

**BEFORE THE
UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT**

Testimony of

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Regarding

Consumer Protection Policies for Climate Legislation

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SUMMARY OF TESTIMONY

The National Association of State Utility Consumer Advocates (NASUCA) supports the enactment of federal legislation to reduce greenhouse gases on an economy-wide basis. It is NASUCA's position, however, that any greenhouse gas emission reduction program for the electric industry "should provide appropriate emission reductions while minimizing the cost to consumers, and must not produce windfall gains for electric generators at the expense of electric consumers."

The primary focus of the Congressional debate has been on the development of a cap and trade program for carbon dioxide emissions. This focus is understandable, given the great success of the cap and trade program for sulfur dioxide emissions under the Clean Air Act of 1990. Congress must recognize, however, that the electric industry of 2009 is far different from the electric industry of 1990, particularly in those states that have restructured, or deregulated, the generation function of our electric utilities.

Under the 1990 Clean Air Act, allowances were initially allocated free of charge to utility generators, and the benefits of those free allowances were effectively passed through to customers through their cost-based rates in states across the Nation. The same result will not occur today, particularly in "restructured" states where electric generation rates are no longer based on the actual cost of service, but rather are based on unregulated wholesale market prices. If allowances are given for free to carbon-emitting generators in deregulated markets, those generators will nevertheless include the market value (or opportunity cost) of the allowances in the prices that they bid into the market, and consumers will pay the market value of these allowances in generation prices, even though they cost the generator nothing. Moreover, under the "single market clearing price" method that is used to establish generation prices in restructured markets, if the market clearing price reflects the cost (or market value) of an emission allowance, this price will be paid to all generators that are operating in that hour, including nuclear units that do not need to purchase allowances and do not incur any carbon compliance costs. As a result of these factors, consumers could pay many billions of dollars in increased generation prices with only modest reductions in actual carbon dioxide emissions.

To the extent that allowances are to be given at no cost to any segment of the utility industry, those allowances must not be given to unregulated generators, but to regulated local distribution companies, which should include state-regulated investor-owned utilities as well as rural cooperatives, and municipal and other publicly owned companies. The benefits of those free allowances must be flowed back to consumers through such means as customer rebates, energy efficiency programs, and low-income energy assistance. A similar result can be achieved if allowances are distributed to the states, as in the Regional Greenhouse Gas Initiative, and the states then auction the allowances to generators with the proceeds of those auctions utilized for the benefit of that state's consumers. Alternatively, the allowances can be auctioned directly to generators by the federal government, but it is important that proceeds from such an

auction be utilized to benefit consumers through dedicated programs such as utility rebates, energy efficiency programs, and low income energy assistance.

Simply raising the price of electricity by adding the cost of carbon dioxide emission allowances is not the most effective way to reduce carbon emissions in the electric power sector. Any cap-and-trade legislation should be coupled with complementary policies to support energy efficiency and the development of new, low-or-no carbon emitting generation resources, that are designed to minimize the overall cost to electricity consumers and to meet our climate change goals in the most cost-effective manner.

**Chairman Markey, Ranking Member Upton,
and Members of the Subcommittee on Energy and Environment**

Thank you for inviting me to testify on this issue which I believe is critical to the debate on climate change legislation in this Nation – that is, the impact on consumers, particularly electric utility consumers, of the costs of reducing carbon dioxide and other greenhouse gas emissions over the next decades.

My name is Sonny Popowsky. I am the Consumer Advocate of Pennsylvania and I have served in that position since 1990. I have worked at the Pennsylvania Office of Consumer Advocate since 1979. My Office was also a charter member of the National Association of State Utility Consumer Advocates (NASUCA), and I have previously served as the President and the Chairman of the Electricity Committee of that organization. My Office and other NASUCA members are authorized by our respective state laws to represent the interests of utility consumers before state and federal regulatory agencies and courts. NASUCA has 44 member offices, representing consumers in 40 states and the District of Columbia.

Let me state at the outset that NASUCA supports the enactment of federal legislation to reduce greenhouse gas emissions on an economy-wide basis. Indeed, NASUCA approved its first Resolution on this issue in 1990. In our 1990 Resolution, NASUCA “acknowledged the need to reduce emissions of greenhouse gases” and recommended to the utility industry “that its resource planning must take into account the growth in those emissions.” The point of that Resolution was that, even in 1990, we concluded that it was in the economic best interest of both utilities and their ratepayers to consider the costs and risks of continuing to rely on generation plans that did not account for the potential future costs of reducing carbon dioxide and other greenhouse gas emissions. More recently, in a Resolution approved in 2007, NASUCA

explicitly called on Congress to implement a program to reduce greenhouse gas emissions. Importantly, from our consumer perspective, we stated that any greenhouse gas emission reduction program “should provide appropriate emission reductions while minimizing the cost to consumers, and must not produce windfall gains for electric generators at the expense of electric consumers.”

