

**Before the  
Consumer Protection and Professional Licensure Committee  
and the Environmental Resources & Energy Committee  
Senate of Pennsylvania  
June 5, 2007**

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**Testimony of James H. Cawley  
Vice Chairman, Pennsylvania Public Utility Commission**

Senators White and Tomlinson, Ranking Members Musto and Boscola, and  
Committee Members:

My testimony consists of a brief overview of what I see as vital to  
Pennsylvania energy policy, and to relate why retreat is, if not out of the question, at  
least fraught with very great difficulties. In brief, we must make every effort to  
empower customers to make vital energy choices about how much energy they use  
and how much they are willing to pay for it. We also must encourage market entry  
by suppliers of energy products and services.

**I. The “Demand Side” – Empowering Customers to Take Control of  
Their Energy Costs.**

As with any competitive market, including natural gas and electricity  
competitive markets, true competition and the benefits thereof will not occur unless  
there are many sellers that can sell their wares and many buyers who can choose  
what to buy. Before enactment of the Electric Generation Customer Choice and  
Competition Act in 1996, only electric utility “sellers” were empowered to make  
decisions for consumers. On the “demand side,” individual customer “buyers” had no  
electric supply choices. Since my return to the Commission two years ago, the  
Commission has addressed many critical “demand side” issues, although we still  
have much work to do. These very important steps on the “buyers” side, which  
empower individual customers to take control of their energy costs, include:

- Distributed generation, or “self generation”
- Efficient pricing signals, including real time pricing, Time-of-Use pricing,  
and more concurrent pricing signals
- Demand Side Management (“DSM”) Programs and Efficiency/Conservation  
Programs
- Consumer Education, including information on market prices, customer  
usage, consumer choices (alternative retail suppliers, conservation,  
efficiency, DSM, distributed generation).

**1. Distributed Generation.** This Commission, in response to passage  
of the Alternative Energy Portfolio Standards Act (AEPS), has completed its net  
metering and interconnection regulations that will provide important incentives,  
and remove existing barriers, to new distributed generation. Specifically, the  
Commission’s net metering regulations provide a full retail credit each month for

any distributed generation behind the utility meter, and further provide an energy credit for any excess generation in excess of a customer's usage each month, based on current market rates for electricity. In this manner, consumers receive timely compensation for helping to put generation into the grid. Because of the unbundled nature of distribution and supply services, these consumers have many choices, including receiving compensation based on market-based rates from the utility for any such excess generation, or agreeing to a long term fixed priced contract to supply electricity to an Electric Generation Supplier (EGS) or (for instance) to a solar service provider.

**2. Efficient Pricing Signals.** One of the strongest advantages of a competitive market is more *efficient pricing signals*. Even with electricity generation competition, utilities use such pricing mechanisms as “average pricing per kWh,” “demand charges,” and “declining block prices” (i.e., the more you use, the less you pay) that fail to provide appropriate pricing signals to customers in order to reduce demand when appropriate. As a result, electricity demand has been increasing steadily, especially expensive peak hour electricity usage. At least partially as a consequence of such rate designs, utilities built large fleets of intermediate load, and especially peaking generation plants, that seldom, if ever, operated in a given year. When they did operate, they ran at very low load factors.

If we are to drive down unit costs for power supply, we must adopt market based rate designs that discourage peak-time usage, so that the unit costs of power can be reduced. The Commission has addressed this policy change by strongly recommending a steady transition to *Real Time Pricing* and *Time of Use Pricing* for default service, and the elimination of declining block pricing and demand charges (except for large customers) because such rate design mechanisms, historically and presently, discourage efficiency and conservation. But vital investments in the distribution infrastructure will be needed to provide the tools needed for a “smart grid,” including investments in *Advanced Metering Infrastructure (“AMI”)*. The Commission has already created a working group to study the operational and market benefits and costs of AMI. I strongly concur with the Governor's legislation that promotes development of this technology (*See Senate Bill 716, P.N. 785, proposed Section 2807(e)(6)&(7), prime sponsored by Senator Musto*).

**3. Demand Side Management and Energy Efficiency.** In addition to altering the way we price electricity, the Commission is working to enhance Demand Side Management and energy efficiency/conservation programs. These programs provide additional incentives to reduce electricity usage during peak periods, when the costs for electricity are highest, and also reduce overall electricity demand. Currently, much of these efforts have been limited to low-income consumers through the Commission's Low Income Usage Reduction Programs, or LIURP. The Commission has embarked on additional efforts to expand such programs to all customers, and established a working group that will soon report to the Commission. Commission Staff will then make specific recommendations for the Commission's consideration.

