

**BEFORE THE
FEDERAL TRADE COMMISSION
WASHINGTON, D.C. 20580**

NOTICE REQUESTING COMMENTS ON
RETAIL ELECTRICITY COMPETITION
PLANS

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FTC File No. V010003

COMMENTS OF THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

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Introduction/Background

In April 1994, the Pennsylvania Public Utility Commission (Commission) instituted a formal investigation to examine the structure, performance and role of retail competition in Pennsylvania’s electric utility industry. In an attempt to balance the interests of all stakeholder groups, the Commission invited interested parties to submit comments and data with respect to electric restructuring, thereby resulting in a consensus position that effectively addressed their diverse interests. Ultimately, a consensus position was achieved in a Report and Recommendation on Electric Competition, prepared by the Commission and submitted to the General Assembly and the Governor, which later became the cornerstone for the Electricity Generation Customer Choice and Competition Act (“Competition Act” or “Act”), 66 Pa. C.S. §§ 2801, *et seq.*, signed into law by Governor Tom Ridge on December 3, 1996.

Pennsylvania’s electric competition legislation went into effect on January 1, 1997, providing the necessary framework enabling the Commission to restructure the electric industry so that retail customers could choose an electric generation supplier. While the Act contained many legislative findings and directives, it deferred most detailed implementation issues to the Commission. The Commission carried out its responsibilities under the Act by utilizing a collaborative approach. It crafted regulations and policies garnered through consensus and compromise that effectively dealt with the myriad of issues presented by electric restructuring.

As a result, in November 1997, retail access pilot programs were opened to five percent of customers. Full retail choice was phased-in so that starting in January of 1999; two-thirds of the customers had the ability to choose a generation supplier. As of January 2001, the phase-in of retail choice in Pennsylvania was complete and all customers had the opportunity to choose their own electricity supplier.

I. History and Overview

1. Why did the state implement retail electricity competition? What problems of the previous regulatory regime was it trying to solve?

One factor behind implementation of retail competition in Pennsylvania was recognition that Pennsylvania ratepayers were subjected to a phenomenal disparity in electric rates and costs at both the intrastate and interstate level. Not only were Pennsylvanians paying among the highest rates in the nation, they were also subject to widely varying rates among neighboring utilities.

This rate disparity was coupled with a significant divergence in the marginal cost of electric power production compared to the existing retail rates. Before implementation of competition, rate of return regulation provided for the recovery of past capital investments in retail rates. However, improved production efficiencies, favorable oil and gas prices, and a change in federal energy policy that allowed for a competitive wholesale electric market, had resulted in significantly lower generation costs in 1996. These market shifts indicated that electric generation was no longer a necessary component of the natural monopoly no longer required the protection of economic regulation.

Additionally, the Commission's move towards a competitive generation market was encouraged by the introduction of competition in other previously regulated, natural monopolies. Specifically, the introduction of competition in the telephone, airline and trucking industries had resulted in a number of net benefits for both consumers and industry alike. A comparison of the benefits reaped from increased competition in those markets indicated that increased competition in the electricity market would prove to be more effective than economic regulation in controlling the cost of generating electricity.

Finally, the implementation of retail electric competition in Pennsylvania was motivated by greater economic and socio-political factors which favored decreased regulation in the electric industry. Reflective of this ideology, in September 1996, Governor Tom Ridge announced his commitment to a transition from a highly regulated electric industry to retail competition. At the same time that the Pennsylvania Commission instituted its investigation into electric competition, many other state governments were contemplating, or had implemented policies, that would create a competitive market for the generation of electricity as well as in the United Kingdom and Norway. Motivated by the prevailing ideology, Pennsylvania embarked upon a progressive, yet pragmatic approach to the future structure of the retail electric industry.

2. What were the expected benefits of retail competition? Were price reductions expected in absolute terms or in relation to what price levels would be absent retail competition? Were the benefits of retail competition expected to be available to consumers in urban, suburban, and rural areas? Were the benefits expected to be available for residential, commercial, and industrial customers? Were the benefits expected to be comparable for each group of customers?

Retail electricity competition was expected to breed technological innovation, efficiency, lower costs, increased consumer value and increased economic development. The previously existing regulatory regime and lack of competition gave electric utilities little incentive to improve technologies or increase efficiency, thereby creating a direct, negative effect on customer value and economic development in Pennsylvania.

With the implementation of retail competition, it was expected that all classes of consumers would eventually benefit from a reduction in the price of electricity as a result of market conditions. However, it was recognized that the larger commercial and industrial consumers would likely benefit from price reductions to a larger extent than small commercial and residential consumers. Nonetheless, it was anticipated that all consumers would benefit with respect to increased consumer value through the promotion of customer service on the part of competing suppliers, the increase in customer options, and the offering of innovative packaging of savings and offers of value to consumers. For example, as a result of competition, consumers are currently able to purchase packages of services having increased value in terms of pricing and convenience, choose from a variety of “green” retail electricity offerings, and select from

innovative offers, including the ability to receive frequent flyer miles for choosing to sign with a competing supplier.

While the Competition Act did not mandate immediate price reductions for consumers, in the negotiated settlement of utility restructuring proceedings, most jurisdictional utilities agreed to lower their rates, thereby establishing a market price for electricity that more closely resembled the cost of generating that electricity. Thus, between the negotiated reductions and the savings achieved in the competitive market, the implementation of retail competition resulted in overall reductions of up to 15% in the price paid by Pennsylvania consumers for electricity.

Additionally, at the time retail competition was implemented, it was recognized that the price of electricity was an important factor in steering business decisions concerning locating, expanding and retaining business facilities in a given region. Therefore, the cost and savings in generation, anticipated increases in efficiency, consumer value and innovation brought about by retail competition was expected to produce favorable market conditions for spurring economic development in Pennsylvania and provide incentives for existing industries to retain or expand their existing facilities within the Commonwealth.

3. What factors or measures should the Commission examine in viewing the success of a state's retail electricity competition program? How should these measures be evaluated?

The success of Pennsylvania's electric deregulation program has been measured according to the following criteria:

- number of customers shopping;
- awareness levels among consumers;
- amount of savings;
- results of surveys among consumers;
- number of marketers in the marketplace; and
- availability of various competitive services and packages.

Initial success of the program was defined by awareness levels, which were over 90 percent. It is important to make the distinction between shopping and switching. Consumers who chose to stay with their current supplier are not counted as a “shopper.” However, by making a choice to stay with their current supplier, they have actively participated in the program. In Pennsylvania, the number of customers shopping has reached more than 2 million of the state’s 5.3 million electric customers with savings approaching \$3 billion.

A somewhat less tangible measurement is recognition by peers and the media. For example, *USA Today* said Pennsylvania’s consumer education program “set the standard” among national programs. Similarly, an article titled “Electric Retailing: Where Are The Profits?” published in the June 1, 2000, issue of *Public Utilities Fortnightly* highlighted the successes of Pennsylvania’s electric choice program. In particular, the article referred to the potential for price savings, the effectiveness of consumer education and access to consumers by marketers. Also, in an article on September 1, 2000, the *New York Times* reported that, “Among states where deregulation has occurred, Pennsylvania has emerged so far as the place where the promises of competition and lower prices are being met most successfully.” Further endorsement of Pennsylvania’s program has come from other governments – Ohio, Virginia, Texas, and the country of India - as they have all turned to Pennsylvania as a model by which they would structure their electric deregulation programs.

Ultimately, the success of any retail competition must be judged in the longer term by the presence of a functioning wholesale and retail market and absence of market power in those markets. As the Pennsylvania and Mid-Atlantic regional markets continue to develop and the market matures, it is likely that the market for electricity will include both supply and demand side markets providing for more overall economic efficiency and choice than could have been provided under any regime of rate regulation.

4. What are the most successful and least successful elements in the state’s retail competition program? Has the state taken steps to modify the least successful elements?

Most Successful Elements of Program

The most successful elements of Pennsylvania’s retail competition programs include the following:

- 1) Reliance on collaborative processes to develop the restructuring legislation, regulations, and guidelines, and to resolve restructuring proceedings,
- 2) Commitment of state government and stakeholders in the successful implementation of electric competition at both wholesale and retail levels,
- 3) Implementation of an effective consumer education program, consisting of a statewide campaign and local grassroots efforts,
- 4) Establishment of a price to compare that permits alternative suppliers to beat the price for generation being offered by the electric utilities,
- 5) Development and enforcement of adequate consumer protections,
- 6) Creation of an environment that treats new entrants fairly, provides them with information about and access to consumers, and subjects them to a set of uniform rules throughout the state on various procedures such as customer switching, notice requirements, billing, and the exchange of customer data, and
- 7) Prompt attention to details that are critical to the effective implementation of electric choice programs, relying heavily upon collaborative processes and informal methods for resolving disputes.

Collaborative Approach

Reliance upon an effective collaborative process continues to be an extremely valuable tool in implementing retail choice programs. From the outset of electric competition, beginning with the drafting of restructuring legislation, Pennsylvania relied upon a consensus-building approach to resolving issues. Following the use of a legislative-drafting collaborative process including all stakeholders, working groups were formed to develop regulations and guidelines necessary to

implement retail choice. Comprehensive settlements among all major parties of most of the restructuring plans resolved a variety of complex issues involving stranded cost recovery, prices to compare and rate caps.

Effective use of a collaborative approach has enabled the timely implementation of a retail choice program by avoiding protracted, expensive litigation. Also, a consensus-building approach encourages parties to focus upon what is most important to them in the final outcome and to more openly exchange information as they work through various iterations of problem solving. Occasionally, it enables the development of innovative solutions that could not necessarily be legally imposed by the Commission.

Commitment of Government and Stakeholders

A commitment of leaders in state government and interested stakeholders to the successful implementation of electric competition is critical. The Pennsylvania Commission enjoyed the commitment of Governor Tom Ridge and the support of the General Assembly for a transition from a highly regulated electric industry to retail electric competition. The belief underlying this commitment was that competitive forces are more effective than economic regulation in controlling the cost of generating electricity. This commitment was shared by many interested stakeholders who participated in the drafting of restructuring legislation that balanced various diverse interests, which resulted in those stakeholders having a vested interest in a successful outcome of those efforts.

Consumer Education

An effective consumer education campaign is necessary for a successful electric choice program. Pennsylvania's restructuring legislation established consumer education as a priority by requiring each electric utility, in conjunction with the Commission, to implement a consumer education program prior to offering retail choice. Providing that the consumer education program would be funded by ratepayers, the legislation mandated that the program inform consumers about changes in the electric industry and furnish consumers with information necessary to help them

make appropriate choices as to their electric service. The Commission directed that all content of the consumer education materials be approved by the Commission.

To implement the statutory directives, the Commission established guidelines creating a statewide consumer education program. The Commission believed that a comprehensive program combining state and local campaigns was necessary rather than having consumer education addressed in a piecemeal manner.

The primary purpose of the statewide campaign was to pool resources to raise consumer awareness through the mass media by disseminating messages about the changes occurring in the electric industry. The local campaigns were grassroots-style initiatives that used community-based organizations to reach diverse groups of consumers. The local efforts provided consumers with specific details enabling them to make informed decisions.

Besides raising awareness and providing information, Pennsylvania's consumer education campaign actively encouraged consumers to shop for electricity supply. Attempting to make consumers comfortable with the idea of shopping for electricity, the Commission explained consumer protections, addressed safety and reliability concerns and offered additional sources of information.

Surveys conducted in late 1999 show that awareness levels were impressive, in that over 94% of consumers had heard, read or seen something about electric choice. It is also noteworthy that 78% of consumers understood that they could choose the company that generates their electricity but that the local electric company is still responsible for distributing electricity. In addition, 63% understood the process of choosing an electric generation supplier and 60% knew where to find information enabling them to make an informed choice among suppliers.

