Report to the General Assembly on Competition in Pennsylvania's Retail Natural Gas Supply Market

From the
Investigation into the Natural Gas Supply Market,
Docket No. I-00040103

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I. EXECUTIVE SUMMARY

In accordance with Section 2204(g) of the Public Utility Code, 66 Pa. C.S. §2204(g), by Order entered May 28, 2004 at Docket No. I-00040103, the Pennsylvania Public Utility Commission ("Commission") initiated an investigation into competition in Pennsylvania's retail natural gas supply market. Section 2204(g) directs the Commission to investigate and evaluate the retail natural gas supply market as restructured under "The Natural Gas Choice and Competition Act" to assess the resulting level of competition five years after the effective date of the Act. Section 2204(g) also directs the Commission to report its findings to the General Assembly. Section 2204(g) further directs the Commission, if it determines that "effective competition" does not exist, to reconvene the stakeholders in the natural gas industry "to explore avenues, including legislative, for encouraging increased competition in this Commonwealth." 66 Pa. C.S. §2204(g).

In the Commission's judgment, the existence of "effective competition" in the retail natural gas supply[1] market in Pennsylvania would be demonstrated by participation in the market by many buyers and sellers, the lack of substantial barriers to market entry for suppliers, the lack of substantial barriers that would discourage customer participation, and the presence of sellers offering buyers a variety of products and services. Based on this standard and the record in this proceeding[2], there is not effective competition in the retail natural gas supply market on a statewide basis at this time. The Commission's competitive outlook is based on seven key conclusions:

[1] "Natural Gas Supply Services" are defined at 66 Pa. C.S. §2202 as including "(i) the sale or arrangement of the sale natural gas to retail gas customers; and (ii) services that may be unbundled by the commission under section 2203(3)(relating to standards for restructuring of natural gas utility industry."

[2] *Investigation into Competition in the Natural Gas Supply Market*, Docket No. I-00040103.

(1) The record demonstrates a lack of participation by natural gas suppliers and buyers in the retail natural gas supply services market on a statewide basis.

(2) The record indicates that natural gas distribution companies tend to act as price leaders in their respective service territories because many customers are not aware that that the commodity price of natural gas, i.e., the "Price to Compare" or "PTC," is a quarterly reconcilable price, based on projections, rather than a fixed annual price.

(3) According to suppliers, substantial barriers to entry in the retail natural gas supply market exist because of differing security requirements among natural gas distribution companies.

(4) According to suppliers, substantial barriers to entry and continued participation by natural gas suppliers in the retail natural gas service supply market exist as the result of the omission of procurement, administrative and other costs from the natural gas distribution company's commodity price of natural gas, i.e. the PTC.

(5) According to suppliers, substantial barriers to supplier participation in the retail natural gas supply market exist because of penalties placed on suppliers that vary among natural gas distribution company systems and that are not cost-based.

(6) The regulatory lag in establishing and implementing quarterly price adjustments by natural gas distribution companies tends to mask the current market price of natural gas.

(7) The marketplace lacks accurate and timely price signals; as a result, the market cost of natural gas supply service offered by natural gas distribution companies is not communicated immediately to customers.

In light of the above findings and conclusion, the Commission directs, pursuant to 66 Pa. C.S. §2204(g), that the stakeholder group in the natural gas industry reconvene to explore avenues, including legislative (if appropriate), for encouraging increased competition in Pennsylvania's retail natural gas supply service market. The collaborative shall examine the above listed issues and other matters that are relevant to the retail natural gas supply service competitive market, and develop recommendations regarding changes that need to be made to the market structure and operation. Also, the stakeholders shall recommend any amendments that need to be made to the Natural Gas Choice and Competition Act and the Public Utility Code and revisions that need to be made to Commission regulations that will enhance competition.

The Commission anticipates that the first stakeholder meeting will be held before the end of this year.

II. HISTORY OF THE PROCEEDING

Section 2204(g) of the "Natural Gas Choice and Competition Act" ("Competition Act") requires the Commission to initiate an investigation or other appropriate proceeding to determine whether effective competition for natural gas supply exists in the Commonwealth. The proceeding must be launched five years after the effective date of the Act, July 1, 1999. The statute provides for participation by all interested parties, and requires the Commission to report its findings to the General Assembly.

On May 28, 2004, the Commission entered an Order initiating an investigation into the effectiveness of competition in the natural gas industry.[3] In its order the Commission directed natural gas distribution companies ("NGDCs") and natural gas suppliers ("NGSs") to file specific data relating to the natural gas market. Also, the PUC invited other interested parties to provide comments or written testimony addressing topics that are relevant in assessing the level of competition in that market. Twenty-four commenters, including one pipeline company,[4] filed comments. The commenters included Office of Consumer Advocate ("OCA"); Office of Small Business Advocate ("OSBA"); Energy Association of Pennsylvania ("EAP"); the Mack Service Group ("Mack"); Equitable Gas Company ("Equitable"); Columbia of Pennsylvania ("Columbia"); Independent Oil and Gas Association ("IOGA"); NRG Energy Center Pittsburgh ("NRG"); Constellation New Energy –Gas Division ("New Energy"); Amerada Hess Corporation ("Amerada Hess"); PEPCO Energy Services ("PEPCO"); Interstate Gas Supply Inc. ("Interstate Gas Supply"); Natural Fuel Resources, Inc. ("NRG"); UGI Utilities, Inc. – Gas Division ("UGI"); Peoples Natural Gas Co ("Dominion Peoples"); Texas Eastern Transmission, Inc. ("Texas Eastern"); Shipley Energy Company ("Shipley"); Dominion Retail, Inc. ("Dominion Retail"); National Energy Marketers Association ("NEMA"); Agway Energy Services ("Agway"); PEPCO

[3] A copy of this order is reproduced in the Appendix to this Report.

[4] Texas Eastern Transmission, Inc.

Energy Services ("PEPCO"); Utilitech, Inc. "Utilitech"); Shell Energy Company ("Shell Energy"); and Direct Energy Services ("Direct Energy").

Responses to data requests were filed by all of the NGDCs.[5] Nineteen licensed NGSs[6] filed responses to the Commission's questions.

The PUC held an *en banc* hearing on September 30, 2004 to further explore the level of competition in Pennsylvania. Ten witnesses[7] representing the Energy Association of Pennsylvania ("EAP"), the Office of Consumer Advocate ("OCA"), the Office of Small Business Advocate ("OSBA"), and various NGSs testified at the hearing. Representatives from the NGDCs did not present testimony but were available to be questioned by the Commissioners.

Reply comments were permitted to be filed by October 12, 2004. Nine reply comments were filed. Reply commenters included EAP, T.W. Phillips, Inc. ("Phillips"); New Energy, Industrial Energy Customers of Pennsylvania ("IECPA"), OSBA, Dominion Peoples, Equitable, and Amerada Hess filed separate comments. Joint Comments were filed by Direct Energy, Dominion Retail, Interstate Gas, Shell Energy, and Shipley Energy.

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[5] The NGDCs filing responsive data include natural gas distribution companies with annual operating income greater than $6,000,000, 66 Pa. C.S. §2202, and the Philadelphia Gas Works.

[6] NGSs are defined at 66 Pa. C.S. §2202 to include entities other than NGDCs that provide natural gas supply service to retail gas customers utilizing the jurisdictional facilities of the NGDC. The number of suppliers varies as suppliers enter and exit the market. As of September 30, 2004, there were 82 licensed NGSs in Pennsylvania.

[7] Witnesses testifying at the hearing represented EAP, Amerada Hess, Direct Energy, Dominion Retail, Interstate Gas, Shell Energy, Shipley, NRG, OCA and OSBA.

III. INTRODUCTION

A. Section 2204(g)

Section 2204(g) of the Competition Act, 66 Pa. C.S. §2204(g), directs the Commission to investigate and evaluate the existing level of competition in the restructured natural gas supply service market five years after the Competition Act went into effect, and to report its findings to the General Assembly. If the Commission determines that "effective competition" does not exist in the market, the Commission is required to reconvene stakeholders to explore avenues, including changes to the legislation, for encouraging increased competition in this Commonwealth. The Competition Act, by not defining "effective competition," deferred to the Commission to use its expertise to define effective competition, to determine how to measure competition and to ascertain what constitutes effective competition. Accordingly, consistent with this charge, the Commission has set forth in this report the standards that it used to evaluate the effectiveness of competition in the retail natural gas supply market statewide, and its conclusions regarding the level of competition.

B. Industry Structure[8]

The natural gas industry has three segments: production, transmission and distribution. In the early 1970s, all three segments of the industry were price-regulated. The federal government, then through the Federal Power Commission ("FPC"), regulated the prices paid by interstate pipelines to producers for gas at the wellhead. The FPC also regulated interstate pipelines which transported this gas to the city gates of local natural

[8] The description of regulation of the natural gas industry was taken in part from the *UGI Comments* at pp. 4-8 and was derived from testimony presented in hearings by UGI's now retired president, Richard Bunn, before the House Consumer Affairs Committee in 1997, concerning legislation which later was enacted as the Competition Act.

gas distribution companies ("NGDCs") and sold the gas to the local gas distribution utilities at bundled rates. Finally, state utility commissions regulated bundled rates charged by the NGDCs for sales of gas at retail to end-user customers.

When federal regulation of wellhead prices proved to be unsuccessful, resulting in severe shortages of natural gas, Congress addressed these problems in several ways. In 1977, Congress reorganized the FPC into the Federal Energy Regulatory Commission ("FERC"). Congress really began the process of increasing maximum allowable natural gas prices in the late 1970s, beginning with the *Natural Gas Policy Act of 1978*, and deregulated all vintages of natural gas prices in 1989,when it passed the Wellhead Decontrol Act that removed all regulation from the gas commodity by 1993. *Natural Gas Decontrol Act of 1989*, H.R.Rep.No.101-29, 101st Cong., 1st Sess.,(1989). This deregulation greatly stimulated production.

The second segment of the natural gas industry is comprised of the federally-regulated interstate pipelines that deliver gas from the production areas to Pennsylvania's NGDCs. This segment of the natural gas industry was also restructured, but not deregulated, by federal authorities in the 1980s and 1990s. In the 1980s these pipelines were required to open their systems to transportation as an alternative to bundled city gate sales service, and in the 1990s were required, as a practical matter, to exit the so-called merchant function of making such bundled sales.[9] In 1986, the Commission adopted formal rules requiring the availability of such service on all Pennsylvania distribution systems.[10]

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[9] *See* FERC Order 436, *Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, Order No. 436, 50 FR 42408 (Oct. 18, 1985), FERC Stats. & Regs. [Regulations Preambles 1982-1985] 30,665 Docket Nos. RM91-11-000 and RM87-34-065, and FERC Order 636. *Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation Under Part 284 of the Commission's Regulations; Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, ORDER NO. 636 (April 8, 1992), [FINAL RULE], Docket Nos. RM91-11-000 and Docket No. RM87-34-065.

[10] 52 Pa. Code Ch. 60 (relating to natural gas transportation service).

Customers with varying needs for interstate pipeline transportation and storage services share the same transmission and distribution systems with smaller, space heating customers. For example, larger Commercial and Industrial ("C&I") customers with higher load factors have a flat load and utilize the same amount of gas on a relatively constant basis throughout the year. In contrast, smaller Commercial customers and residential customers have loads that fluctuate throughout the year, and usage varies on a seasonal basis.

Consequently, larger C&I customers have little need for storage services used to accommodate heating customers' seasonal swings in demand. Further, larger C&I customers may be able to use interstate pipeline capacity efficiently because they do not need to reserve and pay for pipeline capacity to meet seasonal peak demands as they have the discretion to move production schedules, supplement with alternative fuels or implement selective shut downs. Therefore, such customers may have a low unit cost for pipeline capacity under federal pricing methodologies that require payment for pipeline capacity throughout the year, regardless of whether the capacity is needed throughout the year.

The third segment of the natural gas industry is composed of NGDCs. Under the Competition Act, the NGDC segment of the industry was to remain fully regulated and largely unaffected, except that rates would be unbundled to facilitate implementation of competition by natural gas suppliers for small customers.

Today, the natural gas commodity market is a more mature market. NGDCs and NGSs (and C&I customers because of the availability of transportation service[11]) all compete to purchase natural gas supplies in the same wellhead markets at prices set by competition and the economic law of supply and demand.

[11] The increased availability of transportation service to customers is discussed *infra.* at pp. 11-13.

C. History of Competition in Natural Gas Industry

1. Competition Among Gas Companies Overlapping Service Territories

The Commission has been encouraging competition in the gas industry since the early 1980's. Commission policy favoring competition among natural gas companies with overlapping service territories[12] had its inception in cases where a customer was permitted to choose its gas company. In *Montefiore Hospital Assn. of Western Pa.*, 54 Pa. PUC 566 (1981), the Commission ruled that one gas company could serve an existing customer of another gas company where the companies' service territories overlapped.[13] This Commission "customer choice" policy passed judicial muster in *Borough of Grove City v. Pa. PUC*, 505 A.2d 346 (Pa. Cmwlth. 1986).

Two years later in *Columbia Gas of Pa. Inc. v. Carnegie Natural Gas Co.*, 61 Pa. PUC 313 (1986), the Commission advised jurisdictional natural gas utilities that it would no longer prohibit competition among natural gas utilities with overlapping service territories, and the Commission expressly revoked a 1957 policy statement that prohibited

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[12] Overlapping service territories in Western Pennsylvania resulted from the manner in which gas companies could claim service territories under the Natural Gas Company Act of 1885 (Act of May 29, 1885, P.L. 29, No. 32). To acquire a certain territory, the gas company would file a charter indicating "[t]he place or places where natural gas is intended to be mined for and produced or received, the place or places where it is to be supplied to consumers, [and] the general route of its pipe line or lines and branches. . . ." Section 2 of the *Natural Gas Companies Act of 1885*, 15 P.S. §3542. Subsequently, in Western Pennsylvania where natural gas supplies were plentiful and terrain was challenging to traverse, competing companies constructed gathering lines, transmission lines and distribution lines sometimes side by side, and therefore claimed overlapping territories under the Act. *See Equitable Gas Company v. Apollo Gas Company and Equitable Gas Company v. Carnegie Natural Gas Company*, Order entered September 5, 1990 at Docket No. C-844028; C-844035; C-844034. *See also, People's Natural Gas Co. v. American Natural Gas Co.*, 82 A. 935 (Pa. 1911); *The Peoples Natural Gas Company v. Pa. PUC*, 567 A.2d 642 (Pa. 1989).

[13] *Compare Equitable Gas Company v. Apollo Gas Company and Equitable Gas Company v. Carnegie Natural Gas Company*, Order entered September 5, 1990 at Docket No. C-844028; C-844035; C-844034 (gas company ordered to stop serving a customer located outside of the gas company's service territory's boundaries as defined by predecessor companies' charters or certificates of public convenience).

a natural gas utility from providing service to a customer of another natural gas utility without prior Commission approval.

The Commission reiterated its policy favoring competition in *Petition of Equitable Gas for Declaratory Order*, order entered August 26, 1986 at Docket No. P-850053. In its order the Commission dismissed as moot the Petition which sought Commission approval for the initiation of service by a gas company to a new customer located on the site of a building formerly served by another gas company. The Commission's policy was affirmed by Commonwealth Court in *Peoples Natural Gas Co. v. Pa. PUC*, 554 A.2d 585 (Pa. Cmwlth. 1989).

