

Good afternoon. My name is Bruce Alexander, Senior Manager, Strategic Environmental Analysis, with Exelon Corporation. By way of background, Exelon is one of the nation's leading competitive power generators, owning over 34,000 megawatts of nuclear, coal, wind, hydro, solar, gas and oil-fired generation, including almost nine thousand megawatts of generation in Pennsylvania.

Exelon Generation is headquartered in Kennett Square, Pennsylvania and its Exelon Nuclear business unit is the leading owner and operator of nuclear plants in the United States with ownership interests in nuclear plants with over 24 thousand megawatts of generation capacity, including over 5,400 megawatts of capacity in Pennsylvania at the Limerick, Peach Bottom and Three Mile Island facilities. Exelon's PECO Energy subsidiary, located in southeastern Pennsylvania, has over 2,400 full-time employees and proudly provides electric and natural gas distribution services to a population of over 4 million persons, with 1.6 million electric and 497 thousand natural gas customer accounts in southeastern Pennsylvania. In total, Exelon currently employs over six thousand people in Pennsylvania in highly skilled positions. During 2012, Exelon Corporation and its subsidiaries paid \$256 million in state and local taxes in Pennsylvania, and collected an additional \$104 million on behalf of Pennsylvania government agencies.

Exelon appreciates the Department's efforts to seek public input concerning Pennsylvania's plan to implement and enforce EPA's Section 111(d) greenhouse gas rulemaking for existing fossil-fuel power plants. We recognize the important role that the industry must play in reducing

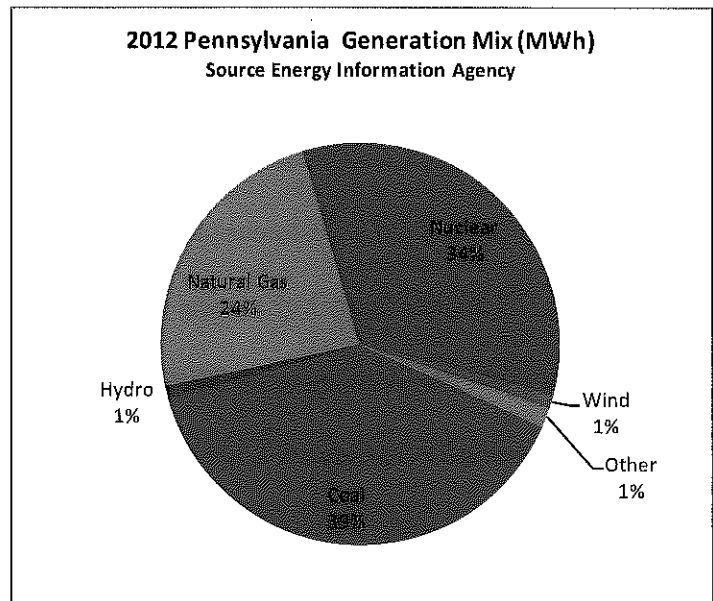
emissions in the power sector and we look forward to working with the EPA and Pennsylvania DEP on the details of the Section 111(d) rule.

We urge EPA and the Commonwealth to be guided by three principles in crafting the federal rule and developing state plans:

1. **Focus on Consumer Costs and Reliability.** Pennsylvania families and businesses enjoy reasonably priced and reliable electricity. By adopting flexible compliance programs, we believe the EPA, the Commonwealth and the industry can achieve meaningful emission reductions without harmful electricity price increases or impacts to electric reliability.
2. **Allow for an Adequate Compliance Timeline.** The industry is in the process of achieving compliance with the Mercury and Air Toxics Rule (MATS) that will limit emissions of hazardous air pollutants such as mercury. Compliance with MATS should be fully achieved by 2016. We encourage EPA and the Commonwealth to consider the cumulative effect of multiple and potentially over-lapping compliance obligations on the existing fleet.
3. **Work Together and Provide a Clear Pathway.** Regulatory uncertainty over how greenhouse gas emissions will be regulated helps no one, least of all power generation companies, which are trying to make enormous investment decisions regarding new

and existing power plants. Reasonable, targeted reductions that gradually ramp-up over time can be achieved if EPA, the states and the industry all work together.

