

**TESTIMONY**  
**OF THE**  
**ELECTRIC POWER GENERATION ASSOCIATION**  
**before the**  
**PENNSYLVANIA HOUSE JUDICIARY COMMITTEE**  
**HEARING ON**  
**ENERGY PRICES**  
**Pursuant to**  
**House Resolution No. 100**

**PRESENTED BY**  
**DOUGLAS L. BIDEN**  
**PRESIDENT**

**September 5, 2002**  
**Pittsburgh, PA**

**[www.epga.org](http://www.epga.org)**

Chairman Gannon, Chairman Blaum, distinguished members of the Judiciary Committee, good afternoon. My name is Doug Biden and I am President of the Electric Power Generation Association (EPGA). EPGA is a regional trade association of electric generating companies with headquarters in Harrisburg, Pennsylvania. Our member companies include:

Allegheny Energy Supply

Exelon Generation

FirstEnergy Generation

Midwest Generation

PPL Generation

Reliant Energy

These companies own and operate more than 110,000 megawatts (MW) of electric generating capacity in the United States. Approximately half of this capacity is located in the mid-Atlantic region; one-third of it is in Pennsylvania.

EPGA provided testimony before this committee in November of last year, and we appreciate the opportunity to appear before you again today. In the aftermath of the California energy market meltdown, and the demise of the merchant energy market leader Enron, we believe it is vitally important that our policy makers, especially our elected officials, understand how restructured energy markets can and do work. And we trust our comments today will help contribute to that essential understanding.

EPGA's members own and operate power plants and sell their output into the deregulated wholesale power market. The market that includes most of Pennsylvania is conducted by the PJM Independent System Operator (ISO). In April of this year, Allegheny Power joined PJM

and formed PJM West. This development, together with the completion of some new power plants, has resulted in the expansion of PJM capacity from 58,000 MW to nearly 72,000 MW. Many new merchant generators have built, or currently have under construction, new power plants in Pennsylvania and in PJM. In addition to the plants being built by current EPGA members, companies like AES Corporation, Calpine Corporation, Conectiv Energy, Constellation Power, Dominion Resources, FPL Energy, Mirant Corporation, and WPS Power have all found Pennsylvania and/or PJM a promising place in which to risk their investment capital. In fact, a recent survey by EPGA revealed that more than 15,000 MW of new generating capacity has either come on line in PJM within the last year, or is scheduled to be in service by 2004, more than half of which has been or will be built in Pennsylvania. Clearly, the supply of electric energy is ample today, and wholesale competition in our state and region is robust. Competition will likely become more robust in the next two years, as new capacity is added in the market.

#### **Recent Electricity Price Experience**

According to figures compiled by the PJM Market Monitoring Unit, wholesale prices averaged \$24.75/MWH for the first 6 months of 2002 in the PJM day ahead market, compared to \$35.01 for the same period in 2001. In the real time (or day of) market, wholesale prices averaged \$24.10 for the first 6 months of 2002, compared to \$33.09 in 2001. These represent declines of 29.3 percent and 27.2 percent respectively in the day ahead and real time markets. Calculated averages for the months of July and August were not available from PJM at the time of our request. However, if members of the Judiciary Committee or staff are interested in tracking prices, PJM publishes hourly wholesale prices on its web site ([www.pjm.com](http://www.pjm.com)). Also, there are a number of publications which track and report wholesale electricity prices such as

Power Daily, Platts, and Bloomberg Daily Power Report. Power Daily Northeast provides the most recent 21-day moving average of on-peak power prices for PJM, the New York ISO, New England Power Pool, and the Ontario IMO. For the 21 days ended August 28, 2002, those prices were reported as follows:

21-Day Moving Average

Nepool	\$58.36
New York A	49.01
New York G	59.82
New York J	80.35
Ontario (C\$)	74.55
PJM West	51.06

House Resolution No. 100 specifically requests information on energy price hikes of more than 50 percent. At the wholesale level, spot market electricity prices rise and fall by more than 50 percent every day. Prices at 3:00 a.m., when demand is very low, can often be less than \$10/MWH. On the other hand, prices at 3:00 p.m. on a hot summer afternoon can often reach hundreds of dollars per MWH, as successively more expensive power plants are called upon to meet demand. This “volatility” in prices is characteristic of wholesale electricity spot markets, primarily because electric energy, unlike other commodities, cannot be stockpiled.

However, the vast majority of retail consumers never see these price spikes because they pay for their electricity at average rates. Only the very few customers who have agreed to be billed for their electricity consumption on time-of-day rates would experience the price volatility

of the spot market. And these are mostly industrial customers who have the ability to shift their consumption to off-peak periods when prices are lower.

Furthermore, it is important to remember that Pennsylvania and other PJM states, in their retail restructuring orders, put no restrictions on their utilities ability to reduce their exposure to spot market volatility through long-term bilateral contracts. As an example of proficient use of that ability, only 15 to 18 percent of PJM energy is purchased through the spot market. That means that 82 to 85 percent of the energy is transacted through long-term agreements, between consenting parties, based on their knowledge and expectations of wholesale market conditions. This is in stark contrast to California where utilities were effectively prohibited from entering into long term power supply contracts and were thus heavily dependent on the spot market for energy purchases.