The result of this Commission policy encouraging competition in the natural gas industry was the western Pennsylvania gas wars--customer/territorial disputes that erupted among gas distribution companies with contiguous service territories. Western Pennsylvania with its overlapping gas company service territories provided a perfect arena for such competition. Participants in the gas wars included Peoples and Apollo (*Peoples Natural Gas Co. v. Apollo Gas Co.*, Docket No. C-850521); Peoples and T.W. Phillips (*Peoples Natural Gas Co. v. Pa. PUC*, 554 A.2d 585 (Pa. Cmwlth. 1989)); and Equitable and Apollo (*Equitable Gas Co. of Equitable Resources, Inc. v. Apollo Gas Co.*, Docket Nos. C-844028 and C-844035).

2. Bypass

The Commission also considered competition faced by local distribution companies from unregulated entities that sought to compete with gas companies in their own service territories. On July 10, 1987, the Pennsylvania Gas Association filed a "Petition for Issuance of a Regulation" which sought a ruling that any person or entity seeking to provide natural gas sales or transportation service must first obtain a certificate of public convenience or an order declaring that the proposed service does not require such a certificate. *Petition of the Pennsylvania Gas Association for the Issuance of a Regulation Setting Forth the Conditions Precedent to the Provision of Natural Gas Sales or Transportation Services Within the Commonwealth of Pennsylvania*, 66 Pa. PUC 383 (order entered February 2, 1988 at Docket No. P-870236). This petition was filed because of the perceived threat of bypass to local distribution companies. The Commission denied the petition but did initiate an investigation into the possibility of harm to Pennsylvania ratepayers from bypass activities. *Investigation into the Bypass of Gas Utilities by Gas Suppliers*,18 Pa. B. 1295 (order entered February 25, 1988 at Docket No. I-880878). As the result of this investigation, the Commission concluded that although the bypass of gas companies by producers, interstate pipelines, or others remained a potential threat, there was no basis to compel regulation of these entities. However, the Commission determined that the issue of bypass should continue to be addressed on a case-by-case basis. *Re: Bypass of Gas Utilities by Gas Suppliers*, 70 Pa. PUC 446, 453 (order entered August 18, 1989 at Docket No. I-880078).

3. Gas Transportation

Another aspect of gas competition involves gas transportation. The benefit of a customer purchasing gas directly at the wellhead from an interstate pipeline or from a gas marketer is immediately apparent. Even with the transportation expense, the total cost is usually less than the price charged by most gas companies for sales of gas. This makes gas transportation service very attractive economically.

Pursuant to a petition filed by the Pennsylvania Gas Association for an expedited rulemaking regarding gas transportation by natural gas utilities, Docket No. P-850040, on October 16, 1986, the Commission adopted at Docket No. L-860016 uniform transportation regulations governing natural gas transportation service. These regulations, while originally promulgated to facilitate local natural gas competition in Pennsylvania, were designed to complement transportation regulations previously enacted by FERC.

However, smaller natural gas customers were prohibited from participating in gas transportation because of the minimum annual volume of MCF required to be transported. The issue of minimum levels of transportation gas was considered by the Commission in *Pa. PUC v. Peoples Natural Gas Co.*, 58 Pa. PUC 293 (1984). There the Commission directed a major distributor of natural gas to set a minimum transportation volume of 50,000 MCF per year and to permit buyers' groups of three or less. Gas transportation regulation in the Commonwealth followed the policy established in *Peoples* for a number of years. When the Commission later promulgated regulations for gas transportation service, the limit of three buyers in each buyers' group (absent gas company concurrence in a larger group size) was incorporated into those rules. 52 Pa. Code §60.3(b). However, the minimum level to qualify for transportation service was left to be established on a company-by-company basis.

On July 15, 1991, the Commission acted to further amend the transportation regulations by: (1) reducing the minimum volume of the transported natural gas to 5,000 MCF; (2) increasing the number of individual customers or buyers' groups eligible for transportation service from three to ten; and (3) requiring customers classified as Priority 1 under 52 Pa. Code §69.21(a)(1) to purchase standby sales service unless a customer can demonstrate that the facility for which it seeks to transport has adequate installed alternate fuel capability.[14]

At the federal level, FERC issued a series of orders extending its prior efforts to increase flexibility and competition in the natural gas industry. Order 637 and its follow-up orders provided for increased pipeline services in the secondary market, market segmentation and capacity release, all of which have increased the value of primary transportation. *Order No. 637, Regulation of Short-Term Natural Gas Transportation*

[14] *Minimum Threshold for Natural Gas Transportation* Service Order entered June 27, 1991at Docket No. L-890050. The regulations became effective March 20, 1992, 21 Pa. B. 5819.

Services and Regulation of Interstate Natural Gas Transportation Services, FERC Stats. & Regs. [Reg. Preambles 1996-2000] (CCH) P 31,091 (2000); *Order No. 637-A*, Order on Rehearing, *Regulation of Short-Term Natural Gas Transportation Services And Regulation of Interstate Natural Gas Transportation Services*, FERC Stats. & Regs. [Reg. Preambles 1996-2000] (CCH) P 31,099 (2000); Order No. 637-B; Order Denying Rehearing, *Regulation of Short-Term Natural Gas Transportation Services And Regulation of Interstate Natural Gas Transportation Services*, 92 FERC 61,602 (2000).

On April 8, 1992, FERC issued its Final Rule in *Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation Under Part 284 of the Commission's Regulations* (Docket No. RM91-11-000); and *Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol* (Docket No. RM87-34-065). FERC's Order 636 essentially restructured the gas industry allowing for the unbundling of the pipelines' merchant function. Commission regulations at 52 Pa. Code Chapter 60 (relating to natural gas transportation service) were revised to be consistent with the new federal policy.[15]

4. Natural Gas Choice and Competition Act

On June 22, 1999, then Governor Thomas J. Ridge signed into law the "Natural Gas Choice and Competition Act", effective July 1, 1999, 66 Pa. C.S. §2201-§2212. The Competition Act established the Commission's role of steward of competition in Pennsylvania's retail natural gas market and allowed retail consumers in the Commonwealth to purchase natural gas supplies from independent suppliers commonly called "natural gas suppliers" while still receiving distribution services from their local natural gas distribution company. In particular, the Competition Act provides for retail natural gas consumers to choose among NGSs for natural gas supply or to receive default

[15] *Gas Transportation Tariffs*, Order entered May 13, 1996 at Docket No. L-00930084.

supply service from an NGDC, requires the licensing of suppliers, and mandates the unbundling of NGDC supply services and non-discriminatory access by suppliers to the NGDC distribution facilities. At the same time, the Act, as emphasized by EAP,[16] also requires the Commission to "ensure safety, and reliability of the natural gas and distribution service." 66 Pa. C.S. §2203(1). Accordingly, the rules for natural gas supply competition were promulgated so as not to compromise the safety and reliability of natural gas service for customers.

Beginning on November 1, 1999, retail customers had the ability to choose their natural gas supplier pursuant to the rules and regulations established by the Commission to implement the Competition Act.

[16] EAP Comments, p. 2.

IV. EFFECTIVE COMPETITION

A. Commission Authority to Define Competition

Pursuant to Section 501(a) of the Public Utility Code, 66 Pa.C.S. §501(a), the Commission has all necessary powers to carry out the provisions and the intent of the Public Utility Code. These powers by necessity provide the Commission with the authority to define terms that appear in the Public Utility Code, but that are not defined therein, such as "effective competition."

The Courts have consistently deferred to this Commission in the interpretation of its enabling legislation unless the Commission's interpretation bears no reasonable relationship to the regulatory purpose of the legislation. *Popowsky v. Pa. PUC*, 669 A.2d 1029 (Pa. Cmwlth. 1995), *appeal granted in part*, 680 A.2d 1165 (Pa. 1995), *rev. in part*, 706 A.2d 1197 (Pa. 1997). *See also Mid-Atlantic Power Supply Association v. Pa. PUC*, 746 A.2d 1196 (Pa. Cmwlth. 2000).

Moreover, the courts have consistently recognized this Commission's authority to determine the degree of competition appropriate within any jurisdictional market. *Peoples Natural Gas Co. v. Pa. PUC*, 554 A. 2d 585 (Pa. Cmwlth. 1989). *See also, Dublin Water Company v. Pa. PUC*, 213 A. 2d 139 (Pa. Super. 1965) and *Sayre v. Pa. PUC*, 54 A. 2d 95 (Pa. Super. 1947). In other words, the courts are in agreement that the determination of the amount of competition among utilities which will best serve the public interest is a matter within the administrative discretion of the Commission. *Columbia Gas of Pennsylvania, Inc. v. Pa. PUC*, 521 A.2d 105 (Pa. Cmwlth. 1987); *Pa. PUC v. Purolator Courier*, 355 A.2d 850 (Pa. Cmwlth. 1976); *Merz White Way Tours v. Pa. PUC*, 201 A.2d 446 (Pa. Super. 1964). *See Elite Limousine v. Pa. PUC*, 832 A.2d 428 (Pa. 2003)(where the legislature provided no definition of specific criteria to grant a certificate of public convenience, the PUC could formulate its own criteria, and omit the showing of inadequacy of existing service to increase competition in motor carriers).

In the past, when the Commission has needed to define a term that had not been previously defined in the Public Utility Code or by the courts, the Commission has referred to definitions of similar terms in legislation and case law in other jurisdictions. For example, in *Application of Paper City Transfer, Inc.*, Order entered October 7, 1993, Docket No. A-00109453 F.0001, the Commission defined "destructive competition" by reference to definitions of "unfair competition" and "harmful competition" established by the courts in *Brinks, Inc. v. Pa. PUC*, 424 A.2d 1010, 1012, note 2 (Pa. Cmwlth. 1981).

The Commission has also looked to other disciplines to define certain "terms" that were necessary to its analysis in certain matters. In the *Investigation Upon the Commission's Own Motion With Regard to PJM Installed Capacity Credit Markets*, Order entered June 13, 2002 at Docket No. I-00010090, the Commission described the term "elasticity" by reference to its use in economics and mathematics in its order concluding an investigation into possible anti-competitive activity. The term "elasticity" had been used by PJM Interconnection, LLC's market monitoring unit in a report.

As previously stated, the General Assembly, by enacting the Competition Act, has determined that competition in the retail natural gas supply market is in the public interest. However, the task of defining "effective competition" was delegated to the Commission. Accordingly, it is appropriate for this Commission, as it has done in the past, to consider fundamental principles of traditional economics as well as law from other jurisdictions to formulate a workable definition of "effective competition" for use in this report.

B. General Economic Classifications of Competitive Activity

Classic economics does not provide a definition of "effective competition." However, it does provide a framework for classifying the type of competitive activity that exists within an industry. Four general categories used to describe the level of competitive activity have been identified. They are: (1) pure competition, (2) monopolistic competition, (3) oligopoly, and (4) pure monopoly.[17]

Markets where there is "pure competition" are characterized as having a large number of independent sellers producing a standardized product. Also, each seller exerts no significant control over price. New sellers have easy entrance and exit to and from the market. No significant legal, technical, or financial obstacles exist.

There are various forms of competition which are not quite "pure." These forms would exist where there are fewer than a large number of sellers; or where the product was not quite standard; or where a group of suppliers might be able to exert some control over price.

Monopolistic competition falls between pure competition and pure monopoly, but it is closer to pure competition.[18] There are a large number of sellers acting independently. Product differentiation is a major feature of monopolistic competition, and the reliability of the seller to stand behind its product is of critical importance. Customers may have specific preferences for certain sellers and small price increases will not cause them to change. Entry is a little more difficult than in the pure competition market. Considerable advertising may be necessary to inform customers of the existence

[17] W.J. Baumol and A.S. Binder, *ECONOMICS: Principles and Policy*, (New York: Harcourt Brace Jovanovich, 1985), page 505.

[18] *Id.*

of a new entrant to the market and to convince them to switch. Because products are differentiated, competition is based on product quality, advertising, and conditions of service.

A third theoretical market structure involves oligopoly. An oligopoly's major characteristic is that a few sellers dominate the market for a product.[19] These sellers can produce standardized products or differentiated products. There may be significant obstacles to entry, and a new entrant must devote considerable resources to advertising and promotion. Oligopoly markets can be quite complex and economists identify three types[20]: (1) Collusion, (2) Price Leadership Model, and (3) Kinked-demand Model. Collusion occurs when firms attempt to control price. The Price Leadership Model features a dominant seller. The dominant seller benefits from economies of scale and could drive the other sellers out of the market by price-cutting. This seldom happens because of the dominant seller's fear of government intervention.[21] The Kinked-demand Model features several large sellers that make pricing decisions independently.

A pure monopoly is a one-seller industry. There are no substitutes available for the product. The monopoly has considerable control over price, and the barriers to market entry are quite significant.

The following table outlines the four forms of competition. It allows for a quick comparison between each.

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[19] J. Bruce Lindeman, Microeconomics Hauppauge, (New York: Barrons Educational Series, Inc., 1992), p. 101. ("Linderman")

[20] *Id.*

[21] Lindeman, *op. cit.*, p. 103.

Type of Market Structure	Number of Sellers	Nature of Product	Barriers to Entry	Examples
Perfect Competition	Many	All companies produce and sell identical products (ex. Wheat)	None	Some agricultural markets and parts of retailing come close
Monopolistic Competition	Many	Different companies produce and sell somewhat different products (Ex. Restaurant meals)	Minor	Most of the retailing sector, textiles, restaurants
Oligopoly	Few	Companies produce and sell identical or differentiated products (Ex. Tooth paste)	May be considerable	Much of the manufacturing sector, esp. autos, steel, and cigarettes
Pure Monopoly	One	Unique product	May be considerable	Public utilities

C. Commenters' General Assessment of the Level of Competition

In the May 28, 2004 Order that initiated this Investigation, the Commission requested comments on different factors that it should take into account in assessing whether "effective competition" exists in the natural gas supply service market. May 28, 2004 Order at p. 2. These factors included price, consumer education, customer information and service, supplier financial security requirements, and natural gas distribution company penalties and other costs. The Commission also requested that commenters assess the level of competition in Pennsylvania's natural gas supply service market and suggest ways to encourage increased competition.

The Commenters' assessment of competition in the market fell along expected lines. The EAP and the NGDCs that responded separately believed that competition exists in the market place.[22] The suppliers and customers believe that competition is lacking and could be encouraged if certain changes were made.[23]

Regarding the specific criteria that the Commission should use in assessing competition, the commenters again were split. Some commenters argued that the falling numbers of customers and suppliers participating in the market demonstrated the lack of competition.[24] EAP and others argued that the numbers of suppliers and customers were not an indication of effective competition.[25] This was the case with regard to the other four criteria upon which the Commission sought comment making it necessary to discuss each criterion separately below.

As to the definition of "effective competition" in Section 2204(g), no commenter volunteered a definition of the term.[26] Accordingly, the Commission, as the agency responsible for interpreting its own enabling legislation, will define "effective competition." *Popowsky, supra.*

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[22] EAP Reply Comments, p.1, EAP Testimony, Tr. 9; Columbia Comments, pp. 1-2; UGI Comments, p. 9; Dominion Peoples Comments, pp. 8-9.

[23] Utilitech Comments, p.1; Shell Energy Comments, p. 2; Dominion Retail Comments, pp. 1-2; NRG Testimony, Tr. 56.

[24] IOGA Comments, p. 2; Shipley Comments, p. 3.

