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Expiration of Electricity Rate Caps Offers Dose of Reality for Many Pennsylvania Electricity Consumers

Do you know how much you are paying for electricity? Many Pennsylvanians will be in for electricity bill sticker shock after December 31, 2010, when electricity generation rate caps are set to expire for the rest of the state. Based on experiences in Pennsylvania and neighboring states, the question is not whether or not rates will go up, but rather a question of just how much. For roughly 15 percent of Pennsylvania electricity consumers, this rate increase is already a reality. This article provides an explanation of the sudden rate increase and how it may affect you.

Electric Competition Law

The passing of the 1996 Electricity Generation Customer Choice and Competition Act, otherwise known as the Electricity Competition Law, gave Pennsylvanians what was, at the time, the unique freedom to choose their preferred electricity generation company.[1] The law allowed consumers to shop for their electricity supplier just like one shops for an Internet service provider or a cell phone provider. Consumers who chose not to exercise their right to shop for an electricity supplier continued to receive service via their default electricity distribution company.

Historically, people complain of great difficulty in understanding the long list of charges on their electric bill and other utility service bills. Although some bills are still nearly impossible to read, let alone understand (e.g. cell phone bills), the Electric Competition Law sought to alleviate at least some of this frustration by making electricity bills more transparent.[1] This was accomplished by requiring electricity utility companies to unbundle their customers' bills. One can think of an unbundled bill as an itemized receipt, breaking down the bill in terms of the generation, transmission, distribution, and other miscellaneous charges.

[1] Pennsylvania Public Utility Commission (2007). Fact Sheet. "Electric Restructuring: The Transition from Rate Caps to Market-Based Pricing."

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Electricity Rate Caps

Another provision of the Electric Competition Law capped the unbundled generation, transmission, and distribution rates for residential consumers for a period of at least 4½ years. The rate caps were meant to provide price stability during Pennsylvania's electricity restructuring process. According to the Pennsylvania Public Utility Commission, all transmission rate caps are expired.

Electric Company	Generation Rate Cap Status	% of PA Ratepayers
Citizens Electric	Expired	0.1
Duquesne Light	Expired	10.6
Pennsylvania Power	Expired	2.8
Pike County Light & Power	Expired	0.1
UGI Utilities	Expired	1.1
Wellsboro Electric	Expired	0.1
PPL Electric Utilites	December 31, 2009	24.6
Metropolitan-Edison	December 31, 2010	9.5
Pennsylvania Electric	December 31, 2010	10.6
PECO Energy	December 31, 2010	27.8
Western Pennsylvania Power	December 31, 2010	12.7

Adapted from: Pennsylvania Utility Commission (2007). "Electric Restructuring: The Transition from Rate Caps to Market Based Pricing."

Distribution rate caps have expired for all electricity consumers except those served by Western Pennsylvania Power. Generation rate caps have expired for about 15 percent of Pennsylvania electricity consumers, with the remaining caps set to expire by the end of 2010 (see table). At the same time generation rate caps expire, so too will a cap on competitive transition charges, which are charges on each customer for recovery of the utility's stranded costs. Stranded costs are potential losses incurred by an electric utility as a result of restructuring.[2]

[2] Congressional Budget Office (1998). "Electric Utilities: Deregulation and Stranded Costs."

To put all this in perspective, the cost of electricity increased over 70 percent for Maryland customers served by Baltimore Gas and Electric Company when their rate cap expired in 2006.[3] That same year some Delaware residents experienced a nearly 60 percent rate increase.[3] In Pennsylvania, consumers served by Pennsylvania Power, UGI Utilities, and Pike County Light and Power had to deal with rate increases of roughly 30 percent,[4] 35 percent,[5] and 70 percent,[6] respectively, when their generation rate caps expired in 2006 (Pike County Power and Light) and 2007 (Pennsylvania Power and UGI Utilities).

[3] Testimony of Sonny Popowsky before the Pennsylvania House Consumer Affairs Committee Regarding Electricity Procurement, Rate Caps and Electric Price Mitigation Strategies, 5 September 2007.

[4] Pennsylvania Public Utility Commission (2006). Press Release. "PUC Certifies Penn Power Competitive Bidding Process as Transparent, Non-Discriminatory and Reflecting Market-Based Prices."

[5] Pennsylvania Public Utility Commission (2006). Press Release. "PUC Approves UGI Electricity Generation Rate Increase."