Price to Compare

A high "price to compare" or "shopping credit" enables alternative suppliers to develop offers that beat the price being charged by the electric utility. Also, a price to compare that is clearly

communicated to consumers encourages shopping. It gives consumers a simple basis upon which to compare various offers, determine the cost savings being offered by an alternative supplier, and make an informed choice as to whether they should switch to another supplier.

To calculate the price to compare for each customer class, the Commission started with the rates that were in effect on January 1, 1997. From that amount, the Commission subtracted distribution and transmission charges, as well as the competitive transition charge, which is the non-bypassable mechanism designed for the recovery of stranded costs. The residual number became the utility's generation price or price to compare.

The level of the price to compare depends upon several factors, including the utility's total bundled rate prior to restructuring, the utility's unbundled transmission and distribution charges and the amount of stranded costs the utility is permitted to recover through the competitive transition charge. The Commission minimized the level of the competitive transition charge, and thereby maximized the price to compare, by limiting stranded cost recovery only to those expenses that were demonstrated by the utilities as just and reasonable and by providing for relatively lengthy stranded cost recovery periods. In particular, the recovery periods negotiated in many of the settlements allowed the utilities to collect reasonable amounts of stranded costs while also producing a price to compare that gave marketers an opportunity to sell electricity to consumers.

Consumer Protections

A theme that underlies the Pennsylvania restructuring legislation and that is critical to the introduction of competition into a previously regulated environment is the need for adequate consumer protections. The Competition Act is replete with provisions protecting the interests of consumers. Absent these important consumer protections, consumers would not be willing to participate in the developing competitive market.

Statutory consumer protections include generation and distribution rate caps, the availability of default electric service, the continuation of low-income assistance programs, the licensing of

alternative suppliers, the ongoing provision of safe and reliable service, maintaining the quality of customer services, the disclosure of adequate and accurate information to consumers by electricity providers, and the development of rules to ensure that consumers are not switched to alternative suppliers without their consent.

The rate cap protections in the statute are especially important to consumers, particularly during the transition period when the wholesale costs of generating electricity are volatile and a competitive wholesale market has not yet fully developed. In Pennsylvania, the restructuring legislation provides for generation charges to remain at the levels in effect prior to retail competition through the end of 2005. Through negotiated settlements, generation rate cap protections are in place in some service areas through 2008-2011. Similarly, distribution charges were capped at pre-competition levels through June of 2001, and those caps have been extended by many utilities until 2003-2005. A related protection is the ability of consumers to return at any time to the electric utility as the default provider of last resort at those capped rates. Additional information relating to other consumer protections will be provided in a subsequent response.

Supplier-Friendly Environment

As critical as adequate consumer protections are to a developing competitive retail market, it is also beneficial to minimize the burdens placed upon alternative suppliers entering the market. While it is imperative to require that new entrants establish minimal threshold criteria such as technical and financial fitness and to comply with consumer protection laws and billing dispute standards, it is also important to allow the competitive market, when possible, to decide what consumers need, want and expect from suppliers. This task calls for an effective balancing by the regulatory commission of providing for important consumer protections while avoiding the imposition of costly or cumbersome, unnecessary burdens on suppliers.

A significant component of minimizing burdens placed on new entrants is through the development of uniform rules that are applicable throughout the state. For instance, standard procedures outlining the steps that must be followed to switch customers to alternative suppliers

have been implemented throughout Pennsylvania. Similarly, the rules imposing consumer protections such as bill formats and advance notification requirements of proposed price changes are the same regardless of which territory the supplier is operating. Importantly, uniform standards are in place throughout Pennsylvania to provide for the use of internet protocols and the electronic exchange of customer data among distribution companies and alternative suppliers.

Moreover, it is vital that alternative suppliers have access to the customer information necessary to serve retail load through access to eligibility lists provided by the distribution companies. Such lists enable suppliers to develop pricing offers based upon consumption data and to convey those offers to consumers. To facilitate sharing of consumer data and place alternative suppliers on a level playing field with electric utilities, Pennsylvania established a process designed to result in new entrants having access to names, addresses, account numbers and usage data of electric utility consumers.

Prompt Attention to Details

The regulatory commission must be empowered and prepared to promptly and effectively address the necessary details associated with the implementation of electric competition. This includes the need to make decisions on all issues ranging from stranded cost determinations to the billing obligations of distribution companies and alternative suppliers. Having sufficient statutory authority to permit flexibility in the methods used to implement customer choice benefited the Pennsylvania Commission. Also, its ability to promptly and effectively address details was enhanced through efforts to remain apprised of issues that are arising and to dedicate adequate staff resources to handle those matters.

One way the Commission has successfully tackled the details is through a Phase-In Committee (PIC), comprised of electric distribution companies, electric generation suppliers and consumer groups and facilitated by Commission staff. Whereas the PIC met by a weekly conference call to discuss and attempt to resolve the various implementation issues that arose on a regular basis during the early transition period, such calls are now held only on an as-needed basis. This forum provides an informal method for resolving issues, as an alternative to the more traditional

adjudicatory process that is in place for hearing matters in the context of complaints or petitions requiring Commission decisions.

Most Challenging Elements of Program

Electronic Data Exchange

One element of Pennsylvania's retail competition program that presented challenges during the pilots related to the electronic exchange of information between electric distribution companies and electric generation suppliers that is necessary for customer switching and billing. During the pilot programs that were open to 5% of the total load, some customer files were lost in the transmittal process and the customers' supplier selections were delayed. Also, some billing problems surfaced when customer data was not being effectively transferred and exchanged.

Recognizing the importance of having customer information smoothly exchanged among utilities and suppliers, the Commission established the Electronic Data Exchange Working Group (EDEWG) in November of 1997. The objective of the EDEWG was to reach consensus on a standard set of data transaction guidelines. A consensus plan was submitted to the Commission in April of 1998 by EDEWG, recommending the use of Electronic Data Interchange (EDI) as the primary format for the transmittal of customer data.

The Commission promptly endorsed the use of EDI in April 1998, and by June 1998, the Commission had approved the initial set of uniform standards for exchanging customer data. That left only about six months, prior to the phase-in of two-thirds of the customers in January 1999, for the utilities and suppliers to implement the standards and test their systems to ensure that customer data would be effectively transferred and exchanged among them.

The Commission and key market participants made uniform use of EDI a priority during those months prior to January 1999. In large measure, those efforts paid off and customer data was smoothly exchanged during the phase-in of customer choice. Despite the successful and timely completion of uniform EDI procedures prior to the phase-in of retail choice, having more lead

time and having more industry resources devoted to the development and testing of electronic transaction standards would have eased the implementation of retail choice. Perhaps a pilot program focused solely on the electronic exchange of data would have also facilitated the transition process.

Company-Specific Approach to Some Issues

The Commission primarily employed uniform statewide rules governing the implementation of retail choice, favoring a generic approach over company-specific methods where possible, which was generally very effective. One area that was not handled in this manner and might have benefited from a more uniform approach relates to supplier service tariffs. After the restructuring plans were decided, the electric utilities filed supplier service tariffs setting forth many of the details governing the relationships between the distribution companies and alternative suppliers. Similarly, codes of conduct addressing the relationships between distribution companies and affiliate suppliers were resolved within the context of the restructuring proceedings, and were subsequently superseded by generic competitive safeguards.

Despite the lack of generic rules in these areas, the Commission sought to consistently resolve contested issues in the various restructuring proceedings. Also, the restructuring settlements resulted in the implementation of many uniform provisions. Nevertheless, it is likely that a smooth transition to retail choice would have been facilitated by the adoption of a “pro forma” supplier service tariff and interim code of conduct for use by all of the electric distribution companies.

Another area that was not handled on a uniform basis pertains to the rules applying to customers that return to provider of last resort service. Although a customer may return to provider of last resort service at the existing rate caps, the electric distribution companies have various methods of seeking to avoid a situation where customers return to capped rates only for a short-term high-cost period. For instance, some companies have provisions in their tariffs requiring commercial and industrial customers to remain with them for a 12-month period. Additionally, some companies offer customers the opportunity to avoid a 12-month stay by paying market-based

rates over a defined period. Other companies have tariff provisions imposing additional demand charges for supply service that is provided only during a high-cost period. While it is important to recognize operational differences among the electric utilities in addressing such issues, the Commission has sought to bring some uniformity to the handling of customers who return to provider of last resort service during high-cost periods.

Expansion of Competitive Services

Many elements of Pennsylvania's program that have presented challenges during the implementation of retail choice were negotiated as part of the restructuring settlements. Examples include competitive metering and billing and competitive default service. Rules were developed to enable licensed generation suppliers to replace the electric distribution company in providing metering and billing services to retail customers. Also, programs were established enabling suppliers to offer provider of last resort service to limited groups of customers.

Generally, these are positive aspects of a retail choice program, and in Pennsylvania's experience, they were a necessary component of the consensus-building process resulting in timely implementation of an effective retail choice program. However, offering these additional competitive services required a significant investment of resources at the same time that competitive retail markets for generation supply were just beginning to develop. Also, it appears that the benefits flowing to consumers as a result of these additional competitive services has been somewhat limited. Ultimately, however, we expect these programs to further enhance the development of the competitive retail market in Pennsylvania.

Generation Rate Caps

Although the generation rate caps are a critical consumer protection embedded in Pennsylvania's retail choice program, some concerns have been raised about both the level and length of the rate caps that were negotiated in the restructuring settlements. In particular, it appears that the existing rate caps may limit the ability of some alternative suppliers to offer competitive retail

prices to consumers, especially during volatile periods in the wholesale market where higher than expected wholesale prices have been experienced.

Licensing Requirements

An aspect of Pennsylvania's retail choice program that may require further attention is a re-examination of entities that must be licensed as electric generation suppliers. While the statute broadly defines "electric generation supplier" as including entities that arrange or market electricity or related services for sale to end-use customers, it is possible that the licensing requirements have captured some entities that were not necessarily intended to be covered. For instance, it appears that some licensed suppliers are engaging in activities solely designed to gather offers from suppliers and convey them, along with an analysis or recommendation as to the best offer, to consumers. Particularly in view of the bonding and reporting requirements imposed on licensed suppliers, it is important to avoid unnecessary licensing of entities that are providing valuable services to end-use customers. This is an area that the Commission is exploring with the objective of determining whether such services may be lawfully offered to consumers without the need for an electric generation supplier license.

II. Consumer Protection Issues

1. What efforts were made to educate consumers about retail competition? How was the success of these efforts measured? Were the programs successful? Who funded these efforts? Who implemented the programs?

The success of Pennsylvania's consumer education program was measured by awareness levels (as reflected in the surveys) and the number of customers who shopped, not just those who switched. Pennsylvania pursued a two-track program: local education plans and a statewide education program. Grassroots education outreach was in the form of advertising, local media coverage, special events, accommodations for the visually impaired, outreach to more than 1,300 community based organizations, town meetings, workshops, direct mail, fairs and conferences, mascot activity, use of consumer advisory councils, translated materials in Spanish, outreach to the African-American community through events and specifically created materials, outreach to the Latino community through Caravana Electric Choice, outreach to seniors through the

Pennsylvania Department of Aging, Area Agencies on Aging and outreach to individuals on limited incomes.

A statewide telephone call center was established to address customer questions concerning Electric Choice. The call center was set up to ensure the use of standard messages and to have consistent training of call center staff. The education budget funded the Call Center.