[25] Dominion Peoples Comments, p. 9 (Dominion Peoples considers competition on its system to be a success even though suppliers have dropped from 37 in 1999 to 20 in 2005).

[26] The Commission's Order did not request that commenters provide a definition of "effective competition."

D. Definitions of "Effective Competition" and Similar Terms from Other Jurisdictions and Resources.

The Competition Act does not define "effective competition," and the term is not defined in any other Pennsylvania statute.[27] However, other jurisdictions have formulated definitions of "effective competition" and other similar terms. For example, Nevada law defined "effective competition" as follows:

> "effective competition" means, with respect to a particular service, a market structure and a process under which an individual seller is not able to influence significantly the price of the service as a result of:
> (1) The number of sellers of the service;
> (2) The size of each seller's share of the market;
> (3) The ability of the sellers to enter or exit the market; and
> (4) The price and availability of comparable substitutes for the service.

NAC § 704.7931 ("effective competition" defined).

On the other hand, New Mexico law lists several factors used to determine whether a particular telecommunications service was subject to effective competition:

> (1) the extent to which services are reasonably available from alternate providers in the relevant market area;
> (2) the ability of alternate providers to make functionally equivalent or substitute services readily available at competitive rates, terms and conditions; and
> (3) existing economic or regulatory barriers.

NMSA 1978, § 63-9A-8(B).

See also The Mountain States Telephone And Telegraph Company v. N.M. State Corporation Commission, et al., 109 N.M. 504; 787 P.2d 423 (N.M. 1990)

Missouri telecommunications law, likewise, sets forth factors that the Missouri Commission must consider in determining whether "effective competition" exists in regard to a particular telecommunications service:

> (a) The extent to which services are available from alternative providers in the relevant market;

[27] The term "effective competition" is used in, but not defined in the *Feature Motion Pictures Fair Business Practices Law* at 73 P.S. §203-2. Likewise, there is no case law interpreting this term.

(b) The extent to which the services of alternative providers are functionally equivalent or substitutable at comparable rates, terms and conditions;
(c) The extent to which the purposes and policies of chapter 392, RSMo., including the reasonableness of rates, as set out in section 392.185, RSMo., are being advanced;
(d) Existing economic or regulatory barriers to entry; and
(e) Any other factors deemed relevant by the commission and necessary to implement the purposes and policies of chapter 392, RSMo.

Section 386.020(13) RSMo.

See also State of Missouri ex rel., Acting Public Counsel John Coffman, Missouri Independent Telephone Group, et al., v. Public Service Commission of the State of Missouri, et al., 154 S.W.3d 316 (Mo. App. 2004).

In defining "effective and sustainable competition," the Public Service Commission of Wisconsin took a more quantitative approach to assess competition in its electric generation market. Relying on classic economic concepts, the Wisconsin Commission first created a "workable competition" standard.[28] The standard consisted of:

(1) A reasonable number of suppliers (HHI[29] of 2,000 to 2,500);

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[28] *Investigation on the Commission's Own Motion into the Need for Changes in Natural Gas Regulation for City Gas Company; Florence Municipal Gas Utility; Madison Gas and Electric Company: Midwest Natural Gas, Inc.; Natural Gas, Inc.; Northern States Power Company; St. Croix Valley Natural Gas Company; Superior Water, Light and Power (Phase III) Company; Wisconsin Fuel and Light Company; Wisconsin Gas Company; Wisconsin Natural Gas Company; Wisconsin Power and Light Company; and Wisconsin Public Service Corporation (Wisconsin Electric Power Company, Gas Operations, formerly Wisconsin Natural Gas Company).* Public Service Commission of Wisconsin, Docket 05-GI-108.

[29] The Herfindahl-Hirschman Index (HHI) is a well-known measure of industrial competition and it helps gauge how competitive an industry is. *See, e.g.*, M. W. Frankena and B. M. Owens, *Electric Utility Mergers: Principles of Antitrust Analysis*, (Westport, Connecticut: Praeger: 1994)("*Frankena and Owens*") The HHI is calculated as the sum of the squares of market share. For example, a monopoly has a market share of 100%, and so the HHI for a monopoly is $100^2 = 10,000$. For a very competitive industry, each firm has a very small market share and the HHI is close to zero. *Frankena and Owens.*

"As an intuitive guide, analysts assessing market concentration (i.e.. whether competition exists) view an HHI below 1,000 as a competitive market. HHI's between 1,000 and 1,800 suggest that the market is more concentrated and less competitive. HHI's over 1,800 indicate strong market concentration, and the need for further analysis to determine if adequate competition exists in the market. However, it is widely recognized that the HHI thresholds are not based on empirical evidence concerning the relationship between concentration/competition and the likelihood that market power will be exercised." *Frankena and Owens.*

(2) Low barriers to competition;
(3) Sufficient available capacity;
(4) Responsive suppliers; and
(5) Informed customers.

Using this standard, the Wisconsin Commission determined that an "effectively competitive" market would have a reasonable number of firms, low barriers to competition, sufficient available capacity, responsive suppliers and informed customers.

The Council for the District of Columbia has also established a definition for "effective competition" in regard to electric generation competition:

> "Effective competition" means, with respect to the markets for electricity supply, billing, and those services declared . . . to be potentially competitive services a market structure under which an individual seller is not able to influence significantly the price of the service as a result of the number of sellers of the service, the size of each seller's share of the market, the ability of the sellers to enter or exit the market, and the price and availability of comparable substitutes for the service.

Council of the District of Columbia, 47 D.C. REG. 1091, §101 (16).

Definitions for terms similar to "effective competition" have been adopted by other entities and include concepts that are worthy of consideration in defining "effective competition." Staff from the Energy Information Administration (EIA), U.S. Department of Energy,[30] listed signs of a "sufficiently competitive" market as including one or more of the following characteristics:

(1) Many buyers and sellers
(2) Many product options
(3) Relative ease of entry and exit
(4) Risk, on the part of the service provider, of losing money if they do not operate efficiently.

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[30] The Energy Information Administration was created in 1977 by Congress and is the statistical agency of the U.S. Department of Energy. The EIA provides policy, independent data, forecasts and analyses to promote sound policy making, efficient markets and public understanding of energy and its interaction with the economy and the environment.

Mariner-Volpe, Barbara, and Trapmann, William, Energy Information Administration, *The U.S. Natural Gas Markets and Industry, (EIA PowerPoint Presentation)*, May 13, 2003, Slide 21 of 40.

The Independent Regulators Group ("IRG") from the European Union[31] in an Internet article[32] states that "effective competition" can be defined as the "persistent absence of players with market power."[33] IRG explains that while perfect competition is a static theoretical concept, "effective competition involves a more dynamic practical view."[34] Hence, for a market to be effectively competitive, it is necessary that this situation be sustainable. In other words, the possibility that one or more players can acquire market power is not consistent with effective competition. *Id.* As to its defining characteristics, IRG states that "effective competition" retains the main features of the competitive process in that:

(1) Agents (buyers or sellers) behave competitively.
(2) Consumers are offered a variety of products.
(3) Firms are efficient and are able to innovate.

IRG Article, ¶2.3.

IRG also states that the importance attached to effective competition is better appreciated in terms of its outcomes for consumers. According to IRG, consumers are better off in an effectively competitive market because they are more likely to find a better deal to meet their needs. *IRG Article*, ¶ 2.5. Therefore, in addition to the traditional structural criteria, consideration is given to particular aspects of customer care,

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[31] Established in 1997, Independent Regulators Groups for telecommunications includes members from 15 countries from the European Union, the European Economic Space (Iceland, Norway and Liechtenstein), Switzerland and from the candidate countries to the European Union (Bulgaria, Poland, Czech Republic, Hungary, Romania, Latvia, Lithuania, Slovak Republic, Slovenia and Estonia and Cyprus). The groups work as informal forums of discussion and information exchange about issues relating to the regulation and development of the European telecommunications market.

[32] Independent Regulators Group, *Principles of Implementation and Best Practice on Effective Competition in Electronic Communications Market* (February 19, 2001) ("*IRG Article*"), found May 12, 2005 at http://www.regtp.de/imperia/md/content/internatio/pibs_on_effective_competition.pdf.

[33] *IRG Article* ¶2.3.

[34] *Id.*

responsive pricing, availability of innovative services, the extent of choice available, availability of appropriate information on prices and quality, evidence of efficiency in the provision of service and value for money. *Id.*

E. "Effective Competition" Defined.

As discussed previously, Pennsylvania's General Assembly delegated the task of defining "effective competition" to the Commission. The Competition Act does not provide specific guidance to the Commission in this task. However, it would seem reasonable that the parameters adopted by others in defining "effective competition" and other similar terms would be same ones that the Commission should consider, and in fact, did solicit comment on in its investigation order:

(1) number of active suppliers;
(2) number of retail customers served by alternate suppliers;
(3) volume of natural gas transported on NGDCs' systems for customers served by NGSs.
(4) effect of price of natural gas on competition.
(5) presence of possible barriers to market entry, participation and exit by NGSs (NGDC security requirements, penalties for under delivery, mandatory assignment of capacity).
(6) presence of possible barriers that may limit customer participation (lack of accurate immediate pricing information, lack of consumer education).

Commission Order entered May 27, 2004 at Docket No. I-00040103, Annex A.

Accordingly, for the purpose of this Investigation, the Commission adopts the following factors as indicia of "effective competition" in the defined retail natural gas supply market:

(1) Participation in the market by many sellers so that an individual seller is not able to influence significantly the price of the commodity.
(2) Participation in the market by many buyers.
(3) Lack of substantial barriers to supplier entry and participation in the market.
(4) Lack of substantial barriers that may discourage customer participation in the market.
(5) Sellers are offering buyers a variety of products and services.

F. Methodology.

Pursuant to its authority at Section 335(a) of the Public Utility Code, 66 Pa. C.S. §335(a), the Commission is the ultimate finder of fact and makes all determinations as to the weight and credibility of evidence. *PP&L Industrial Consumer Alliance v. Pa. PUC*, 780 A.2d 773 (Pa. Cmwlth. 2001); *Borough of Duncannon v. Pa. PUC*, 713 A.2d 737 (Pa. Cmwlth. 1998). The court may determine only whether Commission findings are supported by substantial evidence; the court may not substitute its judgment for that of the Commission, nor "indulge in the processes of weighing evidence and resolving conflicting testimony." *Popowsky, et al. v. Pa. PUC*, 706 A. 2d. 1196 (Pa. 1997). *See also Johnstown-Pittsburgh Express, Inc. v. Pa. PUC*, 291 A.2d 545, 547 (Pa. Cmwlth. 1972).

In Section 2204(g) the General Assembly charged the Commission with the duty of evaluating competition in the retail natural gas market as it developed under the Competition Act. This Investigation was undertaken to fulfill that duty.

The record in this Investigation consists of comments, reply comments, responses to data requests submitted by the NGSs and NGDCs and testimony and exhibits presented at the September 30, 2004 *en banc* hearing before the Commission. The Commission carefully studied the record of this Investigation and assigned what it concludes is the proper weight to the evidence.

The statistical data provided in response to specific Commission data requests simplified our evaluation. On the other hand, the comments and testimony regarding the existence and magnitude of barriers to market entry and participation created by security requirements, capacity assignments and penalties for non-delivery were more difficult to assess.

However, after examining the statistical data submitted by NGDCs and others, it is not difficult to conclude that only a small number of suppliers are actually participating in Pennsylvania's retail natural gas market. Because a competitive market needs to attract and retain competitors, it is necessary to consider carefully the suppliers' concerns about the operation of the current market, including the existence and magnitude of barriers that the suppliers have identified that may have led them to make business decisions to forego participation in the market.

V. ANALYSIS

A. Number of Market Participants

1. Natural Gas Distribution Companies

The natural gas distribution companies provide natural gas distribution services and may provide natural gas supply services and other services as defined in 66 Pa. C.S. §2202. They are companies with annual operating revenues over $6,000,000 and include: Columbia, Dominion Peoples, Equitable, National Fuel, PECO Gas, PG Energy, PGW, PPL Gas, T.W. Phillips, UGI, Southern Union Company, Valley Energy, Inc. and GASCO Distribution Systems.

2. Natural Gas Suppliers

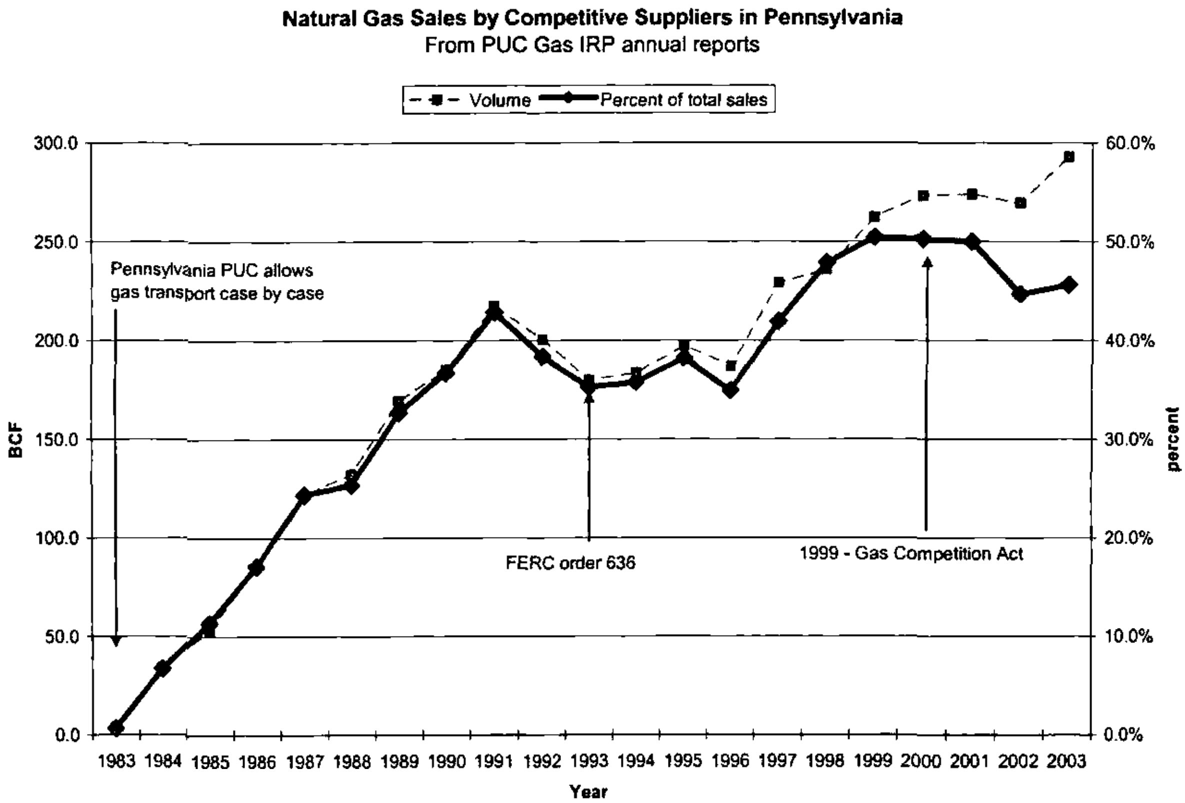
A natural gas supplier is an entity, other than an NGDC, but including an NGDC marketing affiliate, that provides natural gas supply services to retail customers using the jurisdictional facilities of an NGDC.[35] The term includes an NGDC that serves outside its certified territory and a municipal corporation that serves outside its corporate or municipal limits. The term expressly excludes an entity that provides free gas under the terms of an oil or gas lease. Note that an NGS is not a public utility.[36]

[35] 66 Pa. C.S. §2202 (relating to definitions).