With these general principles in mind, I want to focus Exelon's comments today on the important, and often overlooked, role of nuclear power to our clean energy future. Pennsylvania is a national leader in the production of clean energy, in large part due to the benefits provided by its nuclear fleet. As can be seen in the adjacent pie chart, approximately 34 percent of the power generated in Pennsylvania in 2012 was produced by nuclear generation.



Over the last few months, a growing number of environmentalists and scientists from around the world have concluded that emission reductions cannot be achieved without the continued operation of nuclear power. Their rationale is simple. The pathway to a clean energy future must always begin by preserving and protecting what is working today – America's basket of non-fossil fuel clean energy resources, of which nuclear energy provides over 62% of the clean energy. Nuclear power is the only means to predictably produce large amounts of zero-emission electricity.

Stakeholders and policymakers have recently emphasized the important role of nuclear energy for good reason. The new reality is that a number of the existing plants face premature retirement long before their design life. As of today, owners of six<sup>1</sup> of the Nation's 104 nuclear units have retired units or announced that they will soon retire units. While the reasons vary, the common thread in many of these decisions is economic. Wall Street analysts and some academics predict a continuing wave of additional nuclear plant retirements, as well as decisions to scale back capital investment plans to increase the electrical output of existing nuclear power plants. There are many key market influences that have contributed to the deterioration of nuclear plant profitability since 2008: natural gas prices which fuels marginal generating units in many regions have dropped by greater than 50%; load growth is down due to both the economy and increased energy efficiency programs; and subsidized new generation has suppressed energy prices.

The retirement of nuclear units will have a significant impact on our Nation's greenhouse gas emissions. During 2012, nuclear plants in which Exelon has an ownership interest generated over 195 million megawatt hours of power, enough to avoid approximately 100 million metric tons of CO<sub>2</sub>-equivalent emissions based on regional grid emission rate averages (EIA Outlook 2013). Using EPA's 2012 \$35 per tonne Social Cost of Carbon<sup>2</sup>, these emission avoidances provided a societal benefit in 2012 of over \$3.5 billion.

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<sup>1</sup> Kewaunee (2013); Crystal River (2013); San Onofre 2 & 3 (2013); Vermont Yankee (2014); and Oyster Creek (2019).

<sup>2</sup> 2012 \$35 per tonne Social Cost of Carbon (SCC) based on discounting EPA's 2015 SCC at 3% average discount rate back to a 2012 cost value.

Many climate studies conclude that the continuation of the nation's nuclear fleet is key to meeting our nation's carbon goals. In early November, four pre-eminent scientists<sup>3</sup> talked about the importance of preserving the use of nuclear power to provide large quantities of reliable, near zero carbon power in the United States and overseas. This is indeed true. In 2008, Exelon embarked on a first of its kind program to reduce, offset or displace GHG emissions equivalent to its 2001 GHG emissions by 2020.

As of year-end 2012, Exelon had achieved 89 percent of its goal, abating over 14 million metric tons in 2012. Yet, all of our accomplishments are in jeopardy if only a small number of our nuclear plants are forced to retire. Similarly, the power sector is now about 60% of the way to reducing its emissions by 17% from 2005 levels, as per the President's Copenhagen Accord commitment. If we continue at the same pace of nuclear retirements that we have seen this year (3,600 MW), we could lose 25% of the nation's nuclear fleet by 2020 and would lose half of the progress we made to date on the President's climate goals.

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<sup>3</sup> Hansen, Caldeira, Emanuel, Wigley: <http://www.cnn.com/2013/11/03/world/nuclear-energy-climate-change-scientists-letter/index.html>

The choices we make with the Section 111(d) rulemaking will dictate the fate of many of the nation's nuclear units and consequently the nation's ability to meet its clean energy objectives.

We have a gap in the nation's energy policy and it is a gap that must be closed or we will lose precious resources that cannot be replicated. 62% of the nation's clean energy is nuclear. It is the only source of near-zero emissions energy that is predictable and reliable. It does not depend on the wind or weather as is the case with some renewable resources. The question is not whether the nation can afford a greenhouse gas policy that treats all resources equally. The question is whether we can afford not to have that policy.

Thank you for considering Exelon's early comments on EPA's Section 111(d) rulemaking considerations. I would be glad to address any questions that you may have.