Year 1 focused on awareness of the Electric Choice program and targeted 65% of the funding to the statewide campaign, with the remainder going toward a local, grassroots effort. In Year 2, as surveys indicated that 94% of customers were aware they could choose a supplier, the campaign reversed the Year I funding levels for the statewide campaign and the local effort. Year 2 of the Pennsylvania Electric Choice program focused on the details of “how to shop.” Advertising, written materials, information on a dedicated web site and a toll-free phone line provided details to consumers about how to shop for a new supplier. A workbook was created to help customers through each step of the shopping process. Other materials included a brochure for low-income customers and a booklet describing Frequently Asked Questions. All materials and advertisements are printed in English and Spanish.

Corey Sandler, author of a best-selling book, Secrets of the Savvy Consumer, appeared at several media events to explain the shopping process. In addition, a 1-2-3-consumer education campaign was used to convey an easy step shopping process. A consumer bill of rights was included in educational materials that were presented to customers. Targeted workshops were held across the state that included leadership training for legislators and the media. In addition, outreach was increased to audiences with special needs, including minorities, people with disabilities, seniors, and people with limited income.

The statewide and grassroots programs as well as each electric distribution company program are funded through the competitive transition charge imposed on the bill of every customer using the electric company’s distribution facilities. Using the funds collected from customers through the competitive transition charge, each EDC contributed toward the statewide program in an amount

proportionate to the number of customers on its system. The statewide program was slated to last an average of three years; money remaining has been carried over into the fourth year.

Consumer education specialists at each electric distribution company implemented the consumer education program at the local level. Implementation of the statewide plan was under the direction of the Public Utility Commission with close advisement and implementation by the Energy Association of Pennsylvania (formerly Pennsylvania Electric Association) and executed by public relations consultants. The Council on Electric Choice, created by the Commission, and comprised of government representatives and individuals representing consumers and the industry was created to oversee the consumer education program.

Another tool used to reach customers included a letter signed by Chairman John M. Quain, which was provided to electric distribution companies for distribution to 5.3 million consumers during the first year of the Electric Choice program. Further, local newspapers occasionally printed a list of supplier prices and offers for their readership. On the whole, the press has taken an active interest in Pennsylvania's Electric Choice program.

2. Do consumers have enough information to readily make informed choices among competing suppliers? Did the state coordinate its labeling requirements about the attributes of a supplier's product, if any, with neighboring states? Is there a need for federal assistance to provide standardized supplier labeling? If so, what would be the most useful federal role?

Consumers have enough information to make informed choices about the pricing offers made by alternative suppliers. The Commission's customer information regulations require the disclosure of pricing information by suppliers in a manner that enables consumers to readily compare those with the prices charged by distribution companies, as well as with offers made by other competing suppliers. For instance, any marketing materials that offer terms of service for acceptance by consumers must include price information that is displayed in a table showing the price per kilo-watts per hour for an average customer using 500, 1000 or 2000 kilo-watts per hour of electricity per month. Through this requirement, the Commission has sought to ensure the ability of consumers to make apples-to-apples comparisons and avoid the situation where

consumers are left to decipher an offer that claims a certain “percentage off” the distribution company’s price to compare.

Additionally, a number of educational resources exist for consumers:

The web site, www.electrichoice.com, is a nationally available internet resource for consumers to obtain facts about Pennsylvania’s Electric Choice program and shop to shop for a supplier. A link on the website connects consumers to the Pennsylvania Office of Consumer Advocate’s Shopping Guide. The Shopping Guide provides consumers with prices to compare and information on how to shop for electricity. The Guide may also be accessed on the OCA’s website: www.oca.state.pa.us

In addition, a number of tools have been developed independently over the past several years to help consumers select suppliers that use cleaner fuel sources for electric generation. The Power Scorecard (www.powerscorecard.org), developed in the past year by the Pace Energy Project and national environmental groups, grades the environmental quality of electricity products according to how the generation source most seriously impacts three environmental media – air quality, water quality, and land quality.

Another tool that has been used informally in Pennsylvania since 1999 is the Green–e program (www.green-e.org). The Center for Resource Solutions (CRS), a non-profit organization located in San Francisco, Calif. oversees the Green-e program. Electricity offerings certified by Green – e must be: 1) based on at least 50% renewable energy; 2) as clean or cleaner than typical power for any non-renewable part of the offering; and 3) offered by a company committed to following the Green-e Code of Conduct on ethical treatment of customers, including using simple contracts and a disclosure label. Each year, CRS produces a Green-e Verification report by an independent auditor to verify whether electricity service providers met the Green-e standards. Also, the OCA’s Shopping Guide includes information about which products are Green-e certified.

Since Pennsylvania has not mandated labeling requirements, it was not necessary to coordinate this activity with other states. Pennsylvania does require that if a customer makes a reasonable request for information about generation energy sources, the supplier must tell the customer that the information is in the annual licensing report at the Commission, and if the customer is interested, it can be provided. In addition, whenever suppliers market their generation as having special characteristics, such as “produced in Pennsylvania” or “environmentally friendly,” such claims must be substantiated.

3. Have consumers complained about unauthorized switching of their accounts to alternative suppliers (slamming) or the placement of unauthorized charges on their electric bills (cramming)? Were rules adopted to prevent these practices? Has the state taken enforcement action under its new authority against slamming and cramming? Have these actions been effective to curb the alleged abuses? Is there a need for federal assistance with slamming and cramming issues? If so, what would be the most useful federal role?

Section 2807(d)(1) of the Competition Act requires the establishment of regulations “...to ensure that an electric distribution company does not change a customer’s electricity supplier without direct oral confirmation from the customer of record or written evidence of the customer’s consent to a change of supplier.” To implement and codify this provision the Commission adopted 52 Pa. Code Chapter 57, Subchapter M, “Ensuring Customer Consent to a Change of Electric Supplier.” These regulations establish a process of securing customer authorization and effecting a switch that is neither excessive nor burdensome, but largely eliminates incidents of slamming.

All suppliers must deal directly with prospective customers. Once the supplier verifies it is dealing with a person who is authorized to make changes on the account, the supplier must receive direct oral or written confirmation from the party to effect a switch. Next, the supplier must send the switch request to the electric distribution company by the end of the next business day following completion of the application process. The electric distribution company, in turn, sends the customer of record a confirmation letter which notifies the customer of the switch request and provides the customer with an opportunity over 10 days to rescind an erroneous or unauthorized switch before it is processed. If the customer complains after a switch has

occurred, the electric distribution company rescinds the switch, secures appropriate billing adjustments and, if applicable, reinstates the customer with her prior competitive supplier.

A key aspect of Pennsylvania's anti-slamming regulations which has effectively curtailed the incidents of slamming is the confirmation letter that is issued by the electric distribution company giving the customer the opportunity over a 10-day period to prevent an unauthorized switch. Another important feature of the regulations is that a customer contact alleging slamming must be given automatic dispute status regardless of whether the customer complains to the electric distribution company either during or after the 10-day confirmation period. Moreover, a record of every slamming dispute must be maintained and made available to the Commission at its request. These requirements ensure that the Commission can exercise proper oversight, including enforcement action. It also allows all parties to have added confidence that complaints against an affiliate of the electric distribution company will not be treated differently than complaints against other suppliers.

While the Commission has received some slamming complaints and taken enforcement action against some suppliers, the regulations have proven effective in minimizing such instances. In light of the effectiveness of the Commission regulations, federal assistance with slamming issues is not needed.

In regard to "cramming," that is, the placement of unauthorized charges on a consumer's electric bill, the Commission has not found it necessary to adopt additional rules to specifically address this practice. However, the Commission has adopted 52 Pa. Code Chapter 54, Subchapter A, "Customer Information Disclosure for Electricity Providers" to ensure provision of adequate customer information concerning purchase of all services in a competitive generation market. These regulations include the requirement that charges for "basic services," as defined by regulation, shall appear distinctly separate and precede any charges for non-basic services. This requirement enables a customer to review an itemized list of charges and identify any unauthorized ones. Any complaints from residential customers that pertain to the placement of unauthorized charges on a bill would be handled and resolved in accordance with longstanding applicable standards at 52 Pa. Code Chapter 56 "Standards and Billing Procedures for

Residential Utility Service.” Since the Commission, to date, has not received cramming complaints relating to electric bills, and given that Pennsylvania’s existing rules provide for appropriate investigation and resolution of any cramming complaints that may be filed by consumers in the future, there is no need for federal assistance with cramming issues.

4. How did the state facilitate the ability of customers to switch to a new supplier? Have these efforts been successful? Does the state allow consumers to aggregate their electricity demand? If so, has aggregation enabled consumers to benefit from retail electricity competition? If not, why not?

Pennsylvania has facilitated the ability of customers to switch to a new supplier by implementing a simple process for consumers to follow, while affording suppliers flexibility in determining the method that they may use in obtaining a customer’s authorization for a switch. Customers who want to switch need only contact the supplier of their choice and follow the steps set forth by the particular supplier. While many suppliers accept telephone and internet enrollments, some suppliers have chosen to request a written authorization from the customer. Following the customer’s selection of a supplier, the supplier notifies the electric distribution company of the customer’s choice. Although the electric distribution company then issues a confirmation letter to afford the customer an opportunity to indicate that the switch is not authorized, no further action is required by the customer to have the selection implemented.

Aggregation has seen some success in Pennsylvania. One of the most active aggregators is the Pennsylvania Energy Consortium (PENCON). In 1999, PENCON reported customer savings of \$12 million, and in 2000, customers saved \$5 million to \$6 million. The Energy Cooperative and Mondre Energy are two aggregators in Philadelphia that are practicing niche marketing.

5. Has the state established licensing or certification requirements for new suppliers to provide electricity to customers? Why? Which licensing provisions are designed to protect consumers? How do they operate? Has the state taken enforcement action against unlicensed firms? Have these actions been effective to curb unlicensed activity? Have these requirements acted as an entry barrier for new suppliers?

The Competition Act requires the licensing of entities that "... engage in the business of an electric generation supplier in this Commonwealth." 66 Pa. Code § 2809 (a). Such entities

desiring to obtain a license must demonstrate financial responsibility and comply with such other requirements concerning service, as the commission deems necessary for the protection of the public. *See* 66 Pa. Code § 2802 (14). Upon finding that the applicant is fit, willing and able to perform properly the service proposed and to conform to the provisions of the law and the Commission's orders and regulations, a license to operate will be issued. *See* 66 Pa. Code § 2809 (b).

There exist several licensing provisions designed to offer consumer protections. For instance, the Commission has established regulations concerning customer information, anti-slammng provisions, and bonding requirements for license applicants. In addition, license applicants must adhere to the Commission's Chapter 56 Standards and Billing Practices for Residential Utility Service (52 Pa. Code Chapter 56).

Commission staff enforces its rules and regulations by monitoring licensee activities and through both formal and informal complaints filed by customers, electric distribution utilities, and competitors. In the past, the Commission has pursued enforcement action against unlicensed entities and recalcitrant generators, however where egregious violations of consumer protection guidelines or rules have been found, the Commission has not hesitated to refer matters to the Office of Consumer Protection of the Pennsylvania Attorney General. Moreover, with respect to consumer protections, the Commission has engaged in consumer education programs to make consumers, public interest groups, the media and community-based organizations aware of the need to employ a licensed electric generation supplier in order to obtain competitive electrical energy supplies.

Since the implementation of retail electric competition, more than 100 licenses to operate have been issued by the Commission, thereby suggesting that the Act's licensing requirements have not acted as an entry to barrier for new suppliers. Although some applicants have questioned the Act's bonding requirements, generally these concerns have been raised by entities engaged solely in marketing activities, and are not typical of the concerns of new suppliers entering the Pennsylvania market.