[36] Commonwealth Court has held that natural gas suppliers are not "public utilities" and as such, are not subject to assessment for the funding of Commission regulatory activities pursuant to 66 Pa. C.S.§510. *Independent Oil and Gas Association of Pa., et al. v. Pa. PUC, Office of Consumer Advocate and Office of Small Business Advocate,* 804 A.2d 693 (Pa. Cmwlth. 2002).

a. Volume of Gas Transported

The Commission collects data on competitive activities through its Annual Resource Planning Report filings.[37] As shown in the following graph, since 1983, the volume of natural gas flowing under transportation rates has increased dramatically. However, since the inception of the Competition Act in 1999, there has been little to no change in the throughput[38] of competition volumes. In 1999, approximately 50% of the gas flowing in Pennsylvania was under a competitive tariff. In 2004, the volume is approximately 47.5%.

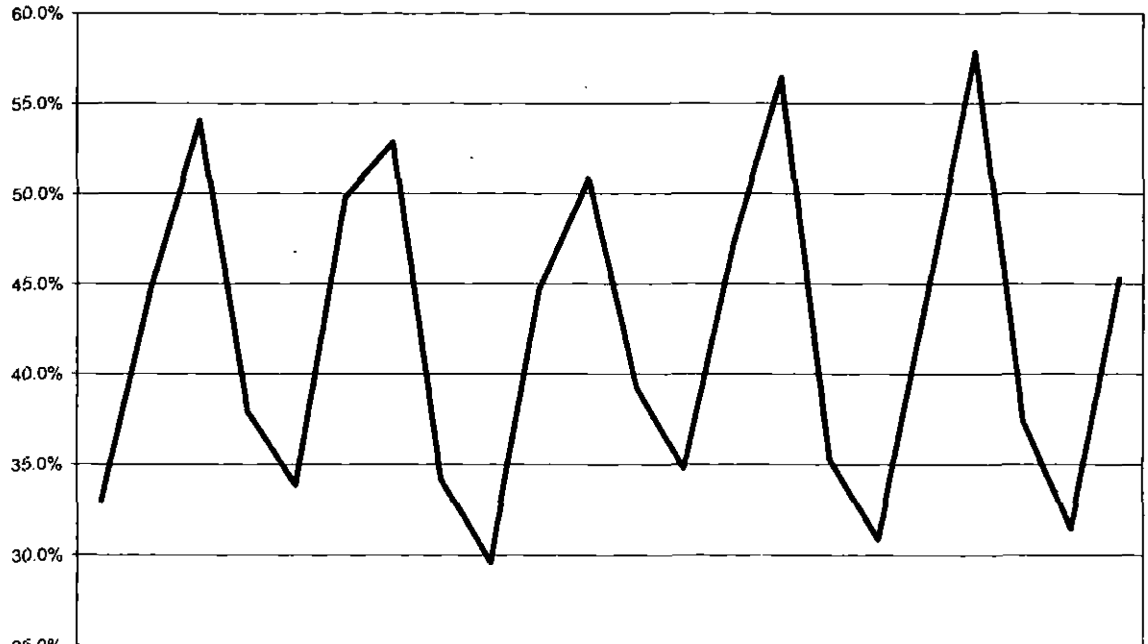


[37] *See* 52 Pa. Code §§59.81-59.84 (relating to Annual Resource Planning Report).

[38] The term "throughput" is commonly used to describe the volume of natural gas moved over an NGDC's system during the course of some time frame, *e.g.*, the total volume of gas moved over an NGDC's system during one year. Usually, throughput is measured on an MCF, or thousand cubic feet, basis. However, some systems calculate throughput on a therm, or BTU , or heat content basis.

The quarterly data, like the annual data, shows that the volumes transported for NGSs have remained nearly constant over time. This is demonstrated in the following graph.

Percent of Total NG Transported by NGSs by Quarter



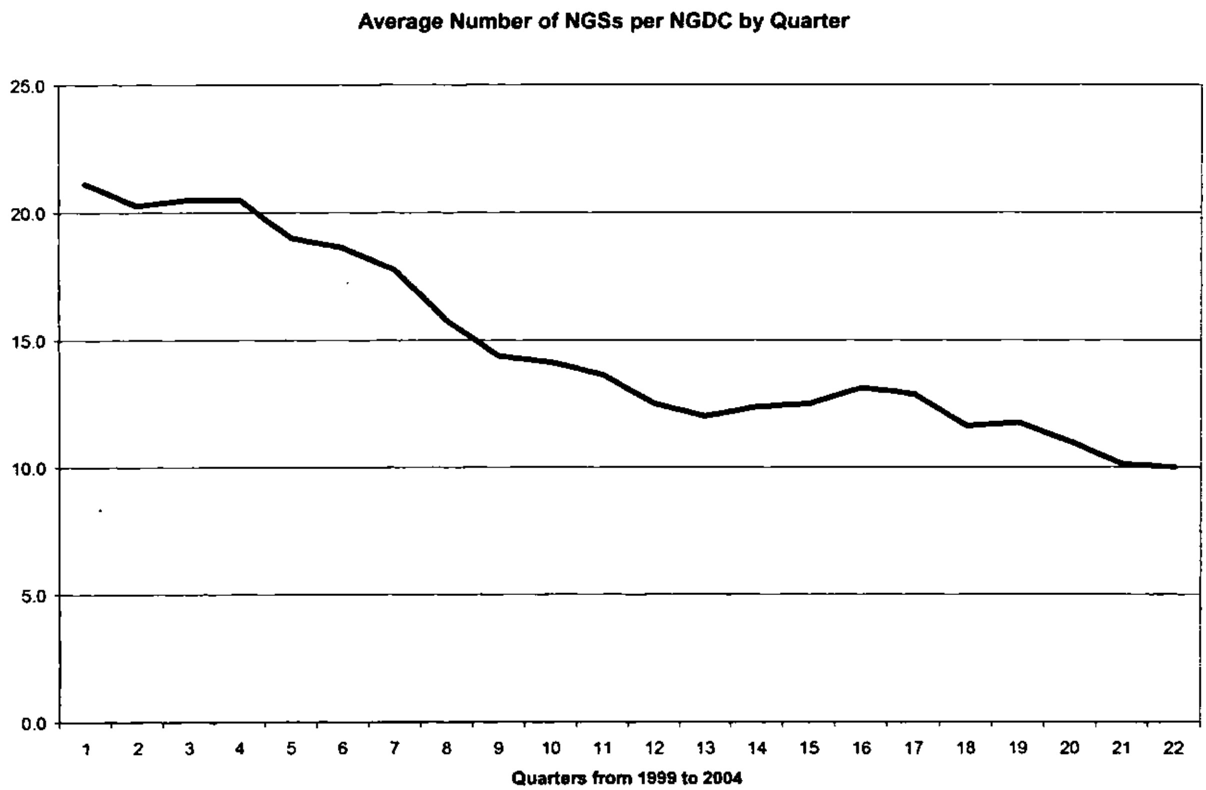
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Percentage	33.0	44.9	54.0	38.0	33.9	49.7	52.8	34.2	29.6	44.7	50.8	39.3	34.8	47.2	56.4	35.3	30.9	44.5	57.8	37.4	31.5	45.3

Percentage of Gas Transported by Quarter from 1999 to 2004

b. Number of Suppliers

In Annex A to its Investigative Order, the Commission asked the NGDCs and NGSs to supply data for the Commission to review. These data responses formed the basis for the following analysis. Generally, nine of the ten major NGDCs filed data in a form that could be analyzed. Of the nine service territories, five had fewer NGSs operating on their systems in 2004 than in 1999. Two had more NGSs, and one had the same number of NGSs. One did not respond. Of the nine, three had increased competitive volumes flowing in 2004, over 1999. Five had the same, or equivalent volumes from 1999 to 2004. One did not respond.

The following chart demonstrates the average number of suppliers per NGDC per quarter from, 1999 to 2004. A point on the graph represents the average of the sum total of each responding NGDC's estimate of the total number of active NGSs serving customers in its service territories in a quarter.[39] By the way of explanation, if there were 6 NGSs serving customers in one territory and 2 NGSs serving customers in another territory, there would be a total of 8 NGSs. To get the average, take 8 NGSs divided by 2 territories to get an average of 4 NGSs per NGDC. As shown, early in 1999 the average number of NGSs per NGDC was just over 20. That number has dropped to 10 NGSs per NGDC in the fourth quarter of 2004.



[39] During the second quarter of 2004, Peoples had 20 NGSs active and serving load, while TW Phillips had 1 NGS.

Not only the average number of NGSs per NGDC is decreasing, but also the total number of NGSs has decreased slightly. According to Commission records regarding licensing, as of May 2005, there are 81 NGSs licensed to provide natural gas supply services.

NATURAL GAS SUPPLIER LICENSES

YEAR	# JAN 1	GRANTED	CANCELLED	# DEC 31
2002	84	7	13	78
2003	78	4	4	78
2004	78	8	4	82
2005	82	2*	3*	81*

*As of May 12, 2005.

3. Buyers/Shopping Customers

a. Consumer Education

The Commission was a partner in the Utility Choice program, a consumer education program, overseen by the Council for Utility Choice (CUC). In addition to the Commission, the CUC also is made up of consumers, small-business and utility representatives, and representatives from the Governor's Advisory Commission on African American Affairs, the Governor's Advisory Commission on Latino Affairs, and the Pennsylvania Rural Development Council. The Utility Choice program, which ended at the end of 2004, educated Pennsylvania consumers about natural gas, electric and local telephone competition, and the opportunity to buy services from alternative suppliers.

The two-year natural gas consumer-education program was funded by $2.4 million in assessments from the following NGDCs: Columbia; Dominion; Equitable; NFG; PG

Energy; UGI-Gas; PECO; Penn Fuel Gas/North Penn; T.W. Phillips; and Valley Cities. The amount of the assessment was based on the number of customers for each company.

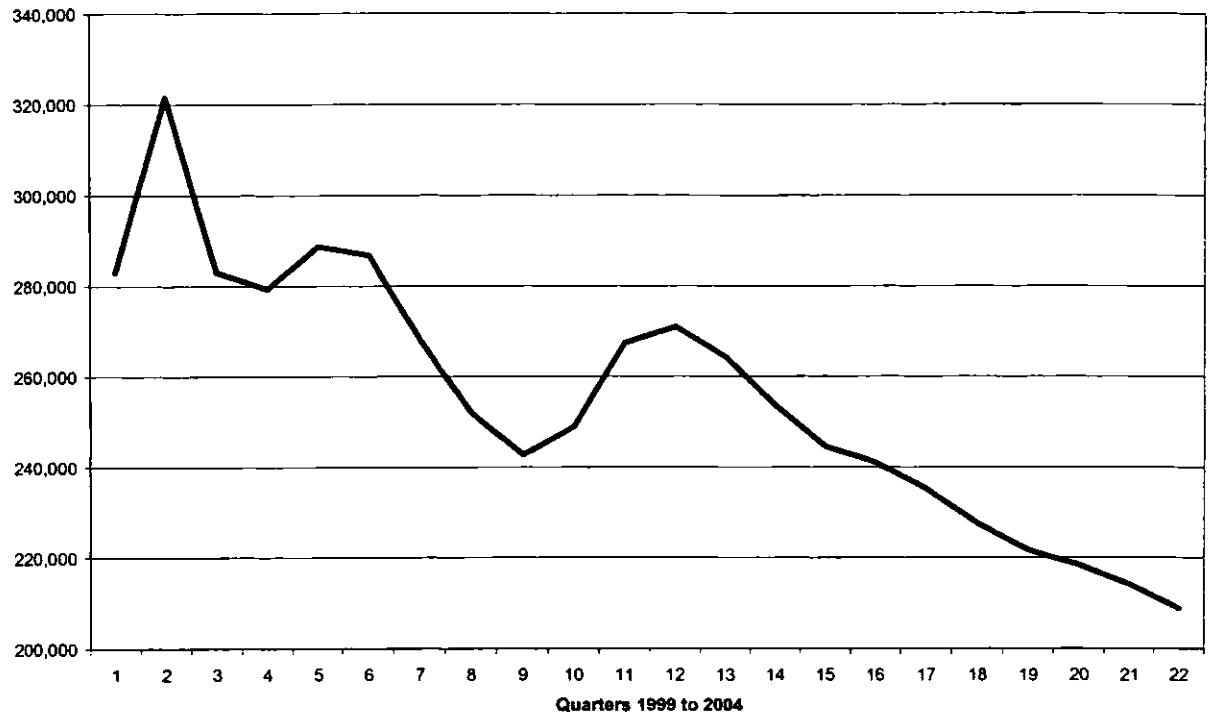
Three surveys were completed that measured the effectiveness of the Natural Gas Choice consumer education program. The most recent survey was conducted in August 2004 (1,205 respondents statewide were surveyed with a margin of error of plus or minus 2.8 percent). According to the August 2004 survey results, 55 percent of gas customers were aware that they are allowed to choose their own supplier of natural gas, and 16 percent have shopped for a different supplier of gas. Fifty-eight percent of gas customers said they did not have enough information to make a decision about participating in the Natural Gas Choice program. Nineteen percent of gas customers wanted more information about rates and savings, and 10 percent wanted more information about competing suppliers.

A survey in March 2001 revealed 71 percent awareness, and a survey in February 2003 yielded a 62 percent awareness level (although Philadelphia residents were not included). Not accounting for the fact that Philadelphia residents were included in only one of the three surveys, 63 percent of the surveyed consumers were aware of Natural Gas Choice and their ability to participate in the program.

b. Number of Customers

The total number of customers obtaining natural gas supply from NGSs was at an all time high in the second quarter of 1999. That high mark was 321,539, or about 11% of the total number of just under 2.8 million customers. By the fourth quarter of 2004, that number had fallen to 208,849, or about 7% of the total number of just under 2.8 million customers. This decrease in customer numbers is depicted in the following graph.

Number of Customers Shopping by Quarter



Of the nine NGDCs, three had fewer customers participating. Three had more customers participating. One had the same number of customers participating. Two NGDCs did not respond.

Looking just at the residential marketplace, one NGDC had the same number of residential customers participating between 1999 and 2004. Three NGDCs had decreasing numbers of residential customers shopping. Two NGDCs had no residential customers shopping. Three NGDCs did not respond.

