

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

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

**Regarding  
Wholesale Electricity Markets**

**Harrisburg, Pennsylvania  
December 18, 2008**

**Office of Consumer Advocate  
555 Walnut Street  
Forum Place, 5th Floor  
Harrisburg, PA 17101-1923  
(717) 783-5048 Office  
(717) 783-7152 Fax  
Email: [spopowsky@paoca.org](mailto:spopowsky@paoca.org)  
107352**

**CHAIRMAN CAWLEY, VICE CHAIRMAN CHRISTY, AND MEMBERS OF  
THE PENNSYLVANIA PUBLIC UTILITY COMMISSION:**

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.

I want to thank you for permitting me to testify here today, and, more importantly, I want to thank you for holding this series of hearings on the critical issue of wholesale electricity markets. By conducting these hearings – and by your active participation at the Federal Energy Regulatory Commission, the PJM Interconnection, and the Organization of PJM States (OPSI) – this Commission has recognized that wholesale electricity markets have a profound impact on Pennsylvania consumers and on the Pennsylvania economy. The Commission has also recognized that, while it has no direct jurisdiction over wholesale markets, those markets affect virtually everything that the PUC does at the state level regarding retail electricity service. Moreover, this Commission’s policies at the state level on matters such as least cost default service procurement, alternative energy portfolio requirements, and demand side resources have an effect, in turn, on the operation of the wholesale markets.

As these hearings have progressed, I believe that there may be a perception that the debate has been between those who “favor” competitive wholesale electricity markets and those who “oppose” such markets. As I have read and viewed the prior testimony, however, I think it is more accurate to say that the debate has been between those who contend that the current wholesale market is working – that is, the market is competitive and beneficial to consumers, versus those who believe that the current market is not working – that is, the market is far from competitive and that, while incumbent utility generators have benefited, the results to wholesale and retail customers have been harmful. In other words, the question has not been whether we

**should** have competitive wholesale generation markets, but rather whether we **do** have competitive wholesale generation markets. I would add that there is also some question about whether we **can** have competitive wholesale generation markets, given the unique characteristics of electricity as a commodity.

In my opinion, we have serious problems in the wholesale markets that must be addressed at the state, regional, and federal level. On the one hand, you heard from witnesses at your November 6, 2008, hearing that the owners of existing baseload generating units (which have low fuel costs and whose capital costs have already been paid by ratepayers through depreciation and stranded cost allowances) are being vastly overcompensated for energy through the PJM single market clearing price and for capacity through the additional windfall that is paid to all generating units under the PJM Reliability Pricing Model (RPM). Yet, when asked about this testimony after that hearing, PJM spokesman Ray Dotter was quoted as saying that power prices in the past decade have not been high enough to encourage investment and that: “If the revenue is not there, the plants don’t get built and the lights go out.” The irony, I think, is that both of these positions are correct. The prices are too high for energy and capacity from most existing generation, but may be too low to attract the kinds of generation that we need to meet our future needs on a timely basis. The problem is that, under the PJM pricing schemes, where all generation is paid RPM for capacity and the highest market clearing prices for energy, we have to overpay almost **everyone** in order to try to get **someone** to build the generation we need. At the most recent OPSI Meeting, I participated on a panel regarding RPM and I compared the PJM pricing methodology to trying to fill a glass of water by turning on all the fire sprinklers in the ceiling and flooding the entire room.

We can see this problem closer to home, where just last week, PPL announced that it was abandoning plans to add 125 megawatts of capacity to its Holtwood hydroelectric plant on the Susquehanna River in Lancaster County. Construction had been planned to begin in 2009 with an expected in-service date of 2012. In withdrawing its application to expand the plant, PPL stated in a December 9, 2008, press release that “As we evaluated this project in light of current economic conditions and projections of future energy prices, we reached the conclusion that it is no longer economically justifiable.” A month earlier, PPL had issued its latest quarterly earnings report, in which it stated that its earnings for the first nine months of 2008 had dropped below those of 2007, but that “PPL’s underlying fundamentals remain very strong” and that it projected earnings per share to increase from \$2.00-\$2.05 per share in 2008 to \$3.60-\$4.20 per share in 2010.

In a fully competitive market, the abandonment of a single project by a single market participant might not be of concern. But how many competitive generators have ready access to an existing site that is already connected to the PJM grid, with a fully operational, zero fuel cost hydroelectric plant like Holtwood?