The primary focus of the Congressional debate in recent years has been on the development of a cap and trade program for carbon dioxide emissions. This focus is understandable, given the substantial success of the cap and trade program for sulfur dioxide emissions under the Clean Air Act of 1990. In my view, it makes sense from an environmental perspective to impose a declining overall cap to reduce the level of emissions over time to a scientifically determined target; and it makes sense from an economic perspective to enable emitters to achieve those reductions at a lower cost by permitting the trading of allowances as occurred under the 1990 Clean Air Act.

My concern, however, is that the electric industry of 2009 is far different from the electric industry of 1990, particularly in those states (like my own state of Pennsylvania) that have restructured, or deregulated, the generation function of our electric utilities. What worked to reduce pollution at reasonable costs for the United States electric industry of 1990 could well result in much higher costs to consumers and unnecessary windfalls to generators in the electric industry of 2009.

This difference is most pronounced when considering the question of how to distribute emission allowances among electric generation providers. Under the 1990 Clean Air Act, allowances were initially allocated free of charge to utility generators, and the benefits of those free allowances were effectively passed through to customers through their cost-based rates in

states across the Nation. To the extent that utilities incurred costs to comply with the 1990 Act, such as by adding scrubbers or by purchasing lower-sulfur coal, the utility's ratepayers paid for those costs in regulated rates. In 1990, those costs were limited to the actual costs of compliance with the requirements of the Act.

The same result will not occur today, particularly in "restructured" states such as Pennsylvania and many of the Nation's most populous states. In these states, electric generation rates are no longer based on the actual cost of service, but rather are based on unregulated wholesale market prices. The first point to recognize in the restructured states is that, even if Congress were to give emission allowances free of charge to emitting generators, those unregulated generators will still charge customers for the value of those allowances as part of the market price for their generation. This is not a matter of conjecture, nor is it, to my knowledge, a matter of economic debate. If allowances are given for free to carbon-emitting generators in a deregulated market, those generators will nevertheless include the market value (or opportunity cost) of the allowances in the prices that they bid into the market. This pattern has already occurred in the European Union, and it will happen here in our restructured markets if allowances are given away free to unregulated generators.

The second point to recognize in our restructured markets is that, under the "single market clearing price" method of establishing generation prices, the wholesale price of electricity in each hour is determined by the highest cost unit operating in that hour. If this market clearing price reflects the cost (or market value) of an emission allowance, the price paid to that unit will include the value of the allowance, and this price will be paid to all generators that are operating in that hour. So, for example, if a coal unit is setting the market clearing price (which is what actually occurs in 70% of the hours on the PJM Interconnection) the value of the emission

allowances used by the coal unit will be included in the price that is paid to all the plants that are operating in that hour, including nuclear units that have no carbon emissions, no carbon compliance costs, and therefore no need to purchase emission allowances. This is the source of the “multi-billion dollar windfall” to the nuclear power industry that the Wall Street Journal accurately reported would occur in deregulated states if a carbon cap and trade system is put in place.¹ These billions of dollars of additional costs will be paid to owners of existing nuclear plant in the restructured electricity markets simply for continuing to operate as they do today.

I would note in this regard that the PJM Interconnection has recently issued a valuable report that estimates the increased wholesale energy market prices, and cost to consumers, that would result from various cap and trade proposals in the year 2013.² PJM estimates that, if the price of carbon dioxide emission allowances were \$20 per ton, then the “impact on the PJM Energy Market could be power price increases as high as \$15/Mwh, and market-wide expenditures increase by as much as \$12 billion, while providing emission reductions from PJM sources of approximately 14 million tons.” PJM Report at page 25. I believe this finding is interesting for two reasons. First, it suggests that PJM customers will pay \$12 billion in higher energy prices in 2013 in order to reduce emissions by 14 million tons, which comes out to a cost of over \$850 per ton of carbon dioxide reduction.³ Second, because approximately 33.9 percent (or 255 million megawatthours) of PJM generation comes from existing nuclear power plants⁴, it would appear that one-third, or \$4 billion, of the \$12 billion in increased energy costs in 2013

1 “Carbon Caps May Give Nuclear Power a Lift,” Rebecca Smith, Wall Street Journal, May 19, 2008.

2 Potential Effects of Proposed Climate Change Policies on PJM’s Energy Market, PJM, January 23, 2009.

3 The reductions in carbon emissions will occur through the displacement of some coal generation by natural gas generation, which typically has a higher fuel cost, but a lower carbon emission rate than coal.

4 PJM 2007 State of the Market Report, page 145.

will go to existing nuclear plants, who are already operating today at full capacity and who incur zero carbon compliance costs.

This discussion brings me back to the NASUCA 2007 Resolution, which supports Congressional action to reduce carbon emissions, but urges that it be done in a manner that minimizes the cost to consumers and does not produce windfall gains to electric generators. The key to approaching these goals is to ensure that emission allowances are allocated properly and that proceeds from any sale of these allowances should be flowed back to the benefit of the electric consumers who are bearing the cost of this program.