The OCA also keeps records of the number of residential customers that are shopping for natural gas. As shown in the following table, the total number of residential customers shopping in October 1999 was 253,734. By April 2005, this number had dropped to 177,534. The most recently available figure on the number of residential customers obtaining supply from NGSs was 174,141 as of July 1, 2005. August 2005.[40]

[40] OCA's shopping statistics for residential natural gas customers for the month of August 2005 may be

Number of Residential Customers Shopping by Date

(Source: PA OCA's Natural Gas Shopping Statistics)

	Oct-01	Apr-02	Oct-02	Apr-03	Oct-03	Apr-04	Oct-04	Apr-05
Columbia	111,914	109,000	92,760	86,974	80,715	77,754	78,058	74,492
Dominion Peoples	114,747	112,989	102,607	95,725	90,393	87,609	84,285	79,481
Equitable	27,071	24,366	22,997	21,591	20,646	20,359	19,510	18,836
NFG	0	0	0	0	0	0	0	0
PECO	2	8	794	1,235	1,594	1,704	1,720	1,777
PG Energy	0	0	0	0	0	0	0	0
PGW	0	0	0	0	0	0	0	0
PPL Gas	0	0	0	0	0	0	0	0
TW Phillips	0	0	0	0	0	0	0	0
UGI		1,251	1,876	4,186	3,683	3,081	2,951	2,948
Valley Cities, NUI	0	0	0	0	0	0	0	0
TOTAL	**253,734**	**247,614**	**221,034**	**209,711**	**197,031**	**190,507**	**186,524**	**177,534**

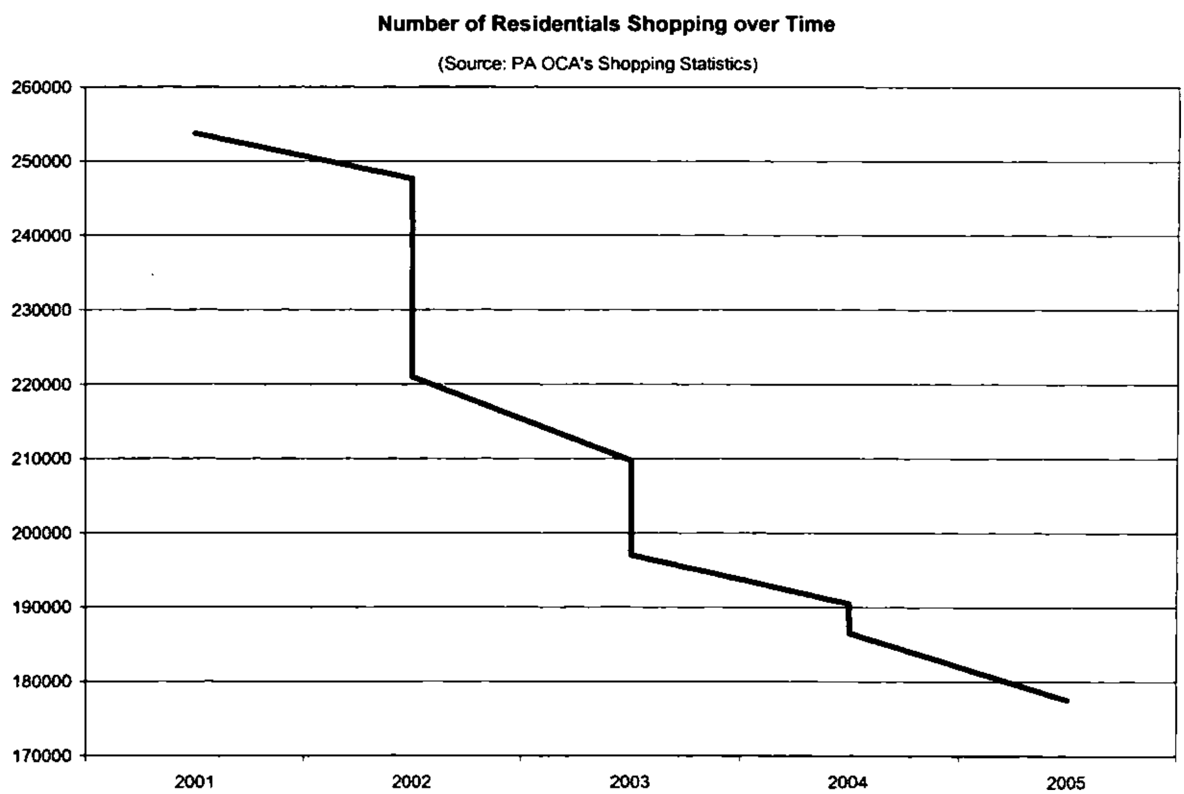
According to the OCA[41] , nearly all the residential customer switching has occurred among the customers of three western Pennsylvania-based companies – Columbia, Dominion Peoples, and Equitable. This fact is demonstrated from the above chart. The reason for this, the OCA believed, is that those three companies already had substantial retail choice "pilot" programs ongoing well before the 1999 legislation was passed. During those pilot programs, customers who switched from their utility to an alternative gas supplier were exempted from paying the 5% gross receipts tax on their monthly gas bills.

accessed at http://www.oca.state.pa.us/cinfo/gstats0705.pdf.

[41] OCA Comments, pp. 3-4; OCA Testimony, Tr. 61-62.

The OCA also states that when the Competition Act was passed, however, this advantage was lost because the gross receipts tax was eliminated on all natural gas service.[42] There has been virtually no retail competitive activity for residential customers in most of the remaining natural gas service territories. Even among the three western Pennsylvania gas utilities, the number of customers served by alternative suppliers has decreased by about 20% since the beginning of 2001.

This data is shown in the following graph.



The data responses show that, with respect to residential volumes, one NGDC had a decrease in residential volume. One had the same volumes. Two NGDCs had zero

[42] *Id.*

residential volumes flowing through competition. Five other NGDCs did not respond to the data request.

Customer participation in the market is of course dependent on the willingness of suppliers to extend service offers to customers. NGSs may find residential customers unattractive to serve because of acquisition costs, load factors, credit risk, and other reasons[43] unrelated to requirements for market participation.

4. Possible Effect of External Forces on Pennsylvania's Retail Market

Regardless of how "effective competition" is defined, or the economic model being used, it is a difficult task to analyze the change in the levels of competition over time. There are macro-economic changes in the wholesale market that trickle down and affect the retail market. An example of these changes would be the increased wholesale price and volatility in the wholesale natural gas markets caused by an increase in total US-wide demand, without an attendant increase in supply.[44] In fact, this supply/demand imbalance has become great enough in today's wholesale market to induce interest in the construction of liquefied natural gas facilities that would provide for the importation of natural gas from around the world.[45]

Moreover, weather can affect the wholesale, and consequently, the retail market price. Weather changes over time. Change occurs from day-to-day, week-to-week, and

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[43] OCA Comments, pp. 5-6.

[44] During the 1999-2000 price spike, the Commission observed a number of failures and exits by long-time gas marketers. Such occurrences are generally symptomatic of a rising wholesale market. where extensions of credit are not as freely available in sufficient amount to cover price escalations.

[45] A good overview of Liquified Natural Gas and related issues is given in *Chemical & Engineering News*, April 25, 2005, Volume 83, Number 17, pp. 19-22. This article may be found at www.pubs.acs.org/cen/coverstory/83/8317LNG.html *See also* various FERC filings for *Dominion Cove Point LNG, LP*, FERC Docket No. RP05-213-000.

year-to-year. Cold winters cause much larger price movements, than warmer winters. Similarly, the increasing reliance on natural gas for electric generation has affected the wholesale marketplace.[46]

Other events may have affected the development of competition at the retail level, including, most significantly, the impact of Enron's bankruptcy on the wholesale and retail marketplaces.[47] For example, Enron's bankruptcy may have affected the financial community's view of marketing and trading companies in general which in turn resulted in a contraction of credit for these entities and a loss of market liquidity. Consequently, the number of traders and the volume of financial and physical natural gas transactions may have been reduced. Also, commodity price and market volatility may have increased due to the increasing participation of non-gas related entities in the NYMEX[48] natural gas market.

By itself, or in combination with other macro-issues, these wholesale market concerns could have affected the level of competition in Pennsylvania's retail natural gas supply market from 1999 to 2004. Without further study, it is difficult to draw any definitive conclusions regarding which, if any, of these factors had a material impact on the development, or disintegration, of this competitive retail market.

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[46] *Testimony Regarding Diversification of Power Generation Resources* by Sonny Popowsky, Consumer Advocate of Pennsylvania, before the U.S. Senate Energy and Natural Resources Committee, March 8, 2005, found at: http://www.nasuca.org/Sonny%20Popowsky%20%20Senate%20Energy%20Testimony%203-8-05.pdf.

[47] *See, e.g.*, University of Pennsylvania, Research, Business Section: *After Enron, Who Else Goes Down, and When?*, dated December 5, 2001, found September 8, 2005 at http://www.upenn.edu/researchatpenn/article.php?170&bus.

[48] NYMEX – New York Merchantile Exchange NYMEX is the world's largest physical commodity futures exchange and the preeminent trading forum for energy and precious metals. Transactions executed on the NYMEX avoid the risk of counterparty default because NYMEX clearinghouse acts as the counterparty to every trade. The NYMEX pioneered the development of energy futures and options contracts 26 years ago as a means of bringing price transparency and risk management to this vital market..

However, it is important to note that the preceding discussion is meant to provide a perspective on the other forces[49] that may have affected, and may continue to affect Pennsylvania's retail natural gas market. These forces are not within the authority, or the direct control of the Commission or the market participants, and as such, for purposes of this investigation, have not been incorporated into our analysis regarding the level of competition in the statewide retail natural gas market.

B. Barriers to Supplier Entry and Participation

In their comments, reply comments and testimony, the majority of commenters (other than NGDCs) accepted as a given that there is not "effective competition" in Pennsylvania's natural gas industry and identified barriers to supplier participation in the market. In so doing, the commenters also offered suggestions that could be implemented to increase competition. Only EAP and the NGDCs indicated that "effective competition" as envisioned in Chapter 22 existed in the retail natural gas market, and that no changes needed to be made to the legislation.

1. Security Requirements.

A number of commenters identified high security requirements for licensing as a barrier to market entry for suppliers. Section 2208(c)(relating to financial fitness) of the Public Utility Code[50] requires that in order to obtain or maintain an NGS license, a supplier must furnish a bond or other security in a form or amount as determined by the NGDC. Section 62.111 of the Commission's regulations carries out this statutory requirement, and dictates that:

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[49] Commenters have also discussed the possible negative effect of these and other outside influences on competition in the gas supply market. *See* IOGA Comments, p. 3; OCA Comments, p. 5-6; UGI Comments, p. 3.

[50] 66 Pa. C.S. §2208(c).

> The amount of the security should be reasonably related to the financial exposure imposed on the NGDC or supplier of last resort resulting from the default or bankruptcy of the licensee. At a minimum, the amount of security should materially reflect the difference between the cost of gas incurred and the supplier's charges, if any, incurred by the NGDC or supplier of last resort during one billing cycle;

52 Pa. Code §62.111(c)(1).

The regulation also allows a variety of security instruments to be used to satisfy the requirement including bonds, irrevocable letters of credit and for companies with annual operating revenues less than $1 million, real or personal property that meet certain criteria. 52 Pa. Code §62.111(c)(2)(3).

In reviewing the record in this Investigation, the Commission found that security issues were of high importance to both NGDCs and NGSs. Accordingly, we will discuss many of the NGS and NGDC comments herein.

Numerous commenters claimed that the high security amounts and the limited forms of security accepted by NGDCs (bonds and irrevocable letters of credit) acted as a barrier to market entry by suppliers.[51] Interstate Gas Supply comments that security requirements not based on definitive credit worthiness can have an anti-competitive effect, and states that if a marketer can provide financial statements that demonstrate an acceptable financial picture or an S&P, Moody, or Dun & Bradstreet rating at an acceptable level, the security requirement should be reduced.[52]

NEMA contends that financial security requirements should be designed to provide the NGDC with reasonable compensation in the event of supplier default.[53]

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[51] Shipley Comments, pp. 5-7; Utilitech Comments, pp. 1-2.

[52] Interstate Gas Supply Comments, p. 5.

[53] NEMA Comments, p.7.

Requirements should reflect reasonable costs of securing supplies during reasonable weather conditions.[54] Companies with certain S&P or Moody ratings should already meet reasonable standards.[55] Direct Energy states that suppliers with high credit ratings should be permitted to provide reduced security.[56]

In their Joint Reply Comments, Suppliers note that in keeping with the current statutory scheme, either the NGS or the NGDC should be able to propose an adjustment to the actual exposure based on the level of risk of the supplier actually defaulting.[57] In other words, the Commission's regulations should have a two-tiered structure: the first tier should be based on actual exposure.[58] In the second tier, actual exposure can be adjusted based upon the individualized risk or lack of risk factors depending on the case.[59] If the NGS can show it is a low risk, it can have a lower requirement; if the NGDC can show the NGS is a higher risk, the NGS would need more security. Under this system, the Commission would be the final arbiter of any dispute and should monitor security requirements to ensure fairness and uniformity.[60] Such a system assumes that any NGS meeting the same requirements will be required to post the same amount of security per customer.[61] Interstate Gas Supply agrees that credit criteria [security] should

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[54] *Id.*

[55] *Id.*.

[56] Direct Energy Comments, pp. 6-7.

[57] Suppliers' Joint Reply Comments – Shipley, Shell Energy, Dominion Retail, Direct Energy Services, Interstate Gas Supply (Suppliers' Joint Reply Comments), p. 9.

[58] Suppliers' Joint Reply Comments, p. 9.

[59] *Id.*

[60] Suppliers' Joint Reply Comments, p. 9.

[61] *Id.*

be standardized across the board and be based upon the financial strength of the individual supplier.[62]

Shipley comments that security requirements should be "bi-lateral" and based on the level of NGS revenue that the NGDC is holding.[63] Allowing marketers to pledge their accounts receivable balances to the NGDC would help in reducing the security requirement under the NGDC's tariffs.[64]

Interstate Gas Supply states that other types of collateral should be permitted as security.[65] In their Joint Reply Comments, the Suppliers advocate that an NGDC should not be permitted to require only a single form of security or a non-industry standard form.[66] At a minimum, NGDCs should be required to accept industry standard bonds, letters of credit, cash collateral or corporate guarantees (from entities with investment grade debt ratings).[67]

The NGSs also voiced their opinions that there should be greater options in providing security. Marketers should be allowed to issue bonds, letters of credit on a variety of other sources.[68] Others should be able to meet the financial standard with, for

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[62] Interstate Gas Supply Testimony, Tr. 39.

[63] Shipley Comments, p. 7.

[64] Mack Service Group Comments, p. 3.

[65] Interstate Gas Supply Comments, p. 5.

[66] Suppliers' Joint Reply Comments, p. 9.

[67] *Id.*

[68] Shipley Testimony, Tr. 50.

example, cash, letters of credit, parental guarantees or a reasonable bonding requirement.[69]

Security requirements should be transparent. They should be non-discriminatory and based on realistic calculations of true exposure that utilities face.[70]

Because the amount and form of security is determined by the NGDC against whom the NGS competes, security requirements not based on definitive credit worthiness can have anti-competitive effects.[71] Also, security requirements that varied among NGDCs discouraged suppliers from broader participation in the market.[72]

EAP continues its support of individual NGDC security requirements.[73] Dominion Peoples claims that its financial security requirements have not drawn any complaints and are not negatively affecting competition[74]. Security requirements are designed to protect customers and to ensure that the NGS is financially sound to secure supply for the load it has committed to serve.[75] They also safeguard the NGDC (and ultimately the NGDC's customers) from having to bear the cost of an insolvent NGS's abandoning its obligations.[76]

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[69] NEMA Comments, p. 7; Direct Energy Comments, p. 7. A "parental guarantee" is a promise by a parent company to pay some debt, or to perform some legal duty in case of failure of another who is liable for the debt or performance of the duty. *Blacks Law Dictionary,* (West 8th ed. 1999) p. 724 (def. of 'guaranty').

[70] Shipley Testimony, Tr. 50.

[71] Interstate Gas Comments, p. 5.