PPL stated that the estimated construction costs for the Holtwood expansion project had grown to \$440 million and that these high capital costs had significantly impacted the economics of the project. But from a PJM consumer point of view, might it not be better to invest in new zero fuel cost, zero carbon-emitting capacity like the expansion of Holtwood, rather than spreading literally billions of RPM dollars among already highly profitable existing units? The benefit of a project like Holtwood, is that it would not only add capacity to PJM, but it should have the effect of lowering PJM market clearing energy prices in the hours in which it operates. That is because the 125 megawatts of zero fuel cost generation from Holtwood could effectively

displace the 125 megawatts of higher cost fossil fuel generation that would otherwise be operating in that hour. It would also reduce carbon emissions because zero carbon hydroelectric generation would be displacing an equivalent amount of carbon-emitting coal or natural gas generation which typically operates on the margin at PJM. It should also be noted that the existing Holtwood plant has been providing renewable energy in Pennsylvania since 1910, and that generation from the expanded plant would have certainly qualified for credits under the Pennsylvania Alternative Energy Portfolio Standards Act.

The flaw in the PJM capacity market structure was noted in October 2008 in the new Energy Master Plan released by our neighboring PJM State of New Jersey. As stated in that Master Plan:

RPM does not target new plants, but instead spreads capacity payments amongst all new and existing plants. Paying all existing plants a capacity price that PJM hopes to be high enough to effectively encourage new plants will cost electricity customers billions of dollars more than a better-targeted effort.

\*\*\*

The first five years of RPM's capacity prices will cost New Jersey customers more than \$7 billion – more than enough to fund the construction of several new power plants outright. Unfortunately, that money is being spread amongst all capacity resources, with only a sliver reaching new power plants or demand response.

New Jersey Energy Master Plan at 41, 93.

Several restructured states have taken matters into their own hands and have ordered their utilities to build or buy new generating plants or to enter into other types of long-term generation contracts. The Connecticut Department of Public Utility Control, for example, issued an Order on June 25, 2008, approving the construction of three new peaking facilities totaling 678 megawatts to be purchased by the state's utilities and charged to customers on a cost of service

basis. Importantly, those units were acquired through a competitive procurement process, but the state did not wait for the New England capacity market to produce the generation needed to ensure reliability. In Maine, the Commission issued a Request for Proposals on December 3, 2008, seeking long-term contracts to provide capacity and energy to the state's restructured utilities. In December 2007, the Maryland Commission issued an Interim Report to the Maryland General Assembly stating that, while the status quo was "lucrative for existing generators" it "is not in the public interest to continue to rely exclusively on market forces to address Maryland's reliability concerns and the high wholesale electricity prices Marylanders pay." Maryland Governor Martin O'Malley put it more bluntly when he was quoted on August 16, 2008, as saying: "We cannot stand idly by and wait for market forces or the electricity good fairy to come in and solve this problem for us." In the April 2008 Draft Version of the New Jersey Energy Master Plan quoted above, it was noted that: "We cannot continue to hope that market forces alone will lead to the construction of new plants by the market participants. Neither can we rely on the market to produce the lower-emitting, more efficient plants that we need most." Under a new law enacted in Delaware, the major restructured utility, Delmarva Power & Light, must submit a comprehensive long-term resource plan to the Delaware Commission, and Delmarva has recently entered into Commission-approved long-term contracts to purchase power from new wind units.

My point is simply that, even in restructured states – which now represent a dwindling minority of the states in the Nation – there is no longer a willingness to rely solely on wholesale power markets like PJM, MISO, and the New England ISO to develop the resources needed to provide reliable service at reasonable rates for retail customers. On the contrary, these states are taking affirmative steps to shield customers from some of the adverse effects of the wholesale

markets. As stated by the Maryland Commission in their Final Report issued last week to the Maryland General Assembly, while not “seeking to unscramble the omelet” by recommending a full re-regulation of all previously divested power plants, “the Commission believes that the public interest compels some re-regulation of Maryland’s electricity markets – or, put another way, that the public interest is not served by de-regulation that requires the Commission to wait passively for market forces to deliver a reliable supply of electricity at reasonable rates.” Final Report of the Public Service Commission of Maryland, December 10, 2008, at 1,4.