I strongly support the Governor's proposed System Benefits Charge which can be used to support cost effective DSM, energy efficiency, and conservation

programs. (See Senate Bill 716, P.N. 785, proposed Section 2807(f)). Twenty states have enacted similar nominal charges and used some of the revenue to promote energy efficiency and conservation programs, which cost 1-4 cents/kWh compared to market electricity prices of 8-11 cents/kWh for new supply.

**4. Consumer Education.** Lastly, I stress the importance of educating customers about wise electricity use. The Commission in its next budget submission will ask for \$5 million to initiate a statewide campaign to educate customers about the end of rate caps, market prices, DSM, energy efficiency, conservation, retail choice options, and the availability of low-income programs. In addition, the Commission has just required electric utilities to submit, by the end of this year, proposed education programs tailored to the needs of their customers.

## II. The “Supply Side” – Acquisition of Electricity for Customers

The Commission is also addressing the “supply side” of the equation, including:

- A balanced default service supply procurement program that allows long term contracts for new renewable energy resources.
- Development of policies that encourage market entry or remove barriers to entry by new retail and wholesale suppliers.
- Participation in the formulation of wholesale market rules and market structure before the Federal Energy Regulatory Commission (FERC).

**1. A Balanced Supply Acquisition Strategy.** The Commission has very steadily and deliberately developed its default service policy, and has recently released its final form regulations and policy statement. These default service regulations adopt a balanced supply acquisition strategy that blends price responsive short term supplies and intermediate length contracts of one to three years purchased at several points throughout the year. Default service providers are also given the ability to enter into long term contracts to meet their AEPS requirements. These regulations should help to avoid the extreme pricing events that Pike County Light and Power Company and Baltimore Gas & Electric Company experienced after entering into fixed price contracts at the peak of the market.

**2. Removing Barriers to Market Entry and Retail Competition.** As a part of these default service regulations, the Commission is making strong efforts to encourage market entry by establishing policies requiring competitive solicitations for default service supply. The goal is give all generators and wholesale suppliers equal opportunities to bid to provide default service supply.

Beyond encouraging market entry by new generation, the Commission is in the process of establishing a working group whose goal will be to identify significant barriers to retail market competition. Policies regarding billing protocols, utility purchase of receivables, customer referral programs, uniform tariffs, retail choice ombudsmen, and data access methods will be examined in detail and implemented

where appropriate to help remove existing barriers, and to provide cost effective means to enable retail competition to develop in Pennsylvania.

**3. Advocacy before FERC and PJM.** The Commission will remain an active participant before FERC, advocating for wholesale market rules and regulations that will minimize wholesale energy prices, while maintaining the reliability of the regional electricity grid. Policies that reinforce this Commission's rules, regulations, and policies will only be effective if FERC and the PJM Interconnection adopt similar competitive market constructs.

I remain concerned about PJM's recent Reliability Pricing Model (RPM). This construct is more of an administrative construct, as opposed to a true market construct. Recent prices for firm capacity under RPM exceeded most projections of prices, further supporting my initial concerns about this wholesale market design element. I'm also concerned that RPM suppresses effective demand response because it fails to provide sufficient and immediate price relief to the capacity market as a whole and instead ultimately shifts capacity costs from one consumer to another consumer. While I agree that it is important to maintain or enhance reliability, I am not convinced that RPM optimally balances the costs and benefits of reliability for consumers. There are other elements of wholesale market design that need equal attention by the Commission, and I will encourage my colleagues to allocate appropriate resources to ensure effective participation before FERC and PJM.

### **III. Why Retreat Is Not An Option**

It does not seem possible for Pennsylvania to return to the "good old days" of vertically integrated, rate regulated electric utilities. The closest possible approximation would be the regulation of existing distribution utilities as monopoly service providers, which would eliminate retail choice and competition, but still subject Pennsylvania ratepayers to the costs of wholesale electricity markets.

**1. Pre-1997.** Prior to the Electricity Generation Customer Choice and Competition Act's effective date of January 1, 1997, Pennsylvania was largely served by vertically integrated electric utilities that were regulated as to all retail rates and terms of service by the Public Utility Commission. Public utilities were expected to own most of their own generation, and to construct all facilities within their service area to serve all retail customers within that service area.

**2. After Enactment of Electric Generation Competition.** After that date, most (if not all) utility owned generation was converted to or sold as Exempt Wholesale Generation under the Federal Power Act of 1992, selling into the interstate wholesale market administered in this region by PJM and (for Pennsylvania Power Company) the Midwest Independent System Operator (MISO) and regulated by the Federal Energy Regulatory Commission. Electric public utilities became Electric Distribution Companies (EDCs), which own distribution facilities in rate base, but are not permitted to place any generation facilities in rate base. Interstate transmission facilities were declared to be under FERC jurisdiction in FERC's Order 888. EDCs were entitled to claim (and did claim) recovery of

stranded costs which supposedly represented the pre-restructuring estimate of the decline in value of existing rate base generation plant resulting from the onset of retail competition.

