

**BEFORE THE  
UNITED STATES SENATE  
ENERGY AND NATURAL RESOURCES COMMITTEE**

**Testimony of  
SONNY POPOWSKY  
CONSUMER ADVOCATE OF PENNSYLVANIA**

**Regarding  
Diversification Of Power Generation Resources**

**Washington, DC  
March 8, 2005**

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**Testimony of Sonny Popowsky, Consumer Advocate of Pennsylvania  
Before the Senate Energy and Natural Resources Committee  
Regarding Diversification of Power Generation Resources  
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**Summary of Testimony**

The diversification of generation resources is a critical element that affects the adequacy, reliability and cost to consumers of our Nation's electric generation supply. The problems resulting from over-reliance on a single type of generation have been illustrated by the recent headlong rush in the electric industry to build power plants that are fired exclusively by natural gas. The rapid rise in natural gas demand for electric generation has had extremely harmful impacts on both the price of natural gas and the price of electricity.

In Pennsylvania, the need to establish greater resource diversity has been addressed by the recent enactment of alternative energy portfolio standards. The Pennsylvania standards include renewable resources such as wind and solar, but also include a second tier of resources such as waste coal that are designed to address Pennsylvania's particular environmental concerns. It is important to note that, under the Pennsylvania law, each tier of the portfolio standard must be met independently, so that the requirements for minimum levels of Tier I resources such as wind and solar cannot be met by overcompliance with Tier II resources such as waste coal.

In my view, Pennsylvania consumers will benefit from the hedge that these portfolio standards will provide against volatile natural gas and other fossil fuel prices. The inclusion of non-polluting renewable resources in that portfolio also provides a hedge against the potential costs of future environmental regulations, including regulations to address global climate change.

A federal portfolio standard would also be beneficial, in my view, but it should not block or hinder the ability of states like Pennsylvania to continue to address their own environmental and economic needs. A federal portfolio standard should designate minimum levels for resources that, for environmental, economic, or national security reasons, should be met on a national basis. But the federal standards should not preempt the ability of states to address their own needs through a second tier of resources, as has been done in Pennsylvania.

Any federal portfolio standard should also be accompanied by a trading program that would allow trading of credits among generation providers in different states. Such a program would help to reduce the cost to consumers of any portfolio requirements because it would permit generation providers to meet those requirements over a broader geographic and market area.

Finally, state and federal policymakers should also consider carefully tailored tax credits and increased research and development funding, especially for resources that currently are the farthest from commercial development.

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Before the Senate Energy and Natural Resources Committee  
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**CHAIRMAN DOMENICI, SENATOR BINGAMAN AND MEMBERS OF THE  
SENATE ENERGY AND NATURAL RESOURCES COMMITTEE**

Thank you for the opportunity to speak to you today on the vital issues surrounding the diversification of our Nation's electric generation resources.

My name is Sonny Popowsky. I have served as the Consumer Advocate of Pennsylvania since 1990 and I have worked at the Office of Consumer Advocate since 1979. My Office is statutorily authorized to represent the consumers of Pennsylvania in matters involving their utility rates and service. I also currently serve as a member of the Executive Committee and Electric Committee, and formerly served as President, of the National Association of State Utility Consumer Advocates (NASUCA). NASUCA's members are authorized by the laws of their respective jurisdictions to represent the interests of utility consumers in 42 states and the District of Columbia.

The adequacy, reliability, and cost of electric generation are all matters of paramount importance to electric consumers across the Nation. That is true whether those consumers live in states like Pennsylvania that have restructured their electric industries in order to try to bring about competition among generation suppliers, or in states in which generation continues to be a part of the bundled service provided by vertically integrated monopoly utilities. In my opinion, the diversification of generation resources is a critical, but often overlooked, element that affects the adequacy, reliability and cost of our Nation's electric generation supply.

It is also my opinion that market forces alone are not likely to bring about the diversification in generation resources that is needed to ensure that our future electricity needs are met in the most reliable and economic manner. Rather, I believe that state and federal policymakers can take steps to avoid excessive reliance on a particular fuel or type of power plant to meet our future energy needs.

This issue has been illustrated most recently by the headlong rush in the electric industry to build power plants that are fired exclusively by natural gas. The rapid rise in natural gas demand for electric generation has had extremely harmful impacts on both the price of natural gas and the price of electricity. In effect, this has been a double whammy for consumers across the Nation, particularly for those who rely on natural gas for home heating or industrial processes. Reliability of utility service has also been called into question in some areas, where demands for natural gas from electric generators during peak cold weather periods have clashed with the demands for more traditional natural gas seasonal usage.