6. Did the state place any restrictions on the ability of a utility's unregulated affiliate(s) to use a similar name and/or logo as its parent utility, in order to avoid consumer confusion when the affiliate offered unregulated generation services? Why or why not? What has been the experience to date with the use of these restrictions? Are consumers knowledgeable about who their suppliers are?

In adopting regulations to establish competitive safeguards for the electric industry, the Commission declined to flatly prohibit a utility's unregulated affiliate from using the utility's name and/or logo. While the Commission recognized that there might have been some initial customer confusion concerning retail competition and the role of utilities, their affiliates and competitors, the Commission believed that its strong and ongoing consumer education programs successfully acquainted Pennsylvanians with their retail options. Further, the Commission's regulations impose disclosure requirements on a utility's affiliated or divisional supplier that is marketing or communicating to the public using the utility's name or logo. Specifically, the unregulated affiliate must include a disclaimer stating that it is not the same company as the utility, that the prices of the affiliate are not regulated by the Commission and that a customer is not required to buy electricity or other products from the affiliate in order to receive the same quality of service from the utility. Such disclaimers must be included at the conclusion of any communication made to the public through radio, television or other electronic medium using the utility's name or logo.

7. Did the state place any restrictions on third-party or affiliate use of a utility's customer information (e.g., customer usage statistics, financial information, etc.)? What were the reasons for enacting the restrictions? What has been the effect of these restrictions on new marketing activity?

The Commission established procedures applicable for the release and transfer of customer information by electric distribution companies to any licensed electric generation supplier in the Commonwealth. These procedures did not differentiate for instances where an electric distribution company transferred customer information to an affiliated electric generation supplier but instead were applied uniformly to all such transactions. This is consistent the Competition Act's requirement that the Commission ensure that retail customers had direct access to competitive suppliers of electricity and that the transition was fair and orderly from the previously regulated structure. 66 Pa. C.S. § 2802; 66 Pa. C.S. § 2804(14).

To fulfill this statutory obligation the Commission established a framework by which the implementation to full competition could be successfully completed. The Commission's Phase-In Committee (PIC) identified and addressed implementation issues. A critical step in implementing the Competition Act was the establishment of procedures for electric distribution companies and electric generation companies to follow during the first phase-in period of electric competition. Section 2806(b) of the Competition Act provided that for the phase-in of retail choice by permitting two-thirds of an electric utility's customers or, for some rate classes, two-thirds of the customers' load, to become eligible for choice on January 2, 1999. The remainder of the customers became eligible on January 2, 2000.

To address the initial phase-in period, procedures were developed to ensure that the first phase-in period to direct access was completed in a fair and orderly manner. For the phase-in period the Commission developed a two-step process for customers to participate. At that time, it was necessary for customers to volunteer for the program by completing an enrollment form, which enabled the electric distribution companies to ensure that no more than two-thirds of the load of each customer class was accepted into the program. The customer's enrollment into the program resulted in the release of their name, address, telephone number, rate class, account number and load data to all licensed electric generation suppliers. On the enrollment form, however, the customer had the option of restricting the release of their telephone number and load data to electric generation suppliers. Following a customer's successful enrollment into the program, the customer had the opportunity to select an electric generation supplier.

Following the first phase-in period, the Commission determined that the need for uniformity was crucial and that volunteer enrollments were no longer required since all customers in Pennsylvania would have direct access to the competitive electric generation market on January 2, 2000. Absent the need for enrollment, the Commission recognized the need to ensure that customers would retain the ability to restrict the release of certain customer information to suppliers.

In establishing a process for customers to exercise that option, the Commission directed the electric distribution companies to furnish postage prepaid forms to customers, affording them the opportunity to restrict the release of either (a) load data or (b) all information, including name, address, rate class and account number. The procedure established by the Commission provided for the use of two separate check-off boxes for restricting the release of this basic customer information. Under no circumstances would telephone numbers be disclosed to suppliers.

Additionally, in providing customers with the opportunity to restrict the release of their information, the Commission established a process that was consistent with its existing “Privacy of customer information” regulations at 52 Pa. Code § 54.8. In particular, the Commission’s regulations prohibit the release of private customer information to a third party unless the customer is notified of the intent to release the information and is given a convenient method to restrict that release. Further, the procedures established by the Commission did not authorize any broad dissemination of this information to the public at large, but rather to only a limited group of electric generation suppliers who are under the regulatory authority of the Commission and obligated to maintain its confidentiality under those regulations.

In establishing these procedures the Commission stated that only by having access to the basic customer information that is readily available to electric distribution companies, could electric generation suppliers have a meaningful opportunity to compete in the electric generation market. Specifically, the Commission determined that in order to have a competitive market it was absolutely necessary that electric generation suppliers have an opportunity to access a customer’s name, account number, rate class and load data. This information was vital in order for the electric generation suppliers to develop pricing offers and a meaningful opportunity to attract customers and compete against the electric distribution companies.

8. Has the state adopted any other measures intended to protect consumers (e.g., length of consumer contracts, automatic renewal provisions, etc.) as it implemented retail competition? What has been the effect of these measures?

Pennsylvania has implemented protections in the areas of information disclosure, reliability, universal service and quality of service.

Section 2807(d)(2) directs the Commission to establish regulations requiring electricity providers to furnish adequate and accurate information in a format that is understandable to consumers. This statutory provision specifically requires that customers be provided with information that allows them to compare prices and services on a uniform basis. To codify this provision the Commission adopted 52 Pa. Code Chapter 54, Subchapter A, and “Customer Information Disclosure for Electricity Providers.” In general, these regulations cover standards and pricing practices for retail electric service, bill format requirements, disclosure statement requirements, response requirements to requests for information about generation supply, and rules relating to marketing/sales activities, privacy of customer information, and the complaint handling process. Suppliers are required to disclose the price of supply, specify the length of the agreement, explain any penalties or fees, and include any cancellation or renewal provisions. These regulations enable customers to make informed choices regarding the purchase of electricity services offered by providing adequate and accurate customer information.

Section 2804(1) of the Competition Act obligates the Commission to ensure the continuation of safe and reliable service to all consumers in the Commonwealth. To fulfill this obligation, the Commission promulgated regulations establishing a uniform method of assessing the reasonableness of electric service reliability. 52 Pa. Code §§57.191-57.197. Those regulations impose reporting requirements on electric distribution companies and electric generation suppliers designed to monitor the reliability of the distribution, transmission and generation facilities. Additionally, the Commission has established performance benchmarks and standards for each electric distribution company’s service territory. To further enhance the reliability of the electric supply in Pennsylvania, the Commission is an active observer and participant in regional wholesale market issues and in proceedings before the Federal Energy Regulatory Commission.

Section 2804(9) of the Competition Act (relating to standards for restructuring of electric industry) requires the Commission to ensure that universal service and energy conservation policies, activities and services are appropriately funded and available in each electric distribution territory. To fulfill this requirement, the Commission promulgated 52 Pa. Code Chapter 54, “Reporting Requirements for Universal Service and Energy Conservation Programs.” These regulations require each electric distribution company to supply information to the Commission showing the types of programs that are being implemented and measuring the degree to which the programs are working to provide affordable utility service at reasonable rates.

Section 2807(d) of the Competition Act (relating to duties of electric distribution companies) directs that utilities are to maintain, at a minimum, the current levels of reliability and customer service to their customers as they move toward competition. To assist the Commission to fulfill this requirement, it promulgated 52 Pa. Code Chapter 54, Subchapter F, “Reporting Requirements of Service Benchmarks and Standards.” These regulations establish uniform measurements and reporting requirements to allow the Commission to monitor the level of the electric distribution companies’ customer service performance. The common set of measures for which performance data is gathered and reported cover telephone access (e.g., percent of calls answered within 30 seconds), billing frequency, and meter reading. The regulations also require general telephone surveys to evaluate customer perceptions about the accuracy of bills, the clarity of bills and other communications, the reliability of service, any problems the customer has had with the electric distribution company, and overall customer satisfaction. Further, these regulations require transaction surveys to assess customer perception of their most recent interaction with the electric distribution company. After the Commission has received and analyzed an adequate volume of data from the proposed uniform measurements, it intends to develop quality of service benchmarks and standards that will be the subject of a future rulemaking.

These four subchapters of regulations have aided Pennsylvania’s movement toward greater competition in the electricity generation market by setting in place the “rules of the road” relating to consumer protections. In addition to protecting consumers who are actively shopping

for alternative supply, Pennsylvania has sought to ensure that generally, consumers are not adversely affected in any way by the introduction of competition into a previously regulated market.

9. To what extent have suppliers engaged in advertising to sell their product(s)? Do some suppliers claim that their product is differentiated (e.g., that it has environmental benefits)? Has there been any enforcement or attempts to verify these advertising claims? Do any certification organizations, such as Green-e, operate in the state? Are they used by (or at least available to) a substantial portion of consumers?

The Commission does not formally track the advertising campaigns of suppliers. Nonetheless, we can describe some instances of which we are aware.

At the outset of competition, alternate suppliers actively marketed themselves and their services. These marketing initiatives included extensive statewide radio and print advertising campaigns in the areas of the Pennsylvania in which they intended to provide generation and other services. In some instances the marketing campaigns of alternate suppliers were tailored to a specific audience, particularly when the alternate supplier intended to offer environmentally preferable power or wished to stress their “commitment to community” as a local alternate generation supplier. Additionally, alternate suppliers solicited customers across the Commonwealth through direct mail pieces and in the Philadelphia area relied on the services of sales representatives to distribute marketing materials door to door.

The Commission’s Law Bureau investigates any charges by customers or suppliers that a company is engaging in misleading or deceptive advertising. These cases are also forwarded to the state Attorney General’s Office for their review under a memorandum of understanding between the Commission and the Attorney General.

III. Retail Supply Issues

1. What difficulties have suppliers encountered in entering the market? What conditions/incentives attract suppliers to retail markets? Have suppliers exited the market after beginning to provide retail service? If so, why?

Various conditions in Pennsylvania have attracted suppliers to retail markets. While the opportunity to beat the retail price for generation being charged by the electric distribution company is critical, Pennsylvania has also sought to create an environment that does not impose unnecessary burdens on suppliers. Additionally, Pennsylvania has implemented uniform rules throughout the Commonwealth governing the manner in which suppliers must interact with electric distribution companies and consumers. The procedures for signing up customers are consistent and simple. Further, new entrants into Pennsylvania's market have been afforded easy access to customer information, such as name, address, account number, rate class and load data.

A difficulty that suppliers have encountered in entering the market relates to the costs of acquiring energy and capacity in the wholesale market. While some suppliers have commented that the levels of the Commission's financial security/bonding requirements are too onerous, those concerns have been primarily raised by entities that are focusing on marketing and brokering efforts without providing generation supply.

Several suppliers have exited the market after beginning to provide retail service, while others have withdrawn from active participation in the market while still maintaining their licenses. These suppliers have generally cited their inability to obtain energy and capacity on the wholesale market at a cost that would allow them to attract retail customers. Others have simply noted that their corporation's goals have changed.

2. What are the customer acquisition costs and operational costs to service retail customers? How do acquisition and operational costs compare to profit margins for electric power generation services? Do retail margins affect entry? If so, how? Did the state harmonize the procedures suppliers use to attract and switch customers with other states' procedures, in order to reduce suppliers' costs?

The Commission does not require that information relative to customer acquisition costs or operational costs associated with providing service to retail customers be filed with the

Commission. Therefore we are unable to address how these costs compare to profit margins. As evidenced by the Pennsylvania retail market, profit margins directly impact the decisions of alternative suppliers and customers to participate in the retail market.