[6] Pennsylvania Public Utility Commission (2006). Press Release. "PUC Investigates Competitive Electric Market in Pike County to Protect Customers from High Rates."

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Rate Increase Explained

The rate caps set during Pennsylvania's electricity restructuring helped create an artificial sense of low energy prices over the last decade. In reality, the prices of coal and natural gas, which are used to generate electricity, have increased roughly 55 percent and 250 percent, respectively, between 2000 and 2007.[7] Therefore, although the expected rate increase might seem excessive to the casual observer in light of the broader energy market, the increased price more accurately reflects the true market price of electricity. While this fact may not provide solace to the consumer who experiences a sudden rate increase after over 10 years of relative price stability, at least it explains the reasoning behind it.

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Were it not for the rate caps, electricity providers would have likely petitioned the Pennsylvania Utility Commission for several rate increases over the last decade in line with the prevailing market price for electricity.[1] However, the rate caps prevented a gradual increase in electricity cost, leaving consumers now faced with the reality of 10 years of energy price inflation all at once.

Benefits of Restructuring

Although it was nice receiving discounted electricity over the last 10 years, the competitive energy market made possible by electricity restructuring is probably in the best long term interests of Pennsylvanians. Many alternative energy providers desiring to offer services in Pennsylvania could not afford to do so while rate caps were in effect. Now that the caps are lifted, these other companies can compete in the energy market for Pennsylvanians' business.[1] More competition among energy suppliers should translate into lower costs for consumers. For those consumers electing to continue purchasing electricity from their default provider, otherwise known as a provider of last resort (POLR), they can be reasonably assured that the rate they pay for service is in line with the prevailing market price for electricity. The price might not be as competitive as if they shopped around for the lowest price, but at least they know the law requires a POLR to maintain pricing within reason of "prevailing market prices."[1]

Focus on Treatment Plants: Practical Steps to Follow

Water and wastewater treatment plants consume large quantities of electricity, which can account for nearly one-third of their annual operations and maintenance costs.[8] However, an Environmental Protection Agency study estimates potential energy savings of 15 percent to 30 percent at most facilities, with other estimates as high as 40 percent.[8] With energy costs rising, and in order to practice good environmental stewardship, facilities should identify opportunities for savings within their plants.

Facility operators might first consider conducting a preliminary energy study to identify the pieces of equipment consuming the most energy, as well as begin tracking their facility's overall energy usage. Some of the obvious "energy hogs" include outdated and inefficient blowers and aeration devices, motors, drives, and control systems.

As a next step, a complete energy audit of their facility should be considered. A good auditor will identify inefficiencies within the plant and suggest operations and capital cost improvements that will result in both short- and long-term cost savings. While equipment replacement is common and can be an effective recommendation, in many cases cost savings can also be achieved through behavioral changes. It may be possible to take advantage of peak shaving, or refraining from using high energy demand equipment during peak hours. However, given the condition of much of our infrastructure, it should not be difficult to convince the most thrifty of facility managers of the even greater energy savings potential associated with replacing aging equipment with newer energy efficient models. Payback period is a consideration, but new technologies have made it easier than in the past to recoup capital costs in a timely manner.

Facilities may even wish to take advantage of the Pennsylvania Guaranteed Energy Savings Act, which established a performance contracting program. Under this program, facilities can contract with an Energy Service Company (ESCO) to obtain guaranteed energy savings. The ESCO conducts an energy audit of a facility and proposes capital upgrades and operational changes to improve its energy efficiency, the costs of which can be paid back through utility budget savings over a period not to exceed 15 years.

A Final Word

Although the end of an era of artificially low electricity prices has passed for some Pennsylvanians and is soon approaching for many others, the benefits of electricity restructuring will undoubtedly have long term positive effects once the sobering reality of higher prices is accepted. If the current trend continues, electricity costs will surely rise in the coming years. Perhaps the best advice is to be proactive by shopping for the best price you can find and investigating ways to conserve as much energy as possible. This course of action will not stop your electricity bill from increasing once rate caps expire (if they have not already), but it will certainly empower you to make informed decisions for your municipality or industry and, on a more personal note, even your family.

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[7] Collin Cain and Jonathan Lesser (2007). "The Pennsylvania Electricity Restructuring Act: Economic Benefits and Regional Comparisons."

[8] Andrea Bistany (2007) "Energy Efficiency Movement Growing in Water Quality Sector." Water Environment and Technology 19, 10.

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