First, it should be clear that allowances must not be allocated at no cost to deregulated generators, who will turn around and charge us for them anyway. To the extent that allowances are to be given at no cost to any segment of the utility industry, those allowances should be given to the regulated local distribution companies, or LDCs.⁵ To the extent that LDCs are paid by generators for the purchase of those allowances, then, in my view, the proceeds must be flowed back to ratepayers through such means as customer rebates, energy efficiency programs, and low-income energy assistance. Just as it would be inappropriate to give unregulated generators the proceeds from the sale or use of free allowances, so too would it be inappropriate to provide this money to electric distribution utilities for purposes other than to benefit their respective ratepayers. The key point is that all electric distribution utilities in the United States are either regulated by state commissions (in the case of investor-owned utilities), or are customer-or publicly owned (in the case of co-ops and municipal and public power companies). As a result, there are reasonable mechanisms in place to ensure that the benefits of any free allowances will go to consumers.

⁵ The local distribution companies who would receive allowances under this approach would include not just state-

Depending on how proceeds are treated, a similar result can be achieved if allowances are initially distributed to the states, as has been done under the Regional Greenhouse Gas Initiative (RGGI) in a large portion of the Northeastern United States. As in RGGI, the allowances that are given at no charge to the states can then be sold to generators through an auction, with the proceeds of those auctions flowing back to the benefit of the state's consumers such as through investments in energy efficiency.

Alternatively, the allowances can be auctioned directly by the federal government, but as a utility consumer advocate, my major concern would be that proceeds from such an auction should be utilized to benefit the consumers who would be bearing the cost of the carbon allowances and compliance costs through their electric generation prices. To the extent that a federal auction is utilized for allowances within the electric industry, I would urge Congress to ensure that the consumers who pay for these allowances through higher generation rates are compensated for these additional costs through dedicated programs such as utility rebates, energy efficiency programs, and low income energy assistance.

One of the design goals of any cap and trade program, in my opinion, should be to reduce the cost of carbon reductions to consumers and to the economy as a whole. Simply raising the price of electricity by adding carbon costs is not the most effective way to reduce carbon emissions in the power sector. As recently noted in an important article by former Vermont Public Service Board Chair Richard Cowart: "cap-and-trade programs that try to reduce emissions through price alone will be much more costly and will save less carbon than a cap-and-trade program that includes proven techniques to deliver low-cost efficiency responses."⁶

regulated investor-owned utilities, but also rural cooperatives and public power companies.

⁶ "Carbon Caps and Efficiency Resources: How Climate Legislation Can Mobilize Efficiency and Lower the Cost of Greenhouse Gas Emission Reduction," 33 Vermont Law Review 201, 203 (2009).

This point was illustrated in the PJM Study that I referenced earlier. As shown in that study, raising carbon prices alone has a limited impact on the dispatch of fossil fueled generation and therefore a limited impact on the level of carbon emissions in a given year. Even at an assumed cost of \$60 per ton of CO₂ emission allowances, and an annual PJM-wide market impact of nearly \$36 billion in higher energy prices in 2013, the PJM Study finds an emissions reduction due to changes in generation dispatch of only about 25 million tons. PJM Report at 24. This equates to a cost to consumers of more than \$1400 per ton of CO₂ removed. Significantly, however, the PJM Study also concludes that increased energy efficiency can substantially reduce the effect of carbon controls on energy costs, both by reducing market clearing prices and by reducing consumption. According to the PJM Study, a 2% load reduction could reduce annual market costs by \$4 billion, while a 10% load reduction would reduce such costs by as much as \$18 billion. PJM Study at 26. PJM also finds that increased development of wind power, which has zero fuel cost and zero carbon emissions, can reduce costs substantially by displacing primarily coal generation. According to the PJM Study, the addition of 15,000 megawatts of wind capacity would reduce annual wholesale market prices by from \$3.55 billion to \$4.74 billion, while also reducing annual carbon dioxide emissions by 35 million tons. Id.

These analyses lead me to conclude that cap-and-trade legislation should be coupled with a set of complementary policies to support energy efficiency and the development of new, low-or-no carbon emitting generation resources, that are designed to minimize the overall cost to electricity consumers and meet our climate change goals in the most cost-effective manner.

It will not be easy or inexpensive for our Nation's electric industry to reduce carbon emissions to the levels envisioned in the climate change legislation that has been considered in Congress. Increases in electricity bills can be hard on any household, and particularly low-

income households that pay the largest share of their income toward their home energy bills. In your further deliberations on this vital matter, I would respectfully urge the members of this Committee and of Congress to take actions that will address our environmental needs without imposing unnecessary additional costs on electricity consumers.

Thank you again for inviting me to participate in this hearing. I would be happy to answer any questions you may have at this time.

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