At the outset of retail competition in Pennsylvania, the “price to compare”, the generation prices being offered by the electric distribution companies to customers not selecting an alternate generation supplier, were sufficiently high enough to permit alternative suppliers to enter the market profitably. These profit margins resulted in an influx of alternative suppliers in the Pennsylvania market and resulted in a large number of customers switching to alternative suppliers. The recent increase of wholesale energy costs has significantly limited and some instances eliminated profit margins available to alternative suppliers in Pennsylvania as the prices to compare established by the Commission for each electric distribution company are at or lower than the offers which alternative suppliers are able to offer Pennsylvania residents. The current inability of alternate suppliers to offer customers retail rates below the existing prices to compare has resulted in the withdrawal from the market of some alternate energy suppliers and the switching of their existing customers back to the incumbent electric distribution companies.

Because Pennsylvania was one of the first states in the nation to implement retail customer choice, it was not possible for Pennsylvania to harmonize its procedures with other states. Pennsylvania did benefit to some extent from reviewing other state restructuring regulatory and legislative initiatives that were simultaneously with Pennsylvania’s restructuring process.

3. Have customers switched to new suppliers? Why or why not? Are there greater incentives for certain customer classes (i.e., industrial, commercial, residential) than for others to switch suppliers? Why or why not? Are penalties or different rates applied to customers that switch back to the supplier of last resort? Are there other measures to determine whether customers are actively considering switching suppliers? If so, do these indicators show different patterns than the switching rate data?

As of this date, more than 534,500 of Pennsylvania’s 5.3 million electric customers are purchasing electricity from alternative suppliers. In addition, 253,000 customers have been switched to an alternative supplier under a competitive default service program that allows them to opt back to the electric distribution company.

The primary reasons customers have switched suppliers are to obtain a better price, to achieve other valuable benefits such as the packaging of certain services or convenient billing plans, or to purchase a different energy supply mix including renewable energy resources. Switching levels have varied among customer classes and service territories. Generally, more competitive offers have been available to the larger customers due to their usage levels and load patterns, as well as their ability to negotiate long-term contracts. As a result, a greater percentage of large industrial and commercial customers than residential customers have switched to alternative suppliers. In addition, more switching has occurred in service areas with higher prices to compare where greater numbers of suppliers are able to make more competitive offers to customers. Even when price savings have been available, customers have frequently opted to remain with the electric distribution company.

Measures to determine if customers are actively considering switching electric generation suppliers are included in the bi-annual surveys that reach 1,000 Pennsylvania electric customers. One of the many questions in the survey asked: “Would you say that you are very interested, somewhat interested, or not very interested in participating in the Electric Choice Program?” In addition, calls to the toll-free consumer phone line are monitored for general trends, including switching trends. These indicators have, to date, followed closely to the patterns indicated by the switching rate data. The Commission does not survey retail customers on an on-going basis to measure their willingness to switch suppliers.

Several of the electric distribution companies’ tariffs contain provisions requiring a customer who switches back to the electric distribution company’s provider of last resort service to remain for a 12-month period. However, the Commission has encouraged the electric distribution companies to permit a customer to switch to an alternative supplier prior to the expiration of the 12-month period upon payment of a market-based generation rate over the course of a shorter stay. Some tariff provisions include minimum demand charges that a customer returning to provider of last resort service would be subject to paying even after switching to an alternative supplier. No switching charges are imposed by the electric distribution companies on customers who switch energy suppliers.

4. Have suppliers offered new types of products and services (e.g., time of day pricing, interruptible contracts, green power, etc.) in states where retail competition has been implemented? If so, describe the products and what customer response has been.

Some electric generation suppliers have offered new products or services. Several electric generation suppliers have offered products that include various proportions of renewable energy sources. Others have offered Internet billing options while some electric generation suppliers offer energy consultation services to assist customers to change their energy consumption in order to qualify for different rate schedules or to attract more bids from other electric generation suppliers. Although the Commission has allowed electric generation suppliers to offer enhanced metering options, it does not appear that electric generation suppliers are ready to offer these options at this point.

Consumers have taken advantage of the opportunity to purchase energy from electric generation suppliers that include renewable generation sources.

5. What are the benefits or drawbacks of the different approaches to handling the supplier of last resort obligation for customers who do not choose a new supplier (e.g., allow incumbent utility to retain the obligation to provide generation services to non-choosing customers, auction the obligation, or assign the obligation to non-utility parties). What has been consumer reaction to these approaches? Is provider of last resort service necessary?

The Competition Act provides that electric distribution companies must provide Provider of Last Resort service to customers who do not choose a competitive provider, who are unable to obtain service from a competitive provider, or who have contracted for electric supply that is not delivered. Specifically the Competition Act provides that the electric distribution companies' general obligation to provide Provider of Last Resort service ensures safe and reliable service to their customers. The electric distribution companies' obligation remains:

While an electric distribution company collects either a competitive transition charge or an intangible transition charge or until 100% of its customers have choice, whichever is longer, the electric distribution company shall continue to have the full obligation to serve, including the connection of customers, the delivery of electric energy and the production or acquisition of electric energy for customers.

66 Pa. C.S. § 2807(e)(1).

However, four of the Joint Petitions for Full Settlement of the electric restructuring proceedings provided an alternative approach for handling the provider of last resort obligation. Specifically, the Joint Petitions provide for the competitive bidding of Provider of Last Resort service to retail customers who do not affirmatively make a choice of an alternative supplier. This alternative is known as Competitive Default Service. The Joint Petitions provide for the graduated competitive bidding of the companies' retail customers. For example, PECO's Joint Petition, subsequently modified by a Merger Settlement approved by the Commission by order adopted on June 22, 2000, provides for 20 percent of all PECO's residential customers, determined by random selection, be assigned to a provider of last resort default supplier other than PECO (CDS Provider).

The Commission's approval of the Competitive Default Service programs is consistent with Sections 2802(16) and 2807 of the Competition Act which set forth that the Commission may approve an alternate supplier to provide Provider of Last Resort service. The Competitive Default Service envisioned by the Joint Petitions sets forth the manner in which the Commission may approve an alternative supplier for the Companies' Provider of Last Resort service.

It is important to note that the competitive bidding process outlined in the Joint Petitions applies only to generation service. Thus, while the generation may be provided by a Commission selected alternative supplier, the companies' will remain as the local distribution provider. Further, the Joint Petitions provide that whomever provides Provider of Last Resort service, the Companies or an alternative supplier, the Provider of Last Resort service is required to be provided pursuant to the generation rate caps established by the Joint Petition. In fact, all bids which exceed the generation rate caps established by the Joint Petitions are rejected. If no bids are received below company's rate cap, the company continues to provide Provider of Last Resort service at the rate cap levels.

Therefore, those customers who do not select an alternative supplier or subsequently return to the Provider of Last Resort service will see, at worst, no change in the cost of the generation they currently receive from the companies for the duration of the companies' rate caps. This

provision is further advanced by the Joint Petitions' requirement that Provider of Last Resort obligations that are not fulfilled by alternative suppliers via Competitive Default Service, return to the Companies as their default Provider of Last Resort.

The Commission approved additional consumer protections for the phase in process of Competitive Default Service. A collaborative process developed stringent bidder qualifications, established credit worthiness, bond limits and other rules necessary to ensure that the Competitive Default Service is properly effectuated. Additionally, the Commission will conduct an annual review of the Competitive Default Service process to review its status and to determine whether it is in the public's interest to continue its implementation. This annual review process is open to all interested parties, including the retail customers of the companies, to determine the economic and practical impacts of the retail competitive bid process.

The anticipated outcome of Competitive Default Service process is to provide Pennsylvania customers with more choices. Further, the implementation of Competitive Default Service will encourage a diverse group of alternate suppliers to participate in Pennsylvania's retail choice program.

To date the Commission has overseen the Competitive Default Service bidding processes for GPU Energy, Allegheny Power and PECO. The PECO Competitive Default Service program successfully resulted in nearly 300,000 PECO residential customers being assigned to a Commission approved Competitive Default Service provider. The assigned customers are receiving up to a two-percent discount off of PECO's price to compare. Moreover, the Competitive Default Service provider will provide no less than two percent of its offered energy supply for Competitive Default Service from renewable sources. The customers assigned to the Competitive Default Service provider have the right to opt out of Competitive Default Service or to switch to an alternate supplier without penalty or charge.

The GPU Energy and Allegheny Power Competitive Default Service programs were unable to attract bids at or below the established rate caps because of cost increases experienced in the wholesale market. To combat the impact of future market volatility, the electric distribution

companies are considering revisions to their Competitive Default Service programs. Specifically, future Competitive Default Service programs will likely shorten the time between the close of bidding and the bid award and to take seasonal price fluctuations into account in the timing of publication of the request for bids.

Pennsylvania's Competitive Default Service programs, along with the retail and wholesale markets, are still evolving. During the development of these markets and the Competitive Default Service programs, customers are guaranteed service on par with the service they would receive had they stayed on Provider of Last Resort. Some of the initial competitive bidding processes were hampered by unexpected volatility on the wholesale market. In the successful PECO Competitive Default Service program, some customer confusion was noted for those who properly were assigned to the Competitive Default Service provider. However, this matter is being addressed by reinforcing consumer education efforts in the PECO service territory.

IV. Retail Pricing Issues

- 1. How is entry affected by the price for the provider of last resort service (for customers who do not choose) or for default service (for customer whose supplier exits the market)? How does the price for the provider of last resort or default service compare to prices offered by alternative suppliers? Is the price for provider of last resort service or default service capped? If so, for how long?**

The entry of electric generation suppliers into the market, as well as the willingness of electric generation suppliers to remain in the market, is largely dependent upon the price for provider of last resort service, and how it compares with the prices in the wholesale market. Provider of last resort service is available to all customers who do not choose an alternative electric generation supplier, as well as those who contract for electric energy that is not delivered.

The rates for provider of last resort service are capped at the levels that were in effect for generation service prior to implementation of retail choice. Those capped rates, which were produced through the unbundling process which identified charges for distribution, transmission and competitive transition (stranded costs), are also known in Pennsylvania as the "price to compare."

The generation rate caps expire under the statute on December 31, 2005, unless stranded cost recovery is terminated earlier. However, restructuring settlements for several of the utilities extended the rate caps at slightly higher than existing levels until 2008-2011. One electric distribution company is expected to complete its stranded cost recovery for the major residential and commercial customer classes in 2002. A post-transition plan has been approved for that utility to provide for rate cap protections for all customer classes extending through 2004.

Although some alternative suppliers (such as those promoting the use of “green” power) have offered prices higher than the capped rates, most of the alternative suppliers that have successfully attracted customers away from the provider of last resort have offered prices below those capped rates. The extent to which offers are below capped rates depends largely upon the particular service territory and the customer class being targeted by the alternative supplier.

The Commission is required by the Competition Act to promulgate regulations that define the electric distribution company’s obligation to connect, deliver and acquire electricity following the completion of the transition period and the expiration of the rate caps. The legislation provides some guidance to the Commission in fulfilling this obligation. Specifically, it imposes a duty upon the provider of last resort, whether it is the electric utility or a Commission-approved alternative supplier, to acquire electric energy at prevailing market prices to serve that customer. Further, the legislation indicates that the provider of last resort shall fully recover all reasonable costs. It is anticipated that the Commission’s regulations will address the method for recovering those costs, as well as a procedure for reviewing the acquisition practices of the provider of last resort.

2. Has the state required retail rate reductions prior to the start of retail competition? What is the rationale for these reductions? How have state-mandated rate reductions prior to the start of retail competition affected retail competition?

