COMMENTS OF JOHN HANGER, FORMER SEC. OF PLANNING & POLICY AND PENNSYLVANIA PUC COMMISSIONER, TO GOVERNOR SANDOVALS'S COMMITTEE ON ENERGY CHOICE MAY 10, 2017

Twenty-one years ago, Pennsylvania's electricity customers were captive to monopoly utilities and were paying the price for their captivity. Residents of our two most populous regions—Pittsburgh and Philadelphia—paid electric rates that were among the 10 highest in the nation. Small business customers also suffered from high rates to power their restaurants, stores, and small manufacturing shops.

Pennsylvania's electricity rates skyrocketed twenty-one years ago, because state utility regulators voted repeatedly to raise rates for nuclear plant projects with costs that were way over budget and behind schedule. Customers were without a choice. And those customers who wanted to self-generate power faced a bureaucratic nightmare that made it difficult, if not quite impossible. In other words, I completely understand how 72% of voters, including many of you, expressed an unequivocal desire for choice. I congratulate you on making this leap forward.

So - Tired of high rates and dirty power options, Pennsylvania adopted twenty years ago electricity competition and customer choice in both the wholesale and retail markets. Right from the beginning, Pennsylvania committed to insuring real competition, and real competition required strong market monitors to prevent market power abuses by power plant owners.

Pennsylvania adopted retail electricity competition for 5 reasons.

First, competition in generation service would lower prices for consumers in the long run. Regulating monopoly utility services is a difficult and often thankless task. No matter how thoughtful and careful, regulatory actions are a poor substitute for a genuinely competitive market for achieving efficient operations and low-costs.

Second, Pennsylvania sought to shift the risk for generation investment from ratepayers to shareholders. Those who build and own generation plants shoulder the risks and rewards of their investments. And ratepayers need not be put at financial risk to build generation.

Third, Pennsylvania competition creates more opportunity for renewable and alternative generation. More renewable generation would diversify generation sources and lower fuel price volatility. It would also decrease water consumption and air emissions.

Fourth, Pennsylvania enacted retail competition to give consumers choice, not just suppliers of generation but also products. For example, customers today can buy power products that are 100% renewable energy or other mixes of power plants. Customers can choose multi-year contracts to eliminate price risks – those on fixed incomes would appreciate this benefit. Customers receive energy efficiency services like smart thermostats, light bulbs and understandable monthly bills – imagine that! And suppliers competing for business offer a range of incentives to customers to select them.

Fifth, Pennsylvania also chose competition to accelerate the pace of innovation in the power industry. Competitors must build a better mouse trap every day simply to survive – well, maybe that's not the metaphor for survival, but you get it. By the way, that expression is attributed to Ralph Waldo Emerson through a significant paraphrasing, but the rest of Emerson's sentence is, "…you will find a broad hard-beaten road to his house, though it be in the woods." That is spot on here – the best competitive electric markets have attracted energy-intensive businesses from around the world because of low prices, price management and attractive regulatory environments.   Innovation provides horsepower to increase value to consumers, and competition is the spur for innovation.

Pennsylvania was the third state to adopt retail competition and did so after careful consideration by the General Assembly and the Pennsylvania Public Utility Commission. The General Assembly passed the retail electricity competition law in November 1996 – ahead of Texas and California, thank you very much - after 2 years of hearings and examination and with the recommendation of the Public Utility Commission. The law ended the generation monopoly, allowed utilities to sell generation, functionally separated generation from transmission and distribution, if a utility continued ownership, and allowed companies other than utilities to provide default service with the approval of the Public Utility Commission. The General Assembly maintained the state-sanctioned monopoly for the provision of transmission and distribution services.

To implement the law, the General Assembly required each electric utility to file a comprehensive restructuring case before the Public Utility Commission. These restructuring cases became the vehicles by which rates were unbundled into generation, transmission, and distribution components, programs for low-income customers were expanded, and other critical retail competition decisions were made. This is a point I do not want lost today – that formation of a competitive market allows opportunities to develop valuable and lasting programs for the needy, for piloting innovation, or for promoting interests unique to Nevada. But bear in mind that every mandate eliminates a choice and stifles creativity in that space. Aim for sustainability with your efforts.

Much has gone well with competition in Pennsylvania over the last 21 years. Of course, lessons have been learned as well.

For example, paying attention to the demand side of the market is important. And the most important steps are consolidated billing that allows competitive suppliers to bill consumers and deployment of advanced or smart meters that are vital for innovation and better customer service.