[72] Suppliers' Joint Reply Comments, pp. 2-3.

[73] EAP Comments, pp. 12-13.

[74] Dominion Peoples Comments, p. 13.

[75] *Id.*

[76] Dominion Peoples Comments, p. 13.

Summation

An NGDC has the authority to establish the amount and the form of security an NGS must provide not only to operate on the NGDC's system, but also to maintain its license as a natural gas supplier in this Commonwealth. *See* 66 Pa. C.S. § 2208(c). To the extent that NGDCs require security in a form, or in an amount so excessive that it makes it burdensome for a supplier to maintain its license or participate in the NGDC's marketplace, existing security requirements may be anti-competitive and according to suppliers acts as a market barrier to entry.[77] Also, the varying and multiple security requirements among NGDCs increase the cost of doing business for a supplier who wishes to operate in more than one NGDC service territories and thus, represents a significant barrier to supplier entry into, and participation in the retail natural gas market on a statewide basis.

2. Capacity Assignment.

Section 2204 (d)(1) of the Competition Act allows the NGDC the option to release, assign or otherwise transfer capacity or Pennsylvania supply in whole or in part on a nondiscriminatory basis to licensed NGSs or industrial customers on its system. 66 Pa. C.S. §2204 (d)(1). Section 2204(d)(4) requires a licensed NGS to accept such release, assignment or transfer of capacity. 66 Pa. C.S. §2204(d)(4).

According to OCA, the capacity assignment provisions of the Competition Act addressed two important concerns:

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[77] In *Petition of Shipley Energy Co. for a Modification of Security Requirement*, Order entered July 9, 2004 at Docket No. P-0032045, p. 16, the Commission determined that Shipley had not met its burden of proving that UGI's security amount constituted a barrier to competition. It is noted, however, that the Commission did reduce the amount of security that UGI could request from the supplier, calculating the security amount using a 30-day billing cycle and the average gas cost for the two coldest months of two consecutive years. Order at pp. 13-14. The Commission's order was affirmed on appeal by Commonwealth Court. *See UGI Utilities, Inc. v. Pa. PUC*, 878 A.2d 186 (Pa. Cmwlth. 2005). UGI filed a petition for review with the state Supreme Court on August 8, 2005 at Docket No.655 MAL 2005.

(1) to ensure suppliers had adequate and reliable resources to deliver gas to the NGDC to serve customers and
(2) to ensure that NGDCs did not incur and remaining sales customers did not have to pay for "stranded" interstate pipeline costs associated with customers who migrated to service by an alternate supplier. The capacity assignment ensured both reliability and fairness to customer choice participants and consumers who remained with the utility.

OCA Comments, p. 10.

Many commenters have identified the assignment to suppliers of pipeline capacity as a barrier to market entry. EAP indicates that the capacity assignment provisions are necessary to maintain reliability.[78] UGI states that it has not assigned gas supply assets to NGSs to date. However, UGI states that the rules allowing NGDCs to assign pipeline transportation and storage capacity to NGS are necessary to avoid creating stranded costs and to provide for reliable service.[79]

Texas Eastern, the only pipeline company to participate in this Investigation, states that the most significant development at FERC is Order 637 issued on Feb. 9, 2000. Order 637 provided for increased pipeline services in the secondary market, market segmentation and capacity release, all of which have increased the value of primary transportation.[80]

Texas Eastern comments that continued reliable natural gas service is dependent on continuing contractual dedication of capacity, especially capacity at specific points that are operationally important (points of input, quantities of gas, and pressure) to

[78] EAP Comments, p. 6.

[79] UGI Comments, p. 9.

[80] Texas Eastern Comments, p. 4.

NGDC systems. Without access to the requisite firm upstream interstate pipeline capacity, there can be no assurance of continued reliable service.[81]

Also Texas Eastern comments that capacity should be adequate to cover peak days and average day deliveries, to preserve historical reliability and supply diversity, and to meet on a firm basis, new market demands.[82] Providers of service to firm load should be required to hold firm capacity with firm receipt points and firm delivery points sufficient to meet their peak day requirements.[83]

Texas Eastern comments that the supplier of last resort ("SOLR") should be given a clear signal that the costs of acquiring pipeline capacity and other assets on a firm basis sufficient to meet its obligations will be fully recoverable. Texas Eastern supports building additional pipeline capacity.[84] The SOLR must have contractually held non-recallable firm capacity at primary delivery points and primary receipt points as well as sufficient supply to meet customer needs.[85] SOLR must be able to meet obligations, and demonstrate a pre-existing capability to cover potential failures of the market.[86] There must be sufficient economic incentives for SOLRs to perform the standby supplier function for the entire period required to serve the market.[87]

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[81] Texas Eastern Comments, pp. 7-8.

[82] *Id.*.

[83] *Id.*

[84] Texas Eastern Comments, p. 5.

[85] Texas Eastern Comments, p. 11.

[86] *Id.*

[87] *Id.*

OSBA states that as long as an NGDC will function as SOLR for priority customers, it will need to have sufficient capacity to serve both sales and transportation customers.[88]

Suppliers, however, oppose mandatory capacity assignment. They assert mandatory assignment of pipeline capacity by certain NGDCs is often excessive and/or unusable or too costly to serve retail customers. NGSs believe they should have the sole option of deciding whether or not to take assignment of upstream capacity.[89]

An NGDC has no incentive to reduce or reform contracts and the marketers are forced to pass the costs of the capacity to customers. According to New Energy, "mandatory assignment may be the primary reason that natural gas choice has not occurred in small commercial and residential markets."[90]

OSBA points out, however, that Section 2204(e), 66 Pa. C.S. §2204(e), allows NGSs to provide their own capacity, but the NGDCs have entered into new contracts to serve all priority customers and NGSs have agreed to continue to take capacity assignments.[91]

In regard to mandatory capacity assignment, OCA states that most Pennsylvania choice programs require a mandatory pro rata assignment of interstate pipeline capacity by NGDCs to NGSs as customers migrate to choice. OCA states that mandatory pro rata assignment of capacity may prevent third party suppliers from minimizing transportation costs and thus being able to compete effectively with NGDCs. When capacity is

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[88] OSBA Comments, pp. 6-7.

[89] Dominion Retail Comments, p. 10.

[90] New Energy Comments, p. 8.

[91] OSBA Comments, p. 7.

assigned to an NGS on a pro rata basis, the cost of capacity assigned to the NGS is the same as the cost to the NGDC and thus, the NGS's costs for assigned capacity is fixed. Without this assignment, the NGS might be able to acquire cheaper capacity on its own.[92] OCA states that the mandatory capacity assignments under Section 2204(d) that require suppliers serving priority customers to take mandatory capacity assignment for three years should be kept in place. OCA also states that there should be a pro-rata share of capacity costs.[93]

OCA continues that the natural gas supply service provided by NGDCs against which third parties must compete consists of two cost components: gas supply commodity charges and demand (or capacity charges). Demand charges reflect the costs associated with reserving interstate pipeline capacity and storage capacity used to move that gas to the NGDC city gate. One way for the NGS to compete is to utilize its interstate pipeline capacity in a more efficient manner than the NGDC and achieve a lower per unit cost for delivered gas supplies.[94]

OCA also states that NGSs may also compete by offering natural gas service under different terms and conditions than the NGDC--such as a fixed rate for a longer period of time. An NGS might also compete by combining different services, like natural gas and electricity. However, current fixed price services are priced substantially above the current Price To Compare ("PTC")[95] so they are unattractive to consumers. Also,

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[92] OCA Comments, pp. 15-16.

[93] *Id.*

[94] *Id.*

[95] Commenters have used different terms for the NGDCs' commodity price of natural gas. To eliminate confusion, the term "Price to Compare" or "PTC" is used in this report.

there is no evidence that bundled services are being offered in Pennsylvania on terms attractive enough to induce customers to switch.[96]

NGDCs take issue with the failure of NGSs to use Commission proceedings to address the capacity assignment issue as provided for in the Competition Act. T.W. Phillips points out that no NGS has taken advantage of the opportunity to petition the Commission pursuant to Section 2204(d)(5)(ii) to prevent capacity assignments and authorize use by supplier of alternate capacity when it has been shown to be comparable, particularly in terms of reliability. Also, no NGS has intervened in any Section 2204(e) proceeding, wherein an NGDC must obtain Commission approval in advance of its acquiring any new or renewed firm transportation or storage service capacity that is used to maintain service to their customers. T.W. Phillips states that it has made several of these filings since 2000 and no supplier has intervened.[97] EAP claims that the NGSs' criticisms and refusal to take advantage of existing statutory avenues for providing alternate capacity, rest on their desire to replace firm interstate services with inferior substitutes.[98]

Summation

The position of the NGDCs is that firm capacity is essential to ensure reliability of service for customers. However, NGS have identified mandatory capacity assignment as a substantial barrier to supplier participation in the retail natural gas supply services market here in Pennsylvania. While it may be argued that the suppliers have cast some doubt on their willingness to risk their own capital to ensure delivery capability to their own markets by not intervening in Commission proceedings to challenge the renewal of

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[96] OCA Comments, p. 17.

[97] T.W. Phillips Comments, p. 6.

[98] EAP Comments, p. 6.

capacity contracts, mandatory capacity assignment remains, from the suppliers' perspective, a barrier to market participation that should be addressed. Notwithstanding the identification of capacity assignment as a market barrier, the issue must be carefully considered, especially in regard to SOLR service where it is of vital importance that service be continuous and reliable.

3. Nomination and Delivery Requirements

Some NGDCs have nomination and delivery requirements[99] that align with the interstate pipelines; others do not. The varying rules regarding nomination and delivery create a barrier for a supplier that wants to serve over a number of territories.[100] Wholesale suppliers are reluctant to deliver in certain NGDC territories.

Shipley comments that tariffs in the western part of the state are more conducive to competition. A uniform set of rules that track the nomination requirements of interstate pipelines should be established. Also penalties for imbalance should be cost-based.[101]

Although Interstate Gas Supply strongly supports base load nominations, an error in daily nomination during a non-critical period should not result in excessive penalties.[102] Since the utilities retain the right to charge actual expenses incurred by the utility for over or under delivery by a marketer, the penalty is unnecessary.[103]

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[99] Nomination is defined as "the estimated volume that a customer informs the utility or marketer they will use or deliver for a specific gas day." Deliveries requirements are the "transportation volumes that are confirmed by the pipeline company for delivery to the customer at the delivery point and consumed by the customer." *See* MidAmerican Energy, *Industry Terms and Definitions for Customer Choice*, found May 12, 2005 at https://www.midamericanchoice.com/html/industryterms2.asp.

[100] Shipley Comments, pp. 8-9.

[101] *Id.*.

[102] Interstate Gas Comments, pp. 6-7.

In their Joint Reply Comments, the Suppliers state that the Commission should also look at nomination and delivery rules across the NGDCs with the goal of creating uniformity and fairness. Because market based penalties can insure delivery, fair and flexible nomination rules will not necessarily allow suppliers to harm NGDCs.[104]

Although not strictly related to delivery requirements, Dominion Retail indicates that the purchase of imbalance gas, monthly/daily cash outs and storage gas in place should simply be priced at the then-current market, rather than under complicated and unpredictable pricing schemes presently used by NGDCs.[105] Pooling requirements are cumbersome and act as a barrier to competition.[106]

Summation

Suppliers have identified the varying nomination and delivery requirements established by NGDCs as a barrier to entry, and participation in multiple NGDC markets. The Commission recognizes that nomination rules and delivery requirements are essential to ensure system reliability and that the NGDC system operational requirements may vary because of physical difference among the systems. However, inflexible or unreasonable nomination and delivery requirements may be anti-competitive, and as such, represent a barrier to supplier entry and broader supplier participation in the retail natural gas market. In considering this issue, the purpose of these requirements must be weighed against their impedance of broader supplier participation in the statewide market.

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103 *Id.*

104 Suppliers' Joint Reply Comments, p. 7.

105 Dominion Retail Comments, pp. 3-4.

106 Amerada Hess Comments, p. 10.

4. Penalties for non-delivery

Penalties for non-delivery of gas are required to preserve reliability on the system, and to avoid cost shifting to sales customers.[107] In its reply comments, Columbia defends its $75 per MCF for non-delivery. Columbia submits that the charge serves as a reasonable and important disincentive for non-deliveries or under-deliveries to residential customers, and it is necessary because of the drastic consequences of non-delivery or under-delivery. During recent years, gas prices have neared this level in other markets, tempting NGSs to re-route supply to those markets.[108]

Suppliers have mentioned penalties as a barrier to market entry and participation and suggested solutions to make penalties fairer:

- Penalties in supplier tariffs should be cost based.[109]
- Uniform penalties should be established across all NGDCs.[110]
- A band of tolerances over/under should be considered before a penalty takes effect.[111]
- Significant penalties should attach only during periods of critical gas supply.[112]

Alternatively, OSBA suggests a two-tier penalty structure for non-delivery could be adopted, with the higher penalty applicable only in the case of gaming.[113] EAP

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[107] UGI Comments, p. 14.

[108] Columbia Comments, p. 3.

[109] Shipley Comments, p. 8; New Energy Comments, pp. 8-9.

[110] OSBA Comments, pp. 5-6.

[111] Dominion Retail Comments, p. 8.

[112] Amerada Hess Comments, p. 8.

[113] OSBA Comments, pp. 5-6.

opposes the proposed two-tiered no fault penalty system as unworkable because one would have to adjudicate intent or fault.[114]

Summation

Excessive penalties have been identified as a barrier to market participation by some suppliers. The rationale for assessing penalties for non-delivery and under-delivery is to deter gaming or arbitrage type behavior among suppliers. However, penalties that are in excess of reasonable costs expended by the NGDC may be anti-competitive and according to suppliers, present a barrier to supplier participation in an NGDC's territory. Varying penalties among NGDC systems also discourage a supplier from operating in more than one NGDC service territory and thus, the lack of a uniform penalty system acts as a barrier to suppliers who wish to participate in the retail market on a statewide basis.[115]

5. Price to Compare ("PTC") and Section 1307 Adjustment

Suppliers have identified two possible barriers to market entry and participation in regard to the pricing of natural gas by the NGDC. The first barrier involves the types of costs that have been omitted from an NGDC's PTC. The second barrier involves the quarterly adjustment of the PTC under the Section 1307(f) adjustment mechanism. These issues are discussed separately below.

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[114] EAP Comments, p. 13.

[115] In *Shipley, infra.*, the Commission also directed that penalty charges should not be included in calculations of security amounts. Order at p. 11. *See* 52 Pa. Code §62.111 (relating to bonds or other security).

a. Fully Loaded PTC

The initial PTC was developed for each NGDC in the context of its restructuring proceedings.[116] Under Section 2203(3), 66 Pa. C.S. §2203(3), each NGDC was directed to address unbundling of commodity, capacity, balancing and aggregator services.

