

**BEFORE THE
HOUSE ENVIRONMENTAL RESOURCES AND ENERGY
COMMITTEE**

**Testimony Of
Sonny Popowsky
Consumer Advocate**

**Regarding
House Bill 2035**

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CHAIRMAN ADOLPH, REPRESENTATIVE GEORGE AND MEMBERS OF THE ENVIRONMENTAL RESOURCES AND ENERGY COMMITTEE

My name is Sonny Popowsky. I am the Consumer Advocate of Pennsylvania. I am pleased to appear before this Committee regarding House Bill 2035 and the proposed Energy Efficiency Standards Act. I believe this legislation raises matters of great importance to the electricity consumers of Pennsylvania, and I want to commend the Committee as well as Representative McIlhinney and the other sponsors of HB 2035, for bringing this issue forward.

As the statutory representative of the people who pay electric bills in the Commonwealth, I believe this legislation raises two fundamental questions. First, will electricity consumers benefit through the enactment of additional energy efficiency standards; and second, assuming the benefit of such standards, should those standards be enacted at the state level. My answer to the first question is yes, I am convinced that energy efficiency standards are an extremely cost effective way to help individual consumers save on their electricity bills and also to reduce the cost of electricity in the Commonwealth as a whole. The second question is a more difficult one, but I would argue that state standards such as those contained in HB 2035 can be a valuable tool to promote additional consumer savings, particularly if they are promulgated on a coordinated, regional basis with other nearby surrounding states. Let me now provide the basis for those conclusions.

I have been working at the Office of Consumer Advocate for 24 years and I have observed and participated in the evolution of the electric utility industry in Pennsylvania during that entire period. While the electric industry has changed dramatically during those years, certain principles have remained the same. One of those principles, in my mind, is that energy efficiency is the first place to look if your goal is to reduce energy costs in the most cost effective manner. Quite simply, the greater the level of energy efficiency, the more useful work – whether

that work is in the form of lighting, heating, cooling, or some other function – can be performed with the same amount of energy. There is no question that the cheapest kilowatthour of energy is typically the kilowatthour that is not used; the cheapest megawatt of generating capacity is the megawatt that does not need to be built.

Energy efficiency comes at a price, of course, typically in the form of higher initial costs for more energy efficient appliances and equipment. I believe that study after study has demonstrated, however, that the payback in lower energy bills over the life of energy efficient appliances and equipment has greatly exceeded the higher initial purchase costs. Often this payback can occur in a matter of just a few years of service.

Looking at home refrigerators, for example, the Appliance Standards Awareness Project reports that average home refrigerator energy use declined from 1,800 kwh/year in 1972 to 550 kwh/year in 2001. With a typical Pennsylvania residential electric consumer paying anywhere from 8 cents to 14 cents per kilowatthour, the savings from this one advance alone amounts to between \$100 and \$175 per year.

It is not just the individual consumer who saves money as a result of energy efficiency, however. Rather, I believe there is a benefit to all consumers and to the Pennsylvania economy as a whole. Most Pennsylvania electric utilities, as you know, are part of the PJM Interconnection. The heart of the PJM wholesale energy market is an hourly trading market in which the price of the last megawatt hour sold sets the single “market clearing price” for all of the energy sold in that hour. In other words, if the last (most expensive) megawatt hour sold is priced at \$30.00 (or 3 cents per kilowatthour), then all the energy sold at that hour is priced at \$30.00. If the last megawatt hour sold, however, is \$100.00 (or 10 cents per kilowatthour), as occurs on PJM during some hours of particularly high peak usage, then all megawatt hours sold

in the spot market at that hour are paid \$100. To the extent energy efficient appliances and equipment reduce energy usage in those peak hours, the most expensive energy can be avoided and the market clearing price will therefore be lower. The benefits of this reduction are felt by all wholesale energy customers. While most retail consumers in Pennsylvania are currently protected against high wholesale energy prices through retail rate caps, when those rate caps expire, it is likely that future retail generation rates charged by Pennsylvania utilities will be heavily influenced by PJM wholesale market prices.

Finally, in this regard, if this Nation ever decides to take action to address the issue of global climate change by reducing greenhouse gas emissions, it is clear that we will be in a much better position to meet future emissions limitations if we have already invested in appliances and equipment that require less electricity and therefore result in lower emission of greenhouse gases. Those built-in usage reductions will in turn reduce the cost of compliance with any future emission limits.

That brings me to what I consider to be the more difficult question raised by this proposed legislation. That is, assuming, as I do, that enhanced efficiency standards are beneficial to electricity consumers, the question remains whether Pennsylvania should attempt to implement such standards on a stand-alone basis.