Fortunately, the General Assembly of Pennsylvania has now passed legislation – Act 129 of 2008 -- that gives this Commission some of the tools needed to address some (but certainly not all) of the shortfalls in the current wholesale market structure. The first Declaration of Policy in Act 129 is particularly instructive:

- (1) The health, safety and prosperity of all citizens of this Commonwealth are inherently dependent upon the availability of adequate, reliable, affordable, efficient and environmentally sustainable electric service at the least cost, taking into account any benefits of price stability, over time and the impact on the environment.

Act 129 (Declaration of Policy). It is clear from the Declaration of Policy, and the provisions of Act 129, that the General Assembly intends for Pennsylvania’s electric distribution companies to provide least cost service to their customers through both supply-side and demand-side resources. As I stated at this Commission’s November 19, 2008, hearing on the demand side resource provisions of Act 129, it is no longer permissible for Pennsylvania electric utilities simply to accept their load demands as a given, and then serve those loads by acquiring generation at prevailing market prices. Rather, the electric utilities must now take affirmative steps to reduce and shape their loads through cost-effective demand side programs for the benefit

of all customers, and to provide needed generation to their non-shopping customers at the least cost over time through a prudent mix of long-term, short-term and spot market purchases. The General Assembly explicitly repealed the “prevailing market prices” standard for acquisition of default service generation supplies, and replaced it with a requirement that our utilities provide service to their non-shopping customers at the least cost over time. While the PUC does not have authority under Act 129 to require that generation service be provided from a specific supplier or fuel type or from new plants only, the Commission does have the authority to require our utilities to pursue competitive procurement processes to obtain long-term contracts of up to 20 years for a portion of their default service requirements. I am not suggesting that PUC-mandated long-term contracts will solve all the problems with the wholesale market, but I do believe that the development of an actively-managed portfolio of competitively-procured long-term, short-term and spot market purchases is far preferable to the passive short-term full requirements contract approach that this Commission has permitted utilities with generation affiliates such as West Penn and Penn Power to utilize under the prior “prevailing market prices” standard.

As noted by several of the witnesses at your November 6, 2008 hearing, however, it is also appropriate to go to PJM and to FERC to see if we can implement changes in the wholesale market model itself that would support competition, but would also benefit both wholesale and retail customers. To come back to my original point, I did not view those witnesses’ testimony as being “against” wholesale generation competition. Rather, I believe that they were suggesting that the current PJM market – with its reliance on short term market clearing prices and the artificial RPM capacity construct – should be replaced by a model that maintains many of the existing features of PJM, but relies more on long-term bilateral contracts to produce prices that

are just and reasonable for both suppliers and consumers. I would respectfully urge this Commission to consider these alternative models, and, if you deem them appropriate, to work with your fellow state commissions at PJM and at FERC to seek modifications to the current wholesale market structure that would be beneficial to our states and to our regional economy.

Finally, I would like to inject a sense of urgency into this discussion, because I think the flaws in the current wholesale market structure will be exacerbated in the near future in the likely event that the United States adopts a cap and trade program to reduce carbon emissions in order to address global climate change. The cost impact of such legislation in restructured states like Pennsylvania could end up being a multiple of the cost in states that still regulate generation on a cost of service basis. Under traditional cost-based ratemaking, the cost of reducing carbon emissions will fall on carbon-emitting fossil-fueled plants and those costs (no more, no less) generally will be passed on to customers. That is essentially what happened across the Nation in 1990 when the Clean Air Act established a cap and trade program to reduce sulfur dioxide (SO<sub>2</sub>) emissions. Under the PJM single-market clearing price methodology, however, whenever a carbon-emitting plant (such as coal or natural gas) is operating on the margin, the cost of the emission allowances that are required to operate that plant will be included in the market clearing price that is paid not only to that unit, but to **all** the units that are operating in that hour, including nuclear plants which have no carbon reduction costs. This will add an even greater premium to generation prices in states like Pennsylvania as compared to states where generation rates are based on the cost of service. Indeed, the way that the market clearing price works in PJM, the “opportunity cost” of emission allowances will be included in the prices paid to PJM generators **even if the allowances are given to the generators at no cost.** That is, the cost of utilizing an allowance (or the opportunity cost of selling an allowance) will be included in the bid of every

carbon-emitting unit, and, if a carbon-emitting unit is setting the market clearing price, that cost will be paid to every unit operating in that hour.

Again, I would like to thank the Commission for taking on these difficult issues, and I look forward to working with you to resolve these issues in the future. I would be happy to answer any questions you have at this time.

107352.doc