Another element of the PJM market that we believe contributes to relative price stability is the capacity reserve requirement. Under this provision, all load serving entities (utilities and retail generation suppliers) are required to purchase an amount of generating capacity equivalent to their retail customers contribution to peak demand, plus an adequate reserve margin.

As noted previously, unlike other commodities, electric energy cannot be stored. So installed capacity, as well as utilization of that capacity, ensures that electric power is produced when it is required. A capacity market complements the energy market in that it sends a long-term price signal to power plant developers that more capacity is needed before an electricity shortage develops. As the capacity reserve margin falls below the required level, capacity prices increase and power generators have real economic incentives to invest in power supply while the market is still in balance.

Without a capacity market, generators must recover all of their costs, fixed and variable, from energy transactions. Such a market can be expected to produce periodic capacity shortages with associated price booms followed by capacity gluts with associated price busts. Such a market could also not have an energy bid cap of \$1,000/MWH, as PJM does. A market where capacity and energy were recovered through the energy charge was the path that California was on. Today, California plans to implement a capacity market similar to PJM's as the old path proved to be neither economically nor politically sustainable.

We also feel that a capacity market must be based on physical delivery of power, not just financial contracts. The consequences of having a purely financial capacity product were seen just a few weeks ago in Pennsylvania. Several of the energy generation suppliers of a utility found themselves pressed for power supply during an extended summer heat wave and were unable to deliver all of their obligated supply. Those suppliers paid the utility in the form of liquidated damages based on terms of the contract. The utility, however, was forced to put out a public appeal to all its customers to reduce their electricity usage to make up for undelivered supply. To provide a reliable supply of power when customers need it, a utility must be operating in a market that gives energy suppliers adequate incentive to deliver power, even when the last, highest-cost generator must be run to produce that energy.

### **Looking to the Future**

Predicting future electricity prices is an exercise fraught with many uncertainties and some unknowns. As EPGA stated in its earlier remarks before this committee, future electricity prices will be largely determined by supply and demand, power plant fuel prices, environmental and other regulatory requirements. Many of the factors that were mentioned in that testimony have not changed. Rather than repeat them here, I have attached a copy of our earlier remarks to

this testimony for reference. And I'd like to devote the remainder of my time to some significant developments that have occurred since the Judiciary Committee's last hearing nine months ago.

### **Further PJM Expansions**

As mentioned earlier, PJM expanded to include PJM West in April of this year. Now, in response to the Federal Energy Regulatory Commission's (FERC) directives, four more utilities have announced their intention to join PJM West. They are American Electric Power, Commonwealth Edison, Dayton Power & Light and Illinois Power. In addition, Dominion Virginia Power has announced its intention to form PJM South. If these plans come to pass, PJM generating capacity will expand to more than 158,000 MW serving a peak load of approximately 132,000 MW. Other things being equal, more supply competing to serve load in an expanded regional market should yield lower wholesale prices than the market would otherwise see.

Another significant development is the announcement by the Midwest ISO, PJM and the Southwest Power Pool (SPP) of their intent to form a "joint and common wholesale market" with a projected operating date of October 2004. According to a cost-benefit study recently conducted by Energy Security Analysis, Inc., the development of a single MISO-PJM-SPP market "will save consumers from several billions of dollars to several tens of billions of dollars over the next 10 years".

### **Enron and the Financial Decline of the Merchant Energy Sector**

Not all the developments affecting our industry have been positive. In the aftermath of the Enron collapse, and with disappointing earnings reports due to lower wholesale prices and a sluggish economy, the energy merchant sector has lost nearly \$225 billion in market capitalization since May of last year according to the New York Mercantile Exchange. U.S.

power producers as a group, struggling to shore up balance sheets amid increased investor scrutiny, have scaled back plans for new generating plants, a move industry analysts warn could tighten electric supplies later in the decade. Also, declining credit ratings in the merchant energy sector could affect some developers' ability to complete some plants on schedule, and could impact the ability of some to meet credit requirements to engage in power trading activities.

Nevertheless, generating capacity appears to be adequate in our state and region for at least the next 3 or 4 years. After that, if merchant developers do not (or cannot) commit to more capacity, things could get tighter.

But we all look forward to a brighter future for our industry. Part of that will depend on the pace of economic recovery from the recession. But, more than anything else, what our industry needs to adequately perform its vital role in our economy is predictability and consistency in the market rules that we must abide by. A capital intensive industry such as ours simply abhors uncertainty.

#### **Enter the FERC Standard Market Design**

On July 31, 2002, the FERC issued its eagerly awaited Notice of Proposed Rulemaking on Standard Market Design (SMD). This document, more than 600 pages in length, is expected to help alleviate the uncertainty that has accompanied our nation's development of workably competitive wholesale markets since passage of the Energy Policy Act in 1992. There is particular reason for optimism in PJM territory in that many of the SMD's recommendations are based upon practices and market rules that are already in place in PJM.

I am certain that my industry does not support every provision in the draft SMD rulemaking. But this is probably not the forum to discuss such technical details. However, I can tell you that I expect our industry to take issue with comparatively few of the SMD's



recommendations. On balance, we believe it represents a significant step in the right direction. And we are hopeful that when adopted in its final form, the SMD will provide for the rapid development of larger and better functioning wholesale generation and transmission markets, similar to what we have experienced in PJM for the past few years. This may then redound to the benefit of all market players – generation providers, transmission owners, distribution companies, and consumers alike.