Suppliers identify the existing PTC as a barrier to market entry and supplier participation. At present, an NGS must compete with a price that reflects fully loaded gas costs against an NGDC's price that by rule reflects only an NGDC's pure gas costs; non-gas costs have been excluded.[117]

Suppliers argue that the PTC should include all costs related to gas supply function.[118] A fully loaded PTC rate would reflect uncollectible expenses, and the administrative cost of acquiring and administering PTC gas supplies.[119] The PTC must capture all the costs incurred in selling natural gas: the supply costs, the accounting costs, the regulatory costs, all of the overhead costs associated with selling the product, i.e., all

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[116] Application of Columbia Gas of Pennsylvania for Approval of a Restructuring Plan, Docket No. R-00994781; Application of Peoples Natural Gas Company for Approval of a Restructuring Plan, Docket No. R-00994782; Application of PG Energy, Inc. for Approval of a Restructuring Plan, Docket No. R-00994783; Application of Equitable Gas Company for Approval of a Restructuring Plan, Docket No. R-00994784; Application of National Fuel Distribution Corporation for Approval of a Restructuring Plan, Docket No. R-00994785; Application of National Fuel Distribution Corporation for Approval of a Restructuring Plan, Docket No. R-00994785; Application of UGI Utilities Inc. for Approval of a Restructuring Plan for its Natural Gas Division, Docket No. R-00994786; Application of PECO Energy for Approval of a Restructuring Plan for its Natural Gas Division, Docket No. R-00994787; Application of Penn Fuel Gas, Inc. for Approval of a Restructuring Plan, Docket No. R-00994788; Application of Carnegie Natural Gas Company for Approval of a Restructuring Plan, Docket No. R-00994789. On December 1, 1999, after its acquisition of Penn Fuel Gas and PFG Gas, PPL Gas filed an application for a restructuring plan at Docket No. R-00994788.

[117] Shell Energy Comments, p. 4.

[118] Dominion Retail Comments, pp. 2, 10-11.

[119] UGI Comments, p. 16.

customer care costs, including bad debt and customer care migration expenses.[120] These costs, which are currently bundled in the distribution rate, should be split out and should be recovered in the Section 1307(f) adjustment mechanism. In other words, proper unbundling should be performed to reflect these costs in the PTC.[121]

In regard to charges that belong more appropriately in the PTC rather than the distribution rate, more costs should be included in the PTC than in the base rate. OCA's concern is that the non-gas costs will wind up in both the PTC and the distribution rates, and OCA wants to prevent customers from paying for those same charges twice.[122]

One NGDC, Dominion Peoples, does not oppose the idea of a fully loaded PTC, but argues that these costs which are currently included in distribution rates must be done in the context of an NGDC base rate case..[123] UGI, however, claims that a rulemaking could flesh out the details of a fully loaded PTC pursuant to 66 Pa. C.S. §2203(3).[124]

b. Section 1307(f) Adjustment Mechanism

Suppliers have identified the quarterly adjustment of an NGDC's PTC using the Section 1307(f) process as a market barrier for both suppliers and customers.

Under Section 1307(f)(1)(ii), an NGDC may file a tariff with the Commission that provides for regular adjustment, but not more frequently than monthly, to its rates for

[120] Shell Energy Testimony, Tr. 44; Direct Energy Comments, p. 5.

[121] Shell Energy Testimony, Tr. 45.

[122] OCA Testimony, Tr. 78-79.

[123] Dominion Peoples' Reply Comments, pp. 5-6.

[124] UGI Comments, p. 16.

natural gas sales. In Section 1307, "gas costs" are defined as the "direct costs" paid by an NGDC for the purchase and delivery of natural gas to its system in order to supply customers and may include costs paid under agreements to purchase natural gas, costs paid for transporting natural gas to its system, costs paid to storage service from others, all charges, fees, taxes and rates paid in connection with such purchase, pipeline gathering, storage and transportation and costs paid for employing futures, options and other risk management tools. 66 Pa. C.S. §1307(h) (relating to definition).

As to being anticompetitive, the suppliers explain that the Section 1307 adjustment mechanism has a detrimental effect on marketing.[125] The mechanism creates a lag so that customers are never really aware of the true cost of gas that they use. For example, an NGS gave an example where one NGDC made an interim adjustment to its gas cost rate, lowering it by $2.00 per MCF. The timing coincided with Shipley's offer of a fixed rate for one-year. Customers chose to receive service from the NGDC because the rate looked like the better deal, but ended up paying more when the NGDC increased its gas cost significantly during the heating season. Shipley's one-year contract price was $7.25 while the NGDC charged $7.46 and then $8.33 during the heating season.[126]

At present, customers only see an artificial price that does not change often. Consequently, the price of the forecasting error, *i.e.*, the 4% interest rate that customers pay to NGDCs on under collections, is hidden from customers who pay it.[127] The quarterly adjustment perpetuates the myth that the NGDC is supplying a fixed price service. The use of the adjustment mechanism creates a price that is a projection of future gas prices, is reconcilable on a dollar for dollar basis, and most certainly is not a

[125] Shipley Comments, p. 9.

[126] Shipley Comments, pp. 2-3.

[127] Suppliers' Joint Reply Comments, pp. 2-3.

fixed price, but rather a variable price.[128] The price never represents in a current period the actual price a customer pays for a given volume of gas.[129]

Thus, NGSs believe the PTC, as adjusted quarterly through the Section 1307(f) process fails to send the proper price signals to customers. To encourage competition in Pennsylvania, customers should be able to see and respond to price signals. Utility pricing must be able to fluctuate with current market conditions and do so on a timely basis.[130]

Moreover, suppliers state that they are disadvantaged in their marketing efforts because the PTC is presented to the market as an annual gas cost, which implies that it is fixed for one year, but in reality, it is a variable rate.[131] This means the average PTC is at least $1/MCF too low and the NGSs are competing against an artificially low price. NGDCs should explain that their PTC is not fixed and if gas costs are adjusted upward upon reconciliation, the consumer will pay more later.[132]

NGSs also assert that by underestimating their gas costs NGDCs can create below market PTCs. In fact, suppliers argue that there is an incentive to under-collect PTCs because NGDCs are allowed to collect interest from customers on under recoveries.[133]

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[128] *Id.*

[129] *Id.*

[130] NEMA Comments, pp. 3-4.

[131] Dominion Retail Comments, p. 2.

[132] Dominion Retail Comments, p. 3.

[133] Shipley Comments, p. 9.

More importantly, they argue that economic prudence demands that the NGDCs err, if at all, by underestimating those gas costs to avoid the 6% over collection penalty.[134]

OCA and the NGDCs oppose changing the PTC rate to a monthly adjustable rate. OCA states that the intent of the Competition Act was to provide benefits to consumers by introducing retail choice to Pennsylvania, not to harm them by increasing natural gas cost rates and volatility or diminishing service and reliability.[135]

EAP argues that the current statutory system of annual purchased gas cost rates with quarterly adjustments reflects a reasonable balance among the possible approaches. In theory, there are a range of possible ways to establish an initial PTC rate, and its adjustments. However, no evidence was presented during the Investigation that a change to the quarterly adjustments would provide a benefit to consumers.[136]

T.W. Phillips points out that NGDCs are subject to annual gas cost purchase proceedings and are required to use least cost procurement strategies to procure supply so that annual purchased gas cost proceedings assure competitive gas costs for purchases of merchant service. Also, T.W. Phillips states that no regulatory protections are available to gas supply customers from NGSs.[137]

Suppliers have offered numerous suggestions to address their concerns regarding the Section 1307(f) process. Chief among these is the monthly adjustment of an NGDC's PTC so as to more closely reflect the market price of natural gas supply.[138] In its

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[134] Shell Energy Comments, pp. 3-4; Suppliers' Joint Reply Comments, p. 4.

[135] OCA Comments, p. 6.

[136] EAP Reply Comments, p. 7.

[137] T.W. Phillips Reply Comments, p. 5.

[138] Shipley Comments, p. 6; Shell Energy Comments, pp. 3-4; NEMA Comments, pp. 3-4; Dominion

comments, NEMA acknowledges that the law requires a fixed rate option if adjustments are made on a less than quarterly basis. 66 Pa. C.S. §1307(f) (1)(ii). NEMA opposes this because the addition of a fixed rate price will confuse consumers.[139] On the other hand, UGI suggests that NGDCs could voluntarily offer a non-reconcilable fixed rate option as it would more closely resemble NGS monthly offerings.[140] OCA opposes the idea of monthly adjustments of PTC to market.[141]

Other suggestions from suppliers include the following:

- The NGDCs would post a rolling twelve-month average market price with the monthly PTC.[142]
- NGDC system sales of supply gas could be made non-reconcilable.[143]
- NGDCs could move to a monthly price system that would require only minimum reconciliation.[144]
- The Commission could create incentives for the NGDCs to minimize price lags by limiting under/over collection adjustments to no more than .25 /MCF.[145]
- PTC should be market-based and tied to a published and credible index such as the NYMEX that closes at least one month in advance of the current month.[146]

Retail Comments, p. 9; Suppliers' Joint Reply Comments, pp. 5-6.

139 NEMA Comments, pp. 3-4.

140 UGI Comments, p. 14.

141 OCA Comments, pp. 6, 23.

142 Shipley Comments, p. 9.

143 Dominion Retail Comments, pp. 2-3.

144 Dominion Retail Comments, p. 6.

145 *Id.*

146 OCA opposes the idea of using another index like the NYNEX index to make the adjustment. OCA Testimony, Tr. 77.

This would permit suppliers to market against a known formula and allows utilities time to prepare to allow for customer migrations.[147]

- The Section 1307(f) adjustment process should provide over- or under-collections or other supply related costs that are attributable to the period prior to migration to avoid any potential double charging or recovery of such charges.[148]

Summation

While Pennsylvania's retail natural gas market was implemented in accordance with the Competition Act, the resulting competition may be best described in traditional economic terms as a "price leader" type of oligopoly where the actions of one seller influence the price and the subsequent actions of other sellers in the market. In this instance, the NGDC establishes the PTC -- the benchmark price against which NGSs are obliged to compete. When the PTC is adjusted, the suppliers must adjust their price to compete against that NGDC. The existence of such an oligopoly situation alone supports the conclusion that effective competition does not exist in the retail natural gas market.

Because the NGDC's PTC does not include all of the costs of gas supply acquisition, the PTC may represent an artificially low price, making it difficult for NGSs to compete against the NGDCs for customers. Moreover, the quarterly adjustment of the PTC through the Section 1307(f) process creates a lag in recognizing increased gas costs so that customers are confused as to the actual cost of natural gas over the long run. The customers believe to their detriment that the NGDCs are offering an annual fixed rate when it is really a variable cost service with quarterly true-ups. These practices involving

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[147] NEMA Comments, pp. 3-4.

[148] *Id.*

natural gas pricing make it difficult for suppliers to compete against the NGDCs for customers.

Accordingly, the manner in which the PTC was formulated and is adjusted to correct over- or undercollections through the Section 1307(f) process constitutes a barrier to supplier participation in the retail natural gas market. The PTC and the quarterly adjustment mechanism should be re-examined to encourage increased competition.

C. Barriers to Customer Participation

Commenters have raised several issues that might represent barriers to customer participation in the retail natural gas service supply market. Chief among them is the NGDC's PTC rate and Section 1307(f) quarterly adjustment mechanism that insulates customers from knowing the actual cost of gas and perpetuates the notion that the NGDCs are offering an annual fixed rate for natural gas supply.[149]

Suppliers believe that the current system masks the price of gas so customers have no good information on which to base decisions on their consumption. The suppliers make reference in footnote 1 of their Joint Reply Comments to Report of the Government Accounting Office "Electricity Markets: Consumers could benefit from Demand Programs but Challenges Remain," (August 2004, GAO-04-844) from http://www.gao.gov/new.items/d04844.pdf. The report finds that one of the most significant hindrances to demand programs in electric markets is regulated prices that mask market costs from customers.[150]

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[149] In *Dominion Retail, Inc. v Pa. PUC*, 831 A. 2d 810 (Pa. Cmwlth. 2003), Commonwealth Court affirmed the Commission's order that Equitable's fixed sales service (FSS) Rate does not have to be reconciled under Section 1307(f), 66 Pa. C.S. §1307(f). Rate FSS is available for residential and small business customers and provides them with the option of locking in the price for natural gas service for one year.

[150] Suppliers' Joint Reply Comments, pp. 2-3.

To encourage competition in Pennsylvania, NEMA suggests that customers should be able to see and respond to price signals. Utility pricing must be able to fluctuate with current market conditions and do so on a timely basis.[151]

NEMA also suggests that besides more accurate and immediate information about market price, customers need additional consumer education regarding the benefits of shopping for alternative suppliers. NEMA also believes that NGSs should be involved in developing educational messages about the availability of natural gas supply through alternative suppliers.[152] Dominion Peoples disagrees, and states that although the initial education program was successful, there are diminishing returns from further large scale campaigns.[153]

Dominion Retail comments that customer enrollment should be more uniform and efficient to allow for customers to change suppliers.[154] Direct Energy supports providing advance information about contract renewals to customers so they can make informed decisions about selecting a new supplier but would eliminate the 60- and 90-day notice requirement.[155]

In addition to consumer education, some suppliers would like to be more involved in customer care service, especially in providing seamless service transfer when a customer moves. Currently, NGSs are not allowed to continue serving customers through

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[151] NEMA Comments, pp. 3-4.

[152] NEMA Comments, p. 6.

[153] Dominion Peoples Comments, pp. 10-11.

[154] Dominion Retail Comments, pp. 9-10.

[155] Direct Energy Testimony, Tr. 29-30.

the move process, and are not allowed to act as the agent for the customer in contacting the NGDC and arranging for the move and continuation of the NGS's service. Shipley explains that ten percent of its customers move every year.[156] Value may be added to the contract by insuring a customer a seamless transfer of service to a new home.[157]

Summation

According to suppliers, the lack of accurate and immediate information about the true costs of natural gas (price signals) acts as a barrier to broader customer participation in the natural gas supply marketplace. Also, the inability of a supplier to continue a contract with a customer who moves during the term of a contract may also represent a barrier to customers' continuing participation in the market.

Convincing evidence has not been offered that lack of general consumer education programs about choosing an alternative supplier presents a barrier to customer participation in the retail market. However, the need for additional consumer education along with other customer service and information issues may need to be re-visited depending on changes that are made to the statewide retail market to increase supplier participation and competition.

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[156] Shipley Testimony, Tr. 47.

[157] Shipley Testimony, Tr. 48.

VI. FINDINGS

Consistent with Section 2204(g), the Commission presents the following findings:

(1) The Pennsylvania natural gas industry was restructured in accordance with the Natural Gas Choice and Competition Act, 66 Pa. C.S. §§2201, *et seq.*

(2) Since the enactment of the Competition Act, there has been little to no change in the throughput of competition volumes. In 1999, approximately 50% of the gas flowing in Pennsylvania was under a competitive tariff. In 2004, the volume was approximately 47.5%.

(3) Early in 1999 the average number of NGSs serving in each NGDC territory was just over 20. That number has dropped to 10 NGSs per NGDC in the fourth quarter of 2004.

(4) The number of customers obtaining supply from alternative natural gas suppliers was at an all time high in the second quarter of 1999. That high mark was 321,539. By the fourth quarter of 2004, that number had fallen to 208,849.

(5) Although there are levels of competition on three NGDC systems in western Pennsylvania, this competition pre-dates the Competition Act and came about as a result of Commission-approved pilot programs on those systems. Since 2001, competition on these three systems has decreased by 20 percent.

(6) NGS security requirements are established by each natural gas distribution company and differ between companies. 66 Pa. C.S. §2208 (c)(i).

(7) According to suppliers, the amount or form of security required by an NGDC acts as a substantial barrier to entry and participation by an NGS in an individual NGDC service territory.

(8) According to suppliers, the differing security requirements among NGDCs act as a substantial market barrier to NGS entry, and participation in marketing natural gas supply service in multiple NGDC service territories.