While the impact of higher natural gas prices on gas heating customers has been painfully obvious, the impact of high natural gas prices on electricity costs is somewhat more subtle. In the PJM Interconnection, for example, in which most Pennsylvania utilities participate, the wholesale spot price for all energy sold in any given hour is set at a single market clearing price. That market clearing price generally is determined by the cost of operating the most expensive power plant in that hour, which in turn, is largely determined by the cost of fuel at that unit. For many hours of the year, that fuel is increasingly expensive natural gas. The average locational marginal price of energy in the PJM market rose from \$31.60 per megawatt hour in 2002 to \$41.23 in 2003. According to the PJM State of the Market Report for 2003, the impact of increased fuel costs on the average PJM energy price in that year was \$12.63 per megawatt hour. In other words, were it not for the increased price of fuel experienced in 2003,

the price of power on PJM would have been approximately \$28.60 per megawatt hour. When this differential is multiplied by the literally hundreds of millions of megawatt hours traded on the PJM market over the course of a year, the impact of fuel price increases on wholesale electric prices can be seen to be enormous.

It is in this light that one should consider the decision by the General Assembly and Governor of Pennsylvania in 2004 to make Pennsylvania the eighteenth state to enact legislation that established a diverse portfolio standard for all generation suppliers who serve the state's retail electricity customers. Even though Pennsylvania lies at the heart of PJM, which is generally recognized as the most successful regional wholesale market in the Nation, Pennsylvania (like its PJM neighbors, New Jersey and Maryland) has decided that it is necessary to establish mandatory, enforceable portfolio standards to produce a diversity of resources, including renewable resources, that the competitive wholesale generation market might not provide. Or at least might not provide in a timely manner.

In my view, Pennsylvania was correct in establishing portfolio standards for future generation. I believe that Pennsylvania consumers will benefit from the "hedge" that these standards will provide against volatile natural gas and other fossil fuel prices. The inclusion of non-polluting renewable resources in that portfolio also provides a hedge against the potential costs of future environmental regulations, including regulations to address global climate change. If and when this Nation decides to take steps to address global climate change, then I believe consumers in Pennsylvania and the PJM region will be well-served by the development of alternative resources that will have come about as a result of our states' moving forward in this manner.

Pennsylvania's legislation, I should note, is actually called an "alternative energy" portfolio standard because, in addition to typical renewable resources such as wind and

solar, the Pennsylvania legislation contains a second “tier” of resources such as waste coal and integrated combined coal gasification technology that attempt to use Pennsylvania’s indigenous resources and address Pennsylvania’s particular environmental concerns. Importantly, the two tiers in the Pennsylvania portfolio standard must each be met independently, so that, for example, the requirements for minimum levels of Tier I renewable resources such as wind and solar cannot be met by overcompliance from Tier II resources such as waste coal.

Given the progress of Pennsylvania and other states in moving forward in this area, one question before this Committee, of course, is whether a federal portfolio standard is either necessary or appropriate. The members of NASUCA have not taken a position on this issue as an organization. My own view, however, is that a federal portfolio standard should be enacted, as long as it does not block or hinder the ability of states like Pennsylvania to continue their own programs in a manner that best meets their own environmental and economic needs. For example, a federal portfolio standard might designate minimum levels for certain types of resources that, for environmental, economic, or national security reasons, should be met on a national basis. But the federal portfolio standards should not preempt the ability of states like Pennsylvania to continue a second category or tier of resources that the state believes is important to address that state’s own economic and environmental needs. Many states may not have the unsightly and environmentally harmful mountains of waste coal that mar the Pennsylvania landscape, and I would not suggest the inclusion of waste coal in a federal portfolio standard. But I do think that Pennsylvania and other states should remain free to address this issue and others like it through their own portfolio standards.

Any federal portfolio standard should also be accompanied by a trading program that will produce a liquid market for resource credits among generation providers in different states. Such a market should help to minimize the costs of any portfolio requirements to

consumers. This is because generation providers would be able to achieve the lowest cost solutions to meeting the portfolio requirements over a broader geographic and market area.

I am not suggesting that portfolio standards are the only means for state and federal policymakers to support the diversification of future generation resources. Carefully tailored tax credits and increased research and development funding would undoubtedly assist the establishment of resources that are currently the farthest from commercial development.

Finally, while it is not a topic of this particular hearing, I would like to take this opportunity to implore the members of this Committee and all members of Congress to reject any cuts in the federal Low Income Home Energy Assistance Program (LIHEAP) and instead to increase LIHEAP funding substantially in the coming year. The impact of high natural gas and other home heating fuel prices has been harmful to all consumers, but it has been devastating to low income consumers. The need for greater energy assistance is real and immediate. I urge that, whatever else Congress does with respect to energy legislation in the next several months, that you take steps to ensure that energy assistance programs for our neediest consumers are adequately funded.

Thank you for your attention to this testimony. I would be happy to answer any questions you may have.

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