Pennsylvania did not require retail rate reductions prior to the start of retail competition. However, as part of restructuring settlements, several electric utilities agreed to rate reductions ranging from two percent to six percent for the first year of retail choice, with those reductions being lowered and phased out over a two to three year period. The reductions were negotiated

by consumer groups in exchange for other concessions on issues such as the amount of stranded cost recovery that the utilities would be permitted to collect. Also, the reductions gave consumers immediate relief from the above-average electric rates they were paying and eliminated some of the price disparities being experienced throughout Pennsylvania prior to the onset of retail competition. Although the negotiated reductions probably lessened the incentives of some customers to shop for alternate supply during the first year or two of retail choice, the reductions did not interfere with alternative suppliers making competitive offers and the overall shopping statistics during that time were extremely encouraging.

3. Do any seasonal fluctuations in the price of wholesale generation cause some suppliers to enter the market only at certain times of the year? How have these suppliers fared?

Seasonal fluctuations in the price of wholesale generation have caused some suppliers to enter the market only at certain times of the year. Due to the summer peaks experienced by many of Pennsylvania's electric utilities, offers have generally been more available and competitive during the early fall. Some suppliers have terminated month-to-month contracts with consumers immediately prior to the onset of summer, while resuming their marketing efforts aimed at those customers after the summer. Other suppliers have entered into contracts with consumers that expressly contemplated returns to provider of last resort service during the high-cost months with the alternative supplier resuming service in the fall.

Many utilities have provisions in their tariffs requiring commercial and industrial customers to remain with provider of last resort for at least 12 months and or requiring those customers to pay higher demand charges during certain high-cost periods. However, residential and small business customers are generally not subjected to those requirements. Also, disputes are ongoing as to the applicability and interpretation of various tariff provisions to larger customers.

Generally, the Commission is supportive of efforts by the utilities to impose 12-month stay provisions or to employ rate design methods to avoid the shortfalls that might occur as a result of serving customers only during high-cost periods. However, the Commission has also encouraged utilities to offer customers an opportunity to return to the competitive market prior to the expiration of 12 months. Specifically, the Commission has urged utilities to implement

“generation rate adjustment mechanisms,” which allow customers the option to pay market-based rates over the course of a short-term return to provider of last resort service.

4. How has the state addressed public benefit programs (e.g., universal service requirements, low income assistance, conservation education, etc.) as it has implemented retail competition? Which of these programs are necessary as competition is introduced and why? Are public benefits available to all customers or are they restricted to customers of the supplier of last resort? How does this affect retail competition?

The Competition Act at § 2804(9) (relating to standards for restructuring of electric industry) directs the Commission to ensure that universal service and energy conservation policies, activities and services are appropriately funded and available in each electric distribution territory. In Pennsylvania, universal service and energy conservation is defined as the policies, protections and services that help low-income customers to maintain electric service. The term includes customer assistance programs, termination of service protections, policies and services that help low-income customers to reduce or manage energy consumption in a cost-effective manner, application of renewable resources and consumer education.

To fulfill this requirement, the assessment of each public utility’s restructuring plan included careful review of the utility’s universal service and conservation programs. Moreover, the Commission promulgated 52 Pa. Code Chapter 54, Subchapter C, “Reporting Requirements for Universal Service and Energy Conservation Programs.” These regulations require that each electric distribution company report the following information to the Commission: 1) annual reports on residential low-income collections and universal service and energy conservation programs; 2) a company plan every three years for its universal service and energy conservation programs, and 3) an independent third-party evaluation every six years that measures the degree that an electric distribution company’s universal service and energy conservation programs are working to provide affordable utility service at reasonable rates.

With respect to the issue of whether public benefits are available to all customers or restricted to customers of the supplier of last resort, in Pennsylvania the Commission determined that universal service or public benefits should be portable. That is, electric distribution companies

continue to operate the public benefit programs but may not restrict a public benefit customer from choosing a competitive supplier and in so doing, the customer does not lose the public benefits.

V. Market Structure Issues

1. **How has the development of Regional Transmission Organizations (RTOs) affected retail competition in the state?**

The precursor of the regional transmission organization was the independent system operator, FERC's first effort to create a new industry structure to ensure that transmission system operations were conducted in accordance with FERC Order 888 and the national policy requiring that transmission systems provide open access at comparable terms and conditions. The Commission participated extensively in the FERC proceedings leading up to Order 888 and the order which created PJM Interconnection, L.L.C. (PJM). PJM is the independent system operator in the Mid-Atlantic Area Reliability Council region extending through New Jersey, portions of Pennsylvania, Delaware, Maryland and the District of Columbia. It administers a FERC approved Open Access Transmission Tariff governing all transmission activity within its region.

One of the key disputes in the formation of PJM was the issue of independence. PJM was formed as part of a comprehensive restructuring of its predecessor, the PJM Interconnection Association, a voluntary association of vertically integrated utilities within the PJM region. The restructuring of PJM was in response to the efforts of FERC to ensure that public utility pools would be established so as to be in conformance with FERC's open access rules. Promoting Wholesale Competition through Open Access Non Discriminatory Transmission Service by Public Utilities, Order No. 888, 61 Fed. Reg. 21,540 (May 10, 1996), FERC Stats and Regs ¶31,036 (1996), Order on Rehearing, Order No. 888-A, 62 Fed. Reg. 12274 (March 14, 1997), FERC Stats and Regs ¶ 31,048 (1997).

One of the earliest issues involved independence of the new entity from control or ownership interest by the utilities which had formerly exercised complete control and direction of the activities of the association. The Commission strongly argued that the system operator should be

wholly independent of such control and direction, with an independent board and management, and with the power to file tariffs with FERC directly in support of its operations. FERC ultimately decided to favor independence as a central tenet of PJM's operations¹.

Order 2000 was an expansion of the principles of Order 888, based upon the experience gained under Order 888 and in the implementation problems uncovered in the application of that order.

It is Pennsylvania's experience that a functioning and competitive retail market cannot be successful without a functioning and competitive wholesale market. Comprehensive state action to open the retail market to competition by retail suppliers is not sufficient, even though it is a prerequisite.

Retail suppliers must have access to a working competitive wholesale generation market in order to do business. In order to attract and retain customers, retail generation suppliers must be assured that they will play on a level playing field with incumbent utility generation supply operators. That means that they must have access to a competitive wholesale generation supply market which is not owned or controlled by incumbent utilities.

The development of PJM underscores the need for an independent system operator. Early in the implementation of Pennsylvania's Competition Act, electric generation suppliers repeatedly informed the Commission that incumbent utilities were either refusing to supply installed generation capacity credits necessary for operation, or were demanding prohibitive prices. PJM was instrumental in encouraging the creation of auction markets, market rules and in supplying market monitoring functions instrumental to the resolution of this problem and other market problems, both during the initial Pennsylvania pilot programs in 1997 and during the phase in of retail competition in Pennsylvania in subsequent years. Without the existence of an independent PJM and the wholesale markets it created, it is doubtful whether retail suppliers would have had the confidence to do business in Pennsylvania to the extent they have.

¹ / Many aspects of that independence are still under appellate attack by incumbent utilities. Public Service Electric and Gas Co et al v. FERC, Case No 00-1503 (U.S. Court of Appeals, District of Columbia).

An independent system operator provides the following important wholesale market functions, all of which are important to the development of retail markets:

- Creates open and transparent auction and other wholesale markets in transmission facilities, energy, capacity and ancillary services, which in turn, assist bilateral transactions by providing transparent market-based information.
- Provides a forum for development of new and revised market structures and mechanisms through an open, transparent and collegial process.
- Provides efficient and trusted market infrastructure and settlements process for wholesale market participants to participate in the market and schedule transactions.
- Provides market-based generation, redispatch, emergency power, transmission congestion pricing and other market based mechanisms which contribute to a wholesale market in which transactions are not arbitrarily cut because of congestion or equipment failure, but are subject to market based resolutions.
- Supervises real time system operations and provides feedback to market participants based upon observations.
- Provides a neutral and trusted generation interconnection process, so that competitive generation may be added to the grid.
- Provides an independent market monitor with access to real time operations and market information to detect gaming and market power issues and recommend solutions to PJM and FERC.
- Provides a neutral and trusted regional transmission expansion and generation interconnection planning process.

2. Did the state require the divestiture of generation assets (or impose other regulatory conditions on the use of these assets) when retail competition was introduced? To what extent was divestiture of generation assets a component of the state's handling of a utility's stranded costs? Was divestiture used to remedy a high concentration of generation assets serving the state? Was there appreciable voluntary divestiture of generation assets? Has the state examined whether there has been appreciable consolidation of ownership of generation serving the state since the start of retail competition?

The Competition Act explicitly provides that the Commission may permit, but shall not require, an electric utility to divest its generation assets or to reorganize its corporate structure. 66 Pa.C.S. § 2804(5). Electric utilities in Pennsylvania serve as the provider of last resort for retail consumers. Therefore, it was left to the individual utilities to determine what corporate structure was in the best interest of consumers and the utility itself.

Two particular cases of note, Duquesne Light Company and the GPU Energy companies opted to divest themselves of their generation assets.² In both cases the net divestiture proceeds were applied to offset stranded costs. Net divestiture proceeds are the difference between the selling price of the generation assets and the sum of (1) the net book value of the assets as of the closing date of the sales, and (2) the incremental transaction related costs incurred by the companies associated with selling the assets. In these cases the Commission adopted the common economic tenet that the marketplace is best suited to determine the value of an asset. Specifically, an actual “arms length” market transaction between a willing seller and a willing buyer to determine the value of an asset is superior to the expert predictions of what the future value of that asset may be. Both divestiture auctions resulted in the companies receiving above book value for their generation assets and in the case of Duquesne Light Company, reducing the stranded cost recovery period.

Retail competition has resulted in a number of transactions involving the sale of generation assets in Pennsylvania. The Commission has not formerly tracked these transactions for the

² The divestiture of Duquesne Light Company's generation assets were approved by the Commission on May 21, 1998 at Docket R-00974104 which approved the company's restructuring plan under Section 2806 of the Competition Act. On September 23, 1998, the Commission approved the Joint Petition for Full Settlement of the Restructuring Plans of Metropolitan Edison Company and Pennsylvania Electric Company where in the companies agreed to divest their generation assets.

purpose of monitoring the consolidation of generation assets. However, some information may be gleaned from materials filed with the Commission. Specifically, the Pennsylvania Public Utility Code requires an electric distribution company to request an amendment of its certificate of public convenience in order to sell any of its generation facilities. Further, the Commission requires licensed electric generation suppliers to inform the Commission of their ownership or affiliation with the owner of generation resources. While these materials may provide some insight into concentration of generation assets in Pennsylvania, they do not provide specific information about bilateral agreements. Aside from the possible exception of the states of Alaska and Hawaii, the relevant market for determining wholesale market concentration of generation ownership requires a regional perspective. In addition, as the generation of electricity results in a number of discrete but interrelated products (such as peak and off peak energy, capacity, spinning and other ancillary services including voltage support), it is unlikely that a state-by-state analysis of generation ownership provides significant regarding market concentrations.

3. If a utility no longer owns generation assets to meet its obligations as the supplier of last resort or default service provider, what market mechanism (e.g., spot market purchases, buy back or output contracts, etc.) does it use to obtain generation services to fulfill these obligations? What share of a utility's load is obtained via the different mechanisms? How are these shares trending? Is the market mechanism transparent? Is it necessary to monitor these market mechanisms? Why or why not? If so, what should the monitor examine?