(9) Penalties for non-delivery or under delivery of natural gas by a NGS vary by NGDC and for the most part, these penalties are not cost-based.

(10) According to suppliers, the differing penalties among natural gas distribution companies act as a substantial barrier to NGS entry and continued participation

in marketing retail natural gas supply service in multiple NGDC service territories.

(11) Capacity assignment to NGSs is mandatory under 66 Pa. C.S. §2204 (d)(4)) and according to suppliers, acts as a barrier to supplier participation.

(12) An NGDC's Price to Compare ("PTC") establishes the retail market price for natural gas against which NGSs must compete for customers and sales in the NGDC's distribution territory. A change in an NGDC's PTC causes a change in the retail market price of gas against which suppliers must compete for sales and customers.

(13) NGDC's gas rates are adjusted on a quarterly basis, pursuant to 66 Pa. C.S. §1307(f), and subsequently lags behind the true cost of natural gas.

(14) An NGDC's natural gas distribution rate includes costs of natural gas supply procurement that should be recognized in the NGDC's PTC.

(15) Customers are not provided with accurate or timely information regarding the true cost of natural gas supply service because of the price lag associated with quarterly true-ups pursuant to the Section 1307(f) adjustment mechanism and the omission of some natural gas commodity procurement costs from the PTC. These commodity procurement costs are instead included in the NGDC's distribution rate.

(16) There is not "effective competition" in Pennsylvania's retail natural gas supply service market on a statewide basis.

VII. CONCLUSION

In this report, the Commission has adopted what it believes is a reasonable and workable definition of "effective competition" for this Investigation. It is a descriptive definition that lists certain aspects of the market structure and operation that are indicia of "effective competition" in that market:

(1) Participation in the market by many sellers so that an individual seller is not able to influence significantly the price of the commodity;
(2) Participation in the market by many buyers;
(3) Lack of substantial barriers to supplier entry and participation in the market; and
(4) Lack of substantial barriers that may discourage customer participation in the market.

Using this definition as a standard and giving appropriate weight[158] to the data, the comments and testimony submitted by participants, the Commission made sufficient findings regarding the realities of Pennsylvania's retail natural gas supply service market:

- The record demonstrates a lack of participation by many natural gas buyers and sellers in the retail natural gas supply services market on a statewide basis.
- The record indicates that natural gas distribution companies tend to act as price leaders in their respective service territories because many customers are not aware that the commodity price of natural gas, i.e. the Price to Compare or PTC, is a quarterly reconcilable price, based on projections, rather than a fixed annual price.
- According to suppliers, substantial barriers to entry in the retail natural gas supply market exist because of differing security requirements among natural gas distribution companies.
- According to suppliers, substantial barriers to entry and continued participation by natural gas suppliers in the retail natural gas service supply market exist as the result of the omission of procurement costs from the natural gas distribution company's commodity price of natural gas (PTC).

[158] The statistical data submitted by NGDCs demonstrates low numbers of suppliers actually participating in Pennsylvania's retail market. Because a competitive market needs to attract and retain competitors, it is appropriate to give additional weight to the comments and the testimony of suppliers regarding the existence and magnitude of barriers that have caused them to make business decisions to forgo the Pennsylvania market. *See* IV. (f): "Methodology," *supra.*, pp. 26-27.

- According to suppliers, substantial barriers to supplier participation in the retail natural gas supply market exist because of penalties placed on suppliers that vary among natural gas distribution companies systems and that are not cost-based.
- The regulatory lag in the establishment and implementation of quarterly price adjustments by natural gas distribution companies tends to mask the current market price of natural gas.
- The marketplace lacks accurate and timely price signals; as a result, the market cost of natural gas supply service offered by natural gas distribution companies is not communicated immediately to customers.

Based on the factors we have adopted to consider whether "effective competition," exists for purposes of Section 2204(g), these findings support the ultimate conclusion that there is a lack of "effective competition" in Pennsylvania's retail natural gas supply market at this time.

In light of this conclusion, pursuant to 66 Pa. C.S. §2204(g), the Commission determines that there is a need to convene the Stakeholders to consider an integrated solution to enhance competition in the statewide retail natural gas supply services market. The Stakeholders shall examine the below listed issues and other relevant matters that are identified in this report or by Stakeholders, and make recommendations regarding any changes that need to be made to the market's structure and operation to encourage increased participation by NGSs and customers. These issues include:

A. SECURITY. Excessive security and restrictive forms of security accepted by NGDCs and lack of uniformity of security requirements hinder supplier entry and market participation.

B. MANDATORY CAPACITY ASSIGNMENTS. Mandatory capacity assignment acts as a market barrier.

C. NOMINATION AND DELIVERY REQUIREMENTS. Restrictive nomination and delivery requirements that varied among NGDCs discourage supplier participation in the market.

D. PENALTIES FOR NON-DELIVERY. Excessive penalties and lack of uniformity between NGDC systems act as barriers to supplier participation in the statewide retail market.

E. PRICE TO COMPARE. Inclusion of all costs related to natural gas supply procurement as a means of increasing supplier participation in the statewide retail market.

F. PRICING INFORMATION AND CONSUMER EDUCATION. Lack of timely price signals act as a barrier to customer participation. Additional consumer education may be needed in light of changes that may be made to the market.

G. SEAMLESS MOVE: Lack of portability of competitive supply service for a retail customer moving from one location to another within the same service territory discourage customer participation.

H. RECEIVABLES FOR MASS MARKET CUSTOMERS. Institution of a reasonably priced NGDC "purchase of receivables" policy as an interim mechanism to promote choice for customers. Use of a "bad debt tracker" to ensure NGDC recovery of bad debt expense in conjunction with purchase of receivables.

I. ACQUISITION COSTS FOR MASS MARKET: Use of Opt-Out Municipal Aggregation, increased availability of customer lists and customer assignment programs to lessen the high cost to NGSs of acquiring mass market customers.

J. SUPPLIER CONSOLIDATED BILLING: Availability of Supplier Consolidated Billing as an important tool for advancing NGS-customer relationships.

K. SUPPLIER TARIFF REQUIREMENTS: Uniform supplier tariff rules, including those provisions related to customer enrollment, to encourage supplier participation statewide.

L. CONSUMER PROTECTION RULES. Revision of some requirements, particularly customer notice requirements, that create additional costs for NGSs.

M. NGDC CONSOLIDATED BILLING: Exclusive NGDC consolidated billing limitations restrictions NGSs in their ability to communicate effectively with consumers.

N. NGDC PROMOTION OF COMPETITION: Use of incentives for NGDC incentives to promote competition with a corresponding ban on the marketing of SOLR service by NGDC.

O. SUSTAINED COMMISSION LEADERSHIP IN COMPETITIVE MARKETS: The need for a supplier Ombudsman to increase Commission responsiveness to supplier issues.

P. NGDC NEGOTIATED SUPPLY CONTRACTS: Possible elimination of special negotiated contracts or agency agreements between customers and NGDCs.

Q. MARKET INFORMATION: The cost for daily consumption information and data accuracy issues and availability of daily customer usage or utility operating and transportation discount information create barriers for NGS participation.

R. CODE OF CONDUCT: Lack of reporting, auditing or enforcement of the Code of Conduct, especially in regard to certain communications between an NGDC and its unregulated affiliates.

S. SWITCHING RESTRICTIONS: Lag in NGDCs implementation of customer switching suppliers.

T. SERVICE TO LOW INCOME CONSUMERS. Remove of obstacles to provide competitive retail service to low income customers.

Also, the Stakeholders shall recommend any legislative amendments, if any, that need to be made regarding the Natural Gas Choice and Competition Act and the Public Utility Code and revisions that should be made to applicable Commission regulations to facilitate their recommendations to enhance competition in the statewide retail natural gas supply services market.

The Commission acknowledges that it may already have the legal authority to implement some of the solutions that have been proposed commenters in this investigation, such as the recognition in the distribution company's PTC of <u>all</u> natural gas procurement costs in a NGDC base rate case[159] and the further unbundling of specific services such as billing or metering through a rulemaking.[160] However, based on past experience, the Commission believes that an integrated solution that is developed by all interested parties and addresses all relevant substantive and procedural issues is preferable to a piecemeal approach to market climate improvement.

The Commission anticipates that the first stakeholder meeting will be held this Fall 2005 and that the group's work will be completed by the end of 2005.

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[159] 66 Pa. C.S. §2203 (11).

[160] At present, the Commission may address unbundling of other services only through the rulemaking process. 66 Pa. C.S. §2203(3)(relating to standards for restructuring the natural gas industry). Because rulemakings can be a two year process, it may be possible for the stakeholders to agree to the use of a different, more expedient Commission proceeding that would still afford all parties due process.

APPENDIX

Investigation into Competition in the Natural Gas Supply Market,
Order entered May 28, 2004 at Docket No. I-00040103

PENNSYLVANIA
PUBLIC UTILITY COMMISSION
Harrisburg, PA 17105-3265

Public Meeting held May 27, 2004

Commissioners Present:

Terrance J. Fitzpatrick, Chairman
Robert K. Bloom, Vice Chairman
Glen R. Thomas
Kim Pizzingrilli
Wendell F. Holland

Investigation into Competition in the Natural Gas Supply Market

Docket No. I-00040103

ORDER

BY THE COMMISSION:

Section 2204(g) of the Natural Gas Choice and Competition Act requires the Commission to initiate an investigation or other appropriate proceeding to determine whether effective competition for natural gas supply services[1] exists in the Commonwealth.[2] The proceeding must be launched five years after the effective date of the Natural Gas Choice and Competition Act. The Act became effective July 1, 1999.

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[1] The term "natural gas supply services" is defined as (1) the sale or arrangement of the sale of natural gas to retail gas customers; and (2)services that may be unbundled by the Commission under section 2203(3) (relating to standards for restructuring of the natural gas utility industry.) 66 Pa. C.S. §2202.

[2] **§ 2204(g) Investigation and report to General Assembly**

Five years after the effective date of this chapter, the commission shall initiate an investigation or other appropriate proceeding, in which all interested parties will be given a chance to participate, to determine whether effective competition for natural gas supply services exists on the natural gas distribution companies' systems in this Commonwealth. The commission shall report its findings to the General Assembly. Should the commission conclude that effective competition does not exist, the commission shall reconvene the stakeholders in the natural gas industry in this Commonwealth to explore avenues, including legislative, for encouraging increased competition in this Commonwealth.
66 Pa. C.S. § 2204(g).

Thus, we must initiate our investigation on, or shortly after July 1, 2004 to comply with the directive of the General Assembly. With this order, we initiate this investigation.

The purpose of the investigation is to determine the level of competition that exists currently in the natural gas supply service market in Pennsylvania. A party that wishes to submit written testimony shall file ten copies of his or her written testimony at this docket with the Commission's Secretary no later than Friday, August 27, 2004. An electronic copy of the testimony on a diskette must also be provided so that testimony can be posted at the Commission's website.

Parties are asked to address the following topics in their written testimony:

1. The assessment of the level of competition in Pennsylvania's natural gas supply service market.
2. The effect of the price of natural gas on competition.
3. The effect of consumer education on competition.
4. The effect of customer information/service on competition.
5. The effect of supplier financial security requirements on competition.
6. The effect of natural gas distribution company penalties and other costs on competition.
7. Discuss any avenues, including legislative, for encouraging increased competition in Pennsylvania.

Note that the list of topics is not all inclusive. Other topics that are relevant to assessing competition in the Pennsylvania natural gas supply service market may also be addressed.

Additionally, the Commission will direct all natural gas distribution companies and licensed natural gas suppliers to provide the information requested in Annex A. The receipt of this current and historical data should provide a more accurate and complete picture of competition in the Pennsylvania market.

Following receipt of the written testimony, the Commission will hold an *en banc* hearing to further explore the level of competition in Pennsylvania. The *en banc* hearing will be held on September 30, 2004. The Commission will issue a Secretarial Letter addressing further procedural details for this hearing on or before September 10, 2004. The Commission wishes to remind interested parties are invited to contribute other relevant data and statistics related to this investigation; **THEREFORE,**

IT IS ORDERED:

1. That an investigation into competition in Pennsylvania's natural gas supply service market is initiated.

2. That a copy of this order shall be served upon all Pennsylvania natural gas distribution companies, the Philadelphia Gas Works, the Office of Consumer Advocate, the Office of Small Business Advocate, all licensed natural gas suppliers, the Energy Association of Pennsylvania, the Independent Oil and Gas Association and the Industrial Energy Consumers of Pennsylvania.

3. That a person wishing to submit written testimony addressing the issues presented in this order shall do so no later than August 27, 2004. An original and ten (10) copies of the written testimony and one diskette containing an electronic version of the written testimony shall be filed with the Commission's Secretary. Testimony should be addressed to James J. McNulty, Secretary, Pennsylvania Public Utility Commission, P.O. Box 3265, Harrisburg, PA 17105-3265.

5. That the natural gas distribution companies, the Philadelphia Gas Works, and the natural gas companies shall file the answers to the questions appearing in Annex A shall be filed no later than August 27, 2004. An original and ten copies of the answers

and an electronic version of the answer on a diskette shall be filed with the Commission's Secretary.

6. That an *en banc* hearing will be held on September 30, 2004. The Commission will issue a Secretarial Letter addressing the procedural aspects for this hearing on or before September 10, 2004.

7. That the contact persons for this investigation are: Robert Bennett, Fixed Utility Services at 717- 787-5553 (robennett@state.pa.us) and Patricia Krise Burket, Assistant Counsel at (717) 787-3464 (pburket@state.pa.us).

8. That this Order shall be published in the *Pennsylvania Bulletin* and that the Order and the written testimony submitted shall be posted at the Commission's website at www.pucpaonline.com.

BY THE COMMISSION:

James J. McNulty,
Secretary

(SEAL)

ORDER ADOPTED: May 27, 2004

ORDER ENTERED: May 28, 2004

ANNEX A

Natural Gas Distribution Companies

Each natural gas distribution company is directed to provide specific information about its system.

(1) For each quarter of the years 1999 to 2004, provide the following:
   (a) Number of natural gas suppliers operating on its distribution system;
   (b) Number of residential, industrial and commercial customers purchasing gas from alternative suppliers;
   (c) Volume of natural gas transported on its distribution system;
   (d) Volume of natural gas transported for suppliers on its distribution system.
   (e) Numbers of customer complaints/disputes regarding slamming or unauthorized change of supplier; changing a supplier; selecting a supplier; confusion regarding a bill on which charges appear for natural gas from an alternative supplier, error in billing for a supplier; and any other issue competition-related issue.

(2) Provide the following information about security requirements that natural gas suppliers are required to maintain for licensure (66 Pa. C.S. § 2208(c)(1)(i)):
   (a) Security requirement as posted in the distribution company's initial supplier tariff.
   (b) Each change that was made to this security requirement to date.

Natural Gas Suppliers

Natural gas suppliers are directed to provide specific information regarding sales volume and customer number. For each of the quarters of the years 1999 to 2004, provide the following:

(1) Number of customers (by class) for each distribution system on which the supplier operates.
(2) Volume of natural gas delivered to customers (by class) on each system on which the supplier operates.
(3) Numbers of customer complaints/disputes regarding slamming or unauthorized change of supplier; changing a supplier; selecting a supplier; confusion regarding a bill on which charges appear for natural gas from an alternative supplier, error in billing for a supplier; and any other issue competition-related issue.