



National Regulatory
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**Gas Choice:
Do Residential Customers Benefit?**

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Online Access

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[http://www.nrri.org/pubs/gas/NRRI Gas Choice July11-14.pdf](http://www.nrri.org/pubs/gas/NRRI_Gas_Choice_July11-14.pdf).

Executive Summary

Twenty-one states and the District of Columbia allow residential natural gas customers to choose their retail gas-commodity supplier under what have become known as “gas choice” programs. The number of jurisdictions offering such programs comprises about 55 percent of all residential gas customers in the U.S. As of December 2009, 5.1 million residential customers—about 15 percent of those eligible—had chosen a nonutility provider, an energy marketer. The utility acts as a default commodity supplier for customers who decide not to choose a marketer and provides delivery service for all gas consumed in its service area, whether supplied by the utility or a marketer.

The rationale for gas choice programs is to make available to residential customers the presumed benefits of federal deregulation and restructuring of the wholesale gas market that occurred in the 1980s. New choices for gas customers, at least in theory, were expected to improve economic efficiency, lower prices, and offer new value-added services.

Evidence from U.S. markets and from the UK indicates that benefits from choice for residential customers are small and often negative, owing to several factors:

1. A lack of education and information furnished to customers to empower them to take advantage of gas choice;
2. Customers’ inertia—their reluctance to invest the time and effort to determine their “best deal,” given the risks and the small savings that might result;
3. The confusing array of price information and mis-information that marketers sometimes present to customers;
4. The high cost many customers must face to switch suppliers;
5. The difficulty marketers may have in competing with the utility, as marketers’ access to gas supply and storage may be no better than the utility’s;
6. Marketers’ unwillingness to offer value-added services that customers might desire; and
7. The oligopolistic nature of many gas retail markets.

Based on the evidence from several jurisdictions, we are not prepared to say that gas choice for small customers cannot work in their favor. Indeed, for limited periods of time, many customers have surely benefited by switching to a marketer. The evidence suggests, however, that many customers who switched were worse off over the longer term. If gas choice markets are to be effective and beneficial for residential customers, they should possess the following attributes: (1) a sufficient number of sellers to have workable competition and no collusion, (2) well-informed customers, (3) transparent commodity

prices, (4) customer responsiveness to price; (5) low transaction costs for customers to change suppliers, and (6) low entry barriers for new suppliers.

Most if not all of these six conditions are lacking in the gas choice markets we have examined. Accordingly, if gas choice programs are to be continued in the 22 jurisdictions that offer them, we recommend that regulators conduct a thorough investigation of the markets under their jurisdiction and determine whether sufficient attributes of a gas choice market that could be deemed “workably competitive” exist or can reasonably be created.

In such an investigation, regulators should address the following questions:

1. What protections do customers lose when they switch to a third-party marketer? Do they have more protections as utility customers?
2. What special challenges do gas choice programs pose for regulators?
3. What safeguards—including procedures for handling customer complaints, marketer licensing conditions, information requirements, and customer education—should regulators offer customers considering participation in gas choice programs?

If the necessary conditions for a workably competitive market are found to exist, no change need be made, beyond the regulator making clear to all parties that it will continue to monitor the market to ensure that it remains healthy.

If the necessary conditions do not exist, but it appears that changes can be instituted that would render the market workably competitive, the regulator should institute those changes.

If it appears unlikely that all or even most of the conditions can be met, such that a market cannot be made workably competitive, then the gas choice program in that jurisdiction should be terminated.

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Gas Choice: Do Residential Customers Benefit?

I. Introduction to Small Customer Gas Choice

Twenty-one states and the District of Columbia allow residential customers to choose their retail natural gas commodity supplier. The industry commonly refers to these initiatives as “gas choice programs.” The rationale for gas choice programs was to make available to small retail customers the benefits of the federal deregulation and restructuring of the wholesale gas market that occurred in the 1980s.¹ New opportunities for retail customers were expected to improve economic efficiency, lower prices, offer new value-added services, and even enhance the quality of customer service.

Under gas choice, distribution remains a monopoly service, but the retail sale of gas may operate in an unregulated market, with the local gas utility acting as the default supplier. Gas choice programs offer residential customers the opportunity to contract with marketers for gas supply but do not assure that customers will benefit from doing so.

The number of jurisdictions offering such programs has not changed since 2003 and includes about 55 percent of total residential gas customers in the U.S. As of December 2009, 5.1 million residential customers, or about 15 percent of eligible residential customers, had chosen a nonutility provider—*i.e.*, an energy marketer. Some programs have seen increased customer participation over time, while others have seen a decline.² (*See* Table 1 on page 19.)

Markets from which small gas customers might benefit should have the following attributes: (1) a sufficient number of sellers to have workable competition and no collusion, (2) well-informed customers, (3) transparent commodity prices, (4) customer responsiveness to price, (5) low transaction costs for customers to change suppliers, and (6) low entry barriers for new suppliers.