Interestingly, the first energy appliance standards in the United States were not issued by the federal government, but were promulgated in the 1970's by the State of California. As a few other states began to follow suit, it became clear that there was a need for more uniform national standards. Such standards were adopted in the 1980's and 1990's for several major appliances and types of equipment through federal legislation and regulations. Those standards, however, do not touch upon all appliances and equipment.

Ideally, this issue should be addressed through the promulgation of standards on a uniform nationwide basis for every appliance and piece of equipment for which cost-effective energy efficiency standards can be implemented. Unfortunately, we do not live in an ideal world. Federal energy policy has been stuck in a quagmire, as energy legislation has been debated for years without positive Congressional action. Nor is it clear that the pending Energy Bill in Congress goes as far as necessary to capture all the untapped savings that can be secured through increased energy efficiency. Nevertheless, to the extent that Congress does move forward with energy legislation and to the extent that legislation does contain national standards for some or all of the appliances and equipment identified in HB 2035, then I would agree that there is no reason for Pennsylvania to “reinvent the wheel” by developing its own standards for those products.

I also think that, even in the absence of federal action, we do not want 50 states promulgating 50 sets of inconsistent standards. That approach would increase costs for appliance manufacturers, appliance dealers, and most importantly for consumers, in Pennsylvania and across the Nation.

There is a third approach, however, that I believe is consistent with the goals of HB 2035 and that would provide greater consumer benefits than either having Pennsylvania move forward alone or simply doing nothing while we wait for federal action. That is a regional approach, in which all or a majority of the states in a region enact similar or identical standards for the same appliances and equipment.

When I first reviewed HB 2035 in preparation for this testimony, I was frankly skeptical that Pennsylvania, standing alone, was in a position to implement and enforce these standards on a cost-effective basis. As I researched the issue and contacted consumer advocates and

environmental advocates in other states, however, I learned that legislation that is nearly identical to HB 2035 has been introduced throughout the Mid Atlantic and New England states. Indeed, variations of this exact legislation are being considered in every state from Maine to Maryland.

Obviously, this is not a coincidence. Rather, it is a result of a concerted effort by a group of organizations, including the Northeast Energy Efficiency Partnerships (NEEP), which has brought together a number of state, regional and national organizations to develop and promote model legislation that has now been introduced in Pennsylvania and all of the Northeast states. NEEP has also prepared a state by state analysis of the impact of adoption of this set of efficiency standards. In Pennsylvania, NEEP estimates that between 2005 and 2010, the enactment of standards such as those contained in HB 2035 would produce net savings to Pennsylvania consumers of nearly \$300 million and would reduce peak load capacity requirements by over 450 megawatts. By 2020, NEEP estimates that the net savings would grow to more than \$2 billion and the peak load capacity requirements would be cut by almost 750 megawatts. According to NEEP, the implementation of these standards would also dramatically reduce carbon, NO_x, and SO₂ emissions during this period.

The benefits of developing and implementing efficiency standards on a regional basis are obvious. To the extent standards are the same, for example, in states like Pennsylvania, New York and New Jersey, it is easier for manufacturers and dealers in the region to prepare to meet the standards. The broader the adoption of the standards, I believe, the more cost-effective they become. It would also be easier for states, by using a single coordinated set of testing protocols and facilities, to ensure that the standards are met.

The benefit of regional, rather than only individual state action, is illustrated by the recent experience in Maryland, where the General Assembly actually passed legislation similar to HB 2035, only to have that legislation vetoed by the Governor in May of this year. In his veto message, Maryland Governor Ehrlich objected to the cost of imposing these standards on Maryland consumers and businesses and contended that these standards should be addressed on the federal rather than the state level. Governor Ehrlich also specifically noted, however, that “our surrounding states do not have these standards” and that adoption of those standards would put Maryland at a disadvantage. I can understand why the Governor of Maryland took this position, but if every state in the Northeast uses the same logic, then this is a recipe for stalemate. No state will ever be the first to move forward.

I would suggest that one way to avoid this type of stalemate is for HB 2035 to be amended to add a “trigger” mechanism, such that the substantive provisions in the bill will not become effective unless and until comparable or identical standards are adopted in at least “X” number of other Northeast states, or in surrounding states with at least “Y” population. We can’t require other states to do anything, but we can make our own action in Pennsylvania contingent on other states stepping up to the plate in a similar manner. This would limit the concern about Pennsylvania moving forward on its own, while setting an example for positive action in other states. It is my understanding that such an approach has been proposed with respect to the energy efficiency standards legislation that is pending in the State of Maine. Hopefully, similar approaches would be taken by other neighboring Mid-Atlantic and New England states, so that a critical mass of states would move forward simultaneously on a coordinated regional approach that would make the program less costly and more effective for each of the participating states.