As discussed above, the Competition Act imposes various duties on the provider of last resort, including an obligation to serve, and charges the Commission with the responsibility of defining that continuing obligation following the termination of stranded cost recovery and the expiration of existing generation rate caps. As a practical matter, Pennsylvania's electric distribution companies have either sold or moved their generation assets to an affiliate of the distribution company. Through the negotiated settlements, some of the generation facilities were transferred to affiliates to back contracts between the generation affiliate and the distribution company. These transactions must transact at costs under SEC rules for affiliate transactions.³ This

³ It should be noted that a number of Pennsylvania's electric distribution companies are registered, rather than exempt, holding companies which provides for greater oversight by the SEC.

framework allows Pennsylvania's electric distribution companies to obtain reasonably competitive energy resources from their affiliates during critical periods. Moreover, the distribution companies have retained an opportunity and obligation to purchase power on the market when market costs are lower.

However, as discussed above, Duquesne and GPU Energy chose to divest themselves of their generation assets. These companies have taken different approaches to meet their Provider of Last Resort obligations. Duquesne entered in to an "all requirements" contract with the buyers of its plants to supply enough power at fixed prices to meet the needs of those customers that stay on its system as provider of last resort until 2004.

While GPU has relied on "power purchase contracts" to meet its obligations. The power purchase contracts have proved to be insufficient to cover GPU's demand thus forcing the company to buy the balance in the expensive spot market. In addition, demand has been greater than expected because many GPU Energy customers have been reluctant to switch power suppliers, and many of those that have left have returned because they have found suppliers to be more expensive.

As most Pennsylvania utilities continue to provide retail default service under a rate cap, it is in their interest to do so on a least cost basis. In the event that a utility incurs "significant increases in the unit rate of fuel for utility generation or the price of purchased power that are outside of the control of the utility and that would not allow the utility to earn a fair rate of return," a utility is authorized under the Act to apply for a rate increase to cover such events. 66 Pa.C.S. § 2804 (4) (iii)(D). Such a rate filing has been made by GPU and is currently before the Commission.

The Commission does not collect statistics on what share of Pennsylvania's Provider of Last Resort load is obtained via these different mechanisms, nor are we able to speculate as to how these shares are trading as the wholesale market is not wholly transparent. Many arrangements are transacted via bilateral contracts which are not publicly available for inspection. Still, it is essential that all market participants, including the Commission, closely monitor all market mechanisms to ensure that the competitive markets operate in a fair manner.

While it is important for market participants to scrutinize the market behavior, in most of Pennsylvania this responsibility is vested with the independent Market Monitoring Unit of the PJM Interconnection L.L.C. The Market Monitoring Unit is tasked with monitoring and reporting on issues related to the operation of the PJM markets. Also, the Market Monitoring Unit evaluates the PJM markets and bilateral markets for design flaws and structural problems. It is incumbent upon the Market Monitoring Unit must determine whether what, if any, enforcement mechanisms are necessary and to recommend corrective actions to maintain competitive markets.

4. Explain the state's role in overseeing operation of the transmission grid in the state and the extent to which public power or municipal power transmission systems are integrated into this effort. What is the relationship between the state's role and the Federal Energy Regulatory Commission's role in transmission system operation in the state?

The Commonwealth of Pennsylvania has not historically overseen the operation of the transmission grid. Prior to the advent of retail and wholesale competition, the regional transmission grid was, with minor exception, wholly owned and operated by monopoly enterprises. With the exception of a relatively few small radial transmission lines operated by rural electric cooperatives, the Commonwealth of Pennsylvania has no significant public power or municipal power transmission systems.

The transmission system in Pennsylvania is part of a larger regional system covering the states of New Jersey, Pennsylvania, Delaware, Maryland and the District of Columbia, with relatively limited interconnection capability to the north, south and west (the region is bounded to the east by the Atlantic Ocean). As power flows encompass the region and are not confined to the state, the Federal Energy Regulatory Commission has the principal role in transmission system operation regulatory oversight and supervision. The Pennsylvania Commission collects market information from participants and other sources, monitors the activities of regional transmission organizations and the operations of open access transmission tariffs Pennsylvania's utilities. Further, the Commission participates as an observer in the deliberations of various PJM committees, and engages in a direct dialogue with PJM and the regulatory agencies of the states,

both informally and through the Mid Atlantic Commission Regulatory Utility Council (“MACRUC”).

- 5. Do firms that have provider of last resort or default service obligations (formerly native load obligations in the regulated environment) receive preferential transmission treatment? If so, how does this affect wholesale electric power competition? How and by whom should retail sales of bundled transmission services (i.e., retail sales of both energy and transmission services) and retail sales of unbundled transmission be regulated? If by more than one entity, how should regulation be coordinated? What should the state's role be in overseeing wholesale transmission reliability?**

Preferential treatment is prohibited by the terms of FERC jurisdictional open access transmission tariffs. Transmission providers must follow the terms of their FERC approved Open Access Transmission Tariffs, which guarantee that preferential treatment will not be provided to incumbent utilities or providers of last resort.

Retail sales of energy should continue to be regulated by the states. The provision of unbundled transmission service is in most cases based upon the regional transmission system, not a transmission system confined to a single state. That is true even in states with single state regional transmission organizations such as are proposed in New York and Florida. No single state has the jurisdictional authority to adequately supervise and regulate a multi-state regional grid. Numerous proposals have been made to Congress to resolve this jurisdictional gap, including vesting FERC with additional jurisdiction, vesting a private standards setting organization with enforcement authority under FERC’s supervision or authorization of multi-state compacts. No legislative solution has passed muster as of this date.

As a result, FERC should regulate unbundled transmission service, and wholesale generation transactions on that grid. Retail energy sales should continue to be regulated by the states, as well as regulation of business practices, operational competence and financial qualifications of retail energy suppliers. States should continue to exercise jurisdiction to supervise the reliability of distribution systems, participate actively in regional transmission organization market and reliability issues and market monitoring activities. In the event that issues of wholesale transmission reliability are detected and existing stakeholder processes cannot remedy such

issues, states should address such issues to FERC, which can adequately address the issues and direct corrective action on an interstate basis.

6. To what extent did the state identify transmission constraints affecting access to out-of-state or in-state generation prior to the start of retail competition? Is the state capable of remedying these transmission constraints, or is federal jurisdiction necessary? How do the rationales for federal jurisdiction over electric power transmission siting compare to the reasons underlying federal jurisdiction over the siting of natural gas pipelines?

Pennsylvania was aware of transmission constraints across our region based upon review of the record made pursuant to transmission siting applications in the mid-1990s. A specific transmission constraint analysis was not performed. In any event, transmission constraints are not state-specific, but regional in scope. Nor are long term constraints the sole issue in market power analyses; in a regional transmission grid, placement and design of transmission and generation additions have electrical effects on transmission capacity throughout the region. Short term transmission constraints, together with generation output behavior and other contingencies may result in large changes in market power relationships which cannot be successfully captured or remedied by long term forward looking studies. In addition, transmission improvements designed to remedy constraints must be designed on a regional basis, as single state attempts may result in constraints in other regions, or be far more expensive or difficult to accomplish than a regional approach to such improvements.

7. How have state siting regulations for new generation and transmission facilities been affected by the onset of retail competition? Has new generation siting kept pace with demand growth in the state? If not, why not? Is federal jurisdiction necessary for siting of electric power generation facilities? Has the state actively monitored and reported the relationship between in-state capacity and peak demand in the state? What incentives do suppliers have to maintain adequate reserve capacity? What are the ways to value capacity in competitive markets? Is reserve sharing still important in competitive markets? Do other institutions/market processes provide a reasonable substitute for reserve sharing?

As was the case prior to the Competition Act, the Commission does not have siting regulations for new generating facilities. The Commission does, however, have detailed siting regulations relating to the siting and construction of electric transmission lines by public utilities. See 52 Pa. Code §§57.71 - 57.77. These regulations were not amended prior to or since the initiation of

competition in Pennsylvania. However, the continuing development of generation in the region may precipitate the need to evaluate our regulations to ensure grid adequacy and reliability.

The impact on generation siting is limited as the Commission only reviews applications of public utilities for the construction of electric generation plants fueled by nuclear energy, oil or natural gas. See 66 Pa. C.S. §§518 and 519. Specifically, these provisions necessitate a consideration of whether existing coal-fired facilities could be operated in compliance with environmental laws or whether new coal-fired plants could be economically constructed and operated, so as to obviate the need for construction of alternate types of facilities. Further, the Commission's regulations do not establish standards relating to the siting of electric generation facilities and do not consider whether the proposed location is suitable. It should be noted that these provisions do not apply to the construction of new generation facilities by other entities that are outside of the Commission's jurisdiction.

Generally, the PJM Interconnection, L.L.C., which operates as the Independent System Operator in the Mid-Atlantic region under the jurisdiction of the Federal Energy Regulatory Commission, oversees the process of adding new generation resources in most of Pennsylvania. PJM has created a model for analyzing regional electric generation needs, determined procedures for evaluating individual proposals, and defined "generation request queues" for proposed projects. In addition to meeting PJM's criteria for the construction of new generation facilities, an entity must comply with other local, state and federal laws, including those imposing siting or environmental requirements. As discussed below, Pennsylvania continues to see generation expansion in the Commonwealth. The developing wholesale and retail markets are driving the development of generation in Pennsylvania. Many of the proposed projects are being developed by non-regulated entities – merchant plants. The Commission is enthused by the continuing interest of parties to construct generation in Pennsylvania. However, we are concerned that capacity is not being constructed in other states, despite the need for such construction. While we do believe that federal jurisdiction over generation siting is necessary, at this time the lack of generation construction in certain regions of the country is disconcerting. It is imperative that each region adequately prepares to meet its demand growth. Should the regions fail to meet its demand requirements, federal intervention may be necessary.

The Commission actively observes the wholesale market and actively participates in the PJM stakeholder process. Generation expansion is paramount to ensure that the Mid-Atlantic region's forecasted demand growth is met.

Pennsylvania began retail competition with a generation surplus and an adequate, reliable transmission infrastructure. These conditions continue to prevail today, as Pennsylvania is a net exporter of power. In fact, Pennsylvania is the second largest producer of electricity in the United States. The growth of demand in Pennsylvania over the next five years is projected to be 4 percent, while PJM regional demand growth is projected at 10 percent over the next five years. During the same time period, a conservative estimate is that generation is expected to increase by 25 percent or 15,000 MWs.⁴ Of that 15,000 MWs, over 6,000 MWs of new generation capacity are being constructed or added as facility improvements, today.

PJM, which serves approximately 9.5 million customers, has 57,000 MW of installed capacity. This is critical, as capacity obligations play a pivotal role in maintaining reliability and aid the functioning of an effective and competitive energy market. PJM's rules governing these capacity resources are designed to provide assurance that energy will be available to loads in PJM on the highest load days. Specifically, Load Serving Entities in PJM must own or purchase capacity resources greater than or equal to the load that they serve, plus a reserve margin. To meet these obligations, alternate suppliers may own or purchase generating capacity.

Capacity resources are purchased in three different ways. First, capacity resources may be purchased via bilateral contract basis from a source internal PJM control area. These internal bilateral transactions may in the form of a sale of all or part of a specific generation unit, or in the form of capacity credit, which is a unit of unforced capacity measured in MWs of unforced capacity per day. Second, capacity resources may be purchased from the PJM Capacity Credit Markets. These markets provide the transparent, market-based mechanism enabling alternate suppliers, serving at retail, to acquire capacity resources to meet their obligations and to sell capacity resources when they are no longer needed. The markets are administered by PJM for

⁴ This generation has a 75% or higher likelihood of being built and amounts to a 25% increase in regional generation.

terms of a day, a month, or multiple months. Third, capacity may be purchased from a generating unit external to the PJM control area. These imports are unit specific and must have firm transmission to the metered boundaries of the PJM Control Area.

8. Since the start of retail competition, what has been the rate of generation plant outages (scheduled and unscheduled)? To what extent has the state monitored these outages and examined their causes?