It is also important to have independent market monitors with access to real time wholesale market transaction data. These market monitors are a key safeguard to insure generation markets are genuinely competitive.

Pennsylvania also insured that low-income customers would not suffer in the transition to competition and so ordered large increases in the budgets for two major programs designed to prevent shut-offs. The first program was the Low-Income Usage Reduction Program that provided energy efficiency services to low-income customers. LIURP saved energy and lowered electricity bills, making them more affordable for low-income customers. The second program was called Customer Assistance Program or CAP. CAP actually set electric bills for qualifying low-income customers based on a percentage of the customer's income in order to insure the power bill was affordable.

To promote more renewable energy and clean energy at a time when costs for these units were higher, Pennsylvania's transition to competition also established 3 major sustainable development funds in 1998. The purpose of these funds was to accelerate deployment of energy efficiency and renewable energy generation. The sustainable development funds established as part of restructuring made investments in wind, solar, biomass, and energy efficiency projects around Pennsylvania. Pennsylvania now has 26 operating wind farms and more than 12,000 solar facilities of all sizes. All of this was done with an eye toward a diverse fleet of power generation, a plan that would provide appropriate incentives to make the state's fleet cleaner and more efficient but also cost- effective.

After twenty years of allowing customers to choose their generation supplier and competitive power markets with appropriate oversight, customers in the Philadelphia and Pittsburgh regions are paying for generation much less than they were in 1996. In real or inflation adjusted dollars, those residential and commercial customers are paying from 40% to 56% less. And Pennsylvania's statewide average electricity price is at the national average as opposed to well above it.

The Kleinman Center at the University of Pennsylvania published a full review of Pennsylvania's experience with wholesale and retail electricity competition last year and the study is available at: http://kleinmanenergy.upenn.edu/paper/electricity-competition. Christina Simeone and I co-authored this study. It found that retail competition saved just Pennsylvania residential customers $818 million in 2016. Commercial customers across the state are paying 41-56% less than in 1996.

Thanks to competition for customers, power plants don't earn revenues for their owners, unless they operate, unlike during the monopoly era, when ratepayers typically paid for power plants, even when they did not operate. This bears repeating in another way. Today, all of you pay for the power plant decisions made by your utilities and commissioners. Those decisions can be brilliant, good, or bad, but in all cases you pay for them. A competitive market would require those assets to be set aside in a separate company, and that new company must fend for itself and compete for your business. Of all the decisions made by utilities and commissioners, and I am speaking from experience here, power plant decisions are the most difficult. Approving a multi-billion–dollar asset for which all of you pay that lasts two generations – 50 years – and can be antiquated within ten years is an unenviable choice for everyone. Contrast this with a competitive market. Today power plants are much more efficient and burn much less fuel to produce the same amount of power. The pressure to run more efficiently means that they pollute less.

Customers now can buy renewable energy products for their homes, as I do. My electricity generation supplier provides me with 100% wind power that is generated from wind farms in Pennsylvania. Thousands of other customers are installing solar and using other technologies to generate their own power.

Wind farms and solar facilities are a part of the more than 15,000 megawatts of new generation constructed in the Commonwealth, since retail competition began in 1996. The new generation investment produces both cheaper and cleaner power. And that cleaner power is one major reason Pennsylvania's statewide asthma rate has declined sharply during the last 10 years.

The 15,000 megawatts of new generation in Pennsylvania was built entirely with private investment of approximately $15 billion. That large investment was made without any contribution from or risk to utility ratepayers. The companies and their shareholders building the new generation took all the risk of the investment. This shifting of risk from captured utility ratepayers to shareholders is an enormous benefit to utility customers.

Pennsylvania shows that a well-designed and implemented policy of wholesale and retail electricity competition and customer choice will deliver economic and environmental benefits.

Good design includes strong market monitors, with authority to identify and prevent wholesale market abuses, like withholding generation to drive up power prices.

Good design has strong consumer protections on marketing of power products and programs to insure low-income customers can realistically pay for their electric bills. Lastly, good design includes policies that enable customers to generate their own power at their homes and businesses and to control their demand in real-time.

Policies implementing competition are not the same as “deregulation,” where there is no public oversight of corporate behavior. Market rules, and the means to enforce them, are vital to insure competition is real and beneficial to the economy and environments.

Today, Pennsylvania’s residential customers are saving $818 million per year thanks to a well-designed and implemented competitive wholesale and retail electricity markets. Pennsylvania’s economy and environment is better today, because Pennsylvania ended generation monopolies and allowed customers to choose their electricity supplier. Properly designed and implemented electricity competition can benefit Nevada too.