**3. No “Traditional” Electric Public Utilities Now Exist in Pennsylvania.** With almost all significant transmission facilities once in state rate base now under FERC regulatory jurisdiction, and regional transmission planning now under the aegis of RTO planning departments, no traditional electric public utilities now exist in Pennsylvania. There are states within the PJM region that did not restructure their electric utilities (e.g., Kentucky), but their utilities also rely on the FERC jurisdictional interstate wholesale markets for the purchase of a portion of their power requirements. Their utilities use their owned generation to hedge against wholesale market volatility, buying and selling into the wholesale electricity market and flowing through the results in a variety of (state regulated) ways.

**4. Federal Law Has Eliminated Pennsylvania Jurisdiction.** With most generation now existing as “exempt wholesale generation” under federal law and interstate transmission subject to federal regulation and ratemaking, Pennsylvania no longer has regulatory jurisdiction over a substantial portion of what used to comprise “public utilities”. Returning to a pre-1997 era would raise a number of difficult and possibly insurmountable obstacles:

a. The chief issue is that the biggest element of retail electricity costs—generation—is no longer part of state jurisdictional utility rate base. Pre-1997 generating plants are now EWGs not subject to state jurisdiction, and, in some cases, are owned by entities that do not directly serve any retail customers in Pennsylvania. In addition, much low-cost power that Pennsylvania now relies upon is located outside the Commonwealth and is therefore largely outside of Pennsylvania’s jurisdiction.

b. While Pennsylvania could mandate that existing EDCs build new capacity and recover the cost in rate base, such plants would be built at today’s prices and subject to today’s siting, environmental, and land use laws. Such a massive generation investment project would take many years and many billions of dollars, assuming that sites could be found for all the new generation.

c. Pennsylvania could provide incentives or mandates requiring EDCs to furnish default service with owned generation. However, such generation would necessarily be purchased or constructed at today’s prices, and would also likely be furnished with some form of guaranteed pass-through of costs plus some guaranteed level of profit. In that sense, it would place Pennsylvania customers in a worse position than in the “good old days.” Under traditional regulation, utilities could not demand recovery of excess capacity, or unjustly excessive costs, and were permitted by law only an opportunity to earn a fair return, not a guarantee.

d. If Pennsylvania was determined to require its EDCs to reacquire existing generation from today’s owners, EDCs would have to do so at today’s market prices – assuming the existing owners wished to sell.

e. If Pennsylvania was determined to re-structure its retail electricity market to rely solely upon Pennsylvania EDC-owned generation, it would forego access to much low-cost generation available in wholesale markets, from generation located as far away as Illinois.

f. Pennsylvania would still be subject to many wholesale costs, including capacity costs (RPM), ancillary transmission services costs, and required operating reserves.

g. Regional Transmission Organizations (RTOs) would still govern many of the functions that were traditionally exercised by state-regulated public utilities, including transmission planning and construction, as well as capacity reserve requirements. While membership in RTOs is “voluntary,” withdrawal from PJM and MISO would entail significant exit costs and future transaction barriers between Pennsylvania and the rest of the Eastern Interconnection.

h. Some generation resources, primarily intermittent new technology such as wind and solar power, which currently are able to sell into the wholesale and retail competitive markets, would be severely disadvantaged as they tend to be the highest cost power at all times.

i. Pennsylvania generators (Pennsylvania is a net-exporting state) would be disadvantaged by possible loss of access to markets outside of Pennsylvania.

j. Investment in new generation facilities would likely cease immediately until the new Pennsylvania electric utility market structure were established and functioning.

**5. No Way to Unscramble the Egg.** It is difficult to see a way to unscramble this egg that would not result in major increases in retail costs, lengthy litigation (with uncertain results), and much economic disruption. For good or ill, Pennsylvania and its neighboring states appear to be fully committed to the success of wholesale markets and market design. To the extent possible, Pennsylvania’s resources should be devoted to fixing the foibles and flaws of the existing electricity generation wholesale market upon which we rely.

#### **IV. Conclusion**

Initially and now recently, the Commission has actively implemented the Electric Generation Customer Choice and Competition Act. Despite these efforts, no one can accurately predict electricity prices in 2010 and 2011. The Commission has already instructed electric utilities to offer a rate mitigation plan to residential and small commercial customers if price increases exceed 25%. While the Commission has very limited control over wholesale generation prices, it can adopt policies that encourage market entry by many providers of energy services. We can also educate, empower, and encourage consumers to make important decisions about their energy future.