Prior to the onset of retail competition, the electric utilities were required to provide 45 day and 120-day outage reports to the Commission. However, due to the shifting of generation assets to electric utility affiliates or generation divestiture, there are no longer any reportable units within the electric distribution company assets. The Commission does, through the Pennsylvania Emergency Management Agency, receive outage notification through the use of the Pennsylvania Emergency Incident Reporting System. The Pennsylvania Emergency Incident Reporting System establishes standard criteria for reporting incidents to Pennsylvania Emergency Management Agency that affect the safety, health and welfare of the citizens of the Commonwealth. The Commission actively participated in designing Pennsylvania Emergency Incident Reporting System which is intended to assist county emergency management coordinators, communications centers, 911 centers, commercial and industrial facilities, state and federal agencies and volunteer organizations in identifying Pennsylvania Emergency Incident Reporting System reportable incidents and standardizing reporting procedures. The Pennsylvania Emergency Management Agency provides then provides notification to the Commission that an outage incident has occurred.

VI. Other Issues

1. What measures has the state taken to make customer demand responsive to changes in available supply? Has the state provided utilities incentives to make customers more price responsive? Has the state moved away from average cost pricing? What effect have these measures had on demand and on demand elasticity?

In utilizing a gradual transition to implementing full-scale electric competition by emphasizing consumer protections through rate cap design, Pennsylvania retail electric customers are currently insulated from market signals that would likely affect demand during peak usage

periods. The market insular effects of such an approach had always been recognized as a shortcoming of the rate cap design in transitioning to a truly competitive market. Nonetheless, the consumer protection benefits of rate caps during this transition period have always been understood as being indispensable from a policy perspective. Moreover, the precise effects of the rate cap design on demand were not known at the time of their adoption nor were they perceived to be a threat to the competitive market. Yet, with the recent market failures in California, the interdependency of the retail and wholesale electric markets has become even more evident, emphasizing the critical need for transparent market signals.

Recognizing this need as being crucial, coupled with the desire to emphasize customer responsiveness in decreasing electricity demand during peak periods of usage, the Commission hosted a roundtable discussion in November 2000 to discuss issues related to creating demand side responses. Involving stakeholders representing both consumers and industry alike, the participants in the roundtable discussion were invited to provide testimony with respect to whether they believed that promoting demand side response during peak periods would enhance reliability and economic efficiency of wholesale and retail markets. Additionally, if the participants agreed that demand side responses would enhance economic efficiency and reliability, the participants were then asked whether policies should be implemented to promote demand side responses at the wholesale and retail levels and, if so, what types of programs should be implemented. Resoundingly the participants agreed that demand side responses would prove beneficial for the market and enhance reliability. The participants further indicated their desire to move forward with more comprehensive examination of demand side efforts and programs.

Based upon this encouraging testimony, the Commission convened the Demand Side Response Working Group in January 2001 to further explore the establishment of both short and long term programs designed to promote demand sided responsiveness. Up to the present, the Demand Side Response Working Group has emphasized short-term goals, including the implementation of programs as early as this summer which will offer economic incentives to large commercial and industrial customers who are able to trim demand during peak load periods. One such proposed program is the voluntary load reduction program whereby customers receive offers of payment

to voluntarily reduce load during a particular peak period. Another program proposes to offer customers day a head pricing information so as to allow the customer to make economic decisions regarding load reduction.

Also, the working group has formed two subgroups to further explore issues related to demand side response programs. One subgroup is considering whether to implement consumer education programs this summer to inform consumers, particularly residential consumers, that increased electric usage during peak periods affects wholesale market prices. The second subgroup is investigating methods to measure the effectiveness of certain demand response programs, such as the extent of customer participation and the amount of load reduction.

Furthermore, the Commission's Demand Side Response Working Group has tentatively identified some long-term demand response solutions to educate consumers of the impact demand has on the energy markets. Involving a mix of technological innovations and increased consumer education, such programs have a combined goal of introducing customers to real time market information. This will allow customers to make instantaneous economic decisions regarding their electric usage.

Additionally, Pennsylvania's Competition Act has created new opportunities and incentives for the development of renewable and sustainable energy products and services and other distributed generation resources. These services are expected to expand further once barriers for interconnection to the distribution grid are identified and corrected by the Commission's newly formed Interconnection Working Group.

Through the implementation and proliferation of these programs, in conjunction with a "Customer Load Reduction Program" proposed by the PJM Interconnection, LLC, it is expected that the economic efficiency and reliability of electric supply in Pennsylvania will be immensely enhanced in the upcoming months. Thus resulting in a more robust, yet stable, electric generation market.

2. Has the state provided mechanisms and incentives for owners of co-generation capacity to offer power during peak demand periods? Has the state identified, reported, and facilitated development of pumped storage facilities or other approaches to arbitraging between peak and off-peak wholesale electricity prices?

The state has not provided mechanisms or incentives for owners of cogeneration capacity to offer power during peak demand periods. Many cogenerators continue to operate under fixed price contracts with electric distribution companies, which have been approved by the Commission. These contracts specify a cent per kilowatt-hour rate for energy regardless of when the power is produced. These costs are passed through to customers. Under present Federal and State law, the Commission has limited authority to direct renegotiation of contracts to provide for such peak/off peak provisions. Pennsylvania has not identified, reported, or facilitated the development of pumped storage facilities. There is an ongoing effort, however, to identify and facilitate the implementation of methods for providing price signals to customers during peak periods to encourage voluntary demand reductions. (See response to Question VI.1.)

3. What issues have arisen under retail competition that have required cooperation or coordination with other states? What approach was taken to securing this cooperation or coordination? Are there other issues requiring cooperation that have not yet been addressed? Which of these issues are the most significant?

Numerous wholesale market issues have arisen in which coordination and cooperation with states has been required. Such cooperation has generally been informal case-by-case basis and is related to ISO or RTO formation or operations. Such cooperation involves joint pleadings before FERC on issues of common interest. The states also consult and cooperate through their national organization, NARUC and regional organization MACRUC.

The most important issues to date involve ISO and RTO formation and wholesale market power or gaming issues and other market related issues such as demand side pricing and power source tagging. Issues which have not been addressed among regional state jurisdictions involve generation and transmission siting.

4. How prevalent is the use of distributed resources (e.g., distributed generation) within the state? What barriers do customers face to implementing distributed resources?

Distributed generation resources in Pennsylvania have been increasing in recent years. Such use has been mostly limited to larger commercial and industrial customers who are able to incur the costs and meet the guidelines to interconnect to the distribution grid. These costs appear to pose formidable economic and technical barriers to the propagation of distributed generation resources among small commercial and residential consumers, thereby hindering the growth of distributed generation resource use.

Recognizing the efficacy of utilizing distributed resources in encouraging demand side responsiveness to enhance market efficiency and reliability, the Commission formed the Interconnection Working Group in January 2001. This collaborative is exploring the feasibility of developing statewide, uniform interconnection standards. It is currently considering whether and to what extent, barriers impede and unnecessarily discourage the development and interconnection of distributed generation resources to the distribution grid.

The objectives of these collaborative discussions are to clearly identify any technical, regulatory and business practice requirements that appear to impede the interconnection of distributed generation resources to the distribution grid. Further, the efforts of the working group will focus upon methods for eliminating any unnecessary impediments through the development of uniform standards governing the connection and operation of distributed generation resources. Through such efforts, it is expected that the implementation of such guidelines would promote the use of distributed generation resources throughout Pennsylvania, thereby providing customers with greater market control over the price and quality of electricity they consume.

The collaborative effort is still in its initial stages, just having conducted the charter meeting on March 14, 2001. While some interconnection barriers were generally identified and discussed by the participants in that meeting, further discussion and surveying is required before the group can identify specific and unnecessary barriers that exist to impede the implementation of distributed resources throughout Pennsylvania.

5. Which specific jurisdictional issues prevent state retail competition programs from being as successful as they might be?

The Federal Power Act should be amended to provide clearer authority to the FERC to compel wholesale market participants, including electric distribution companies, transmission and generation owners to comply with the requirements of FERC Order 2000. Regional transmission organizations, as described by the FERC in that order are essential to the creation of working wholesale markets, planning and improvements to the transmission grid and open and transparent markets. Regional transmission organizations must be of sufficient size and scope to assure independence from any single market participant or sector and should be responsible for short term reliability and long term reliability planning, market monitoring and market design necessary in aid of those objectives.

In addition, FERC should have authority to make “need” determinations regarding proposed transmission improvements, whether or not such improvements cross a state line. In today’s regional markets, relatively small transmission improvements may have large effects on the operation of the interstate grid for better or worse. States should retain their authority over siting of such projects subject to such FERC need determinations.

States are also disadvantaged to some extent by their limited jurisdiction when addressing issues of consolidation and market power. With increasing concentration in the ownership of transmission and generation resources, more coordination between state and federal authorities is necessary to forestall excessive concentration.

6. Which specific technological developments are likely to substantially affect retail or wholesale competition in the electric power industry that may alter the manner in which states structure retail competition plans? Why? What time frame is associated with these developments?

As mentioned earlier, any technological innovations that allow the consumer to make instantaneous economic decisions regarding their electric usage will have a profound and substantial impact on both retail and wholesale competition. One such innovation are advanced meters that measure and provide real-time consumption and price signals to the consumer by

way of internet or wireless alerts. Additionally, demand side response programs that provide customers with access to pricing and usage information through an internet website on either a day-ahead or end-of-day cycle are currently viable projects that may have significant impacts on the structure of retail competition programs.

Furthermore, new strides in distributed generation equipment such as fuel cells, wind turbines, solar technologies and other generation resources, coupled with innovative uses of those systems, will greatly enhance and reduce peak demand usage for a larger variety of customers and further reduce base load in the aggregate. The timeframe for widespread deployment of these devices varies depending on the complexity of the resource and the impediments that exists in using them, however, it is conceivable that many of these devices could be in wide use within the next decade. Through the use of such “peak shaving” resources, the wholesale and retail electricity market will be more stable and allow implementation of true electric retail competition.

7. What are the lessons to be learned from the retail electricity competition efforts of other countries? Are there other formerly-regulated industries in the U.S. (e.g., natural gas) that allow customer choice and provide useful comparisons to retail electricity competition? If so, what are the relevant insights or lessons to be learned?

In its investigation into the role of electric competition in Pennsylvania, prior to the Competition Act, the Commission reviewed various deregulation activities in several other countries. Specifically, Chile, the United Kingdom, Norway, and Argentina undertook privatization and deregulation of their respective electric industries before Pennsylvania. While there was some value to understanding and learning from the experiences of other countries in developing Pennsylvania’s restructuring model, it is important to note that significant differences existed between the structure of the electric industries in those countries as compared to the structure of the industry in Pennsylvania. Yet, the Commission continues to monitor ongoing developments occurring in other state, federal and international markets and encourages other markets to learn, through visits and inquiry, from Pennsylvania’s experience with retail competition.

In addition to reviewing the deregulation activities occurring in other countries, the Commission found it useful to compare the potential restructuring of Pennsylvania’s electric industry with the

deregulation of other formerly regulated industries. Particularly, the deregulation experiences of the trucking, airline, natural gas, and telecommunications industries assisted in formulating policies and guidelines related to the role, structure and implementation of retail electric competition in Pennsylvania. As noted earlier, a comparison of the benefits reaped from increased competition in those previously regulated industries indicated that increased competition in the electricity market would be more effective than economic regulation, thus encouraging Pennsylvania to move forward with the implementation of retail electric competition. Moreover, the continued monitoring of the competitive natural gas and telecommunications industry provides useful insights and lessons regarding the evolution of previous natural monopolies into full-scale competitive markets.

Respectfully submitted,

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