¹ *See, e.g.*, Kenneth W. Costello and J. Rodney Lemon, “Unbundling Small Customer Services: New Challenges for State Public Utility Commissions,” *Energy Law Journal*, Vol. 18, No. 1 (1997): 137-70.

² For a comprehensive overview of the status of gas choice programs, *see* http://www.eia.doe.gov/oil_gas/natural_gas/restructure/restructure.html.

II. Real-World Experience from Gas Choice

Analyses of several gas choice programs reveal that many customers who have chosen to contract with a competitive marketer have not benefited from the relationship. The examples that follow are not comprehensive and do not of themselves constitute adequate support for terminating or modifying choice programs. They do suggest, however, that regulators should investigate the effectiveness of gas choice programs, determine whether they have produced benefits to customers,³ and, if not, what steps, if any, may be taken to increase their effectiveness.

A. U.S. Energy Information Administration

A comparison of average prices of natural gas delivered to residential customers by gas utilities and marketers for the period 2006-2009 shows that the latter generally had higher prices. EIA selected eight choice states for the comparison. When calculating the delivered prices on a statewide basis across the eight states,⁴ marketers in choice programs serving residential customers had 9.4, 9.8, 8.0, and 12.2 percent higher prices than gas utilities for the years 2006, 2007, 2008, and 2009, respectively. For the eight states, the average marketer price was higher in six, seven, five, and seven of the states for the years 2006, 2007, 2008, and 2009, respectively.

Because the above statistics do not compare individual marketers' prices with the local gas utility's price, they cannot indicate whether or not customers of individual utilities would have benefited from choice. The numbers do suggest, at least on an aggregated basis, that many residential customers paid higher prices when they bought gas from a marketer. The higher marketer prices might reflect the advertising, promotion, and back-office costs that marketers must incur to operate successfully in the residential retail market.⁵

³ One statistical study using country-wide data indicated cost savings from gas choice programs. The study's results showed that:

The ability of consumers to choose their provider . . . lowers the expected price charged by utilities in the state by 0.5-1.6%, depending on the model specification (at 57).

See Vladimir Hlasny, "Do Gas Cost Incentive Mechanisms Work? A Nation-Wide Study," *The American Economist*, Vol. 50, No.1 (Spring 2006): 51-68.

⁴ These states are Florida, Georgia, Maryland, New Jersey, New York, Ohio, Pennsylvania, and Virginia.

⁵ Marketers might also have a higher markup than utilities because of market power. Even if the local utility is the default supplier, marketers know that when customers are inactive in searching out suppliers or are misinformed the former can exploit this situation by charging customers a higher price than the utility or another marketer would charge.

B. Illinois Citizens Utility Board

This state consumer advocate has developed what it calls a Gas Market Monitor.⁶ As described on its website, the Gas Market Monitor “provides a monthly snapshot of how hundreds of plans have fared since 2003.”⁷ Its analysis has shown that most plans since 2003 have resulted in higher gas bills for Illinois residential customers of marketers.⁸ As of June 3, 2011, the vast majority of plans—91 percent—fall into this category. The average per-customer loss across plans since 2003 was almost \$647, or more than \$80 per year.⁹ CUB attributes this outcome in part to “customers’ inability to make informed decisions based on price comparisons among marketers.” CUB discusses the whimsical nature of cost savings to customers when they switch to a marketer:

It all depends on which company you choose and when you sign up. A fixed rate is basically an insurance plan against soaring natural gas prices. You’re likely to pay a premium for that insurance. If you happen to lock in a fixed rate just before prices skyrocket, you might save money. However, you may not be so lucky if prices plummet. You might do better with a variable rate, which changes on a monthly basis, according to the cost of gas or some market indicator of gas (plus a markup). However, there’s no guarantee. *You’re simply gambling that the unregulated supplier will do a better job of buying gas than the utility. Sadly, you would need a crystal ball to determine whether any of these plans are big winners.*¹⁰ [Emphasis added]

⁶ The Illinois Legislature created CUB to represent the interests of residential utility customers.

⁷ See the CUB website page on the Gas Market Monitor at <http://citizensutilityboard.org/GasMarketMonitor.php>.

⁸ The comparison is between what customers actually paid and what they would have paid had they stayed with their gas utility.

⁹ As expressed on the CUB website: This analysis is based on data obtained from suppliers each week. It includes hundreds of active plans as well as expired ones (the plan’s term has ended and customers are no longer on it). For example, if you signed up in December 2005 for a one-year plan, the analysis of that plan’s results would be in the “expired” category, because the term would have ended in December 2006. If, in December 2005, you had signed up for a five-year plan, the analysis would be included in the active section and would reflect savings and losses to date.

¹⁰ See Gas Monitor Market at <http://citizensutilityboard.org/GasMarketMonitor.php>.

The CUB findings are so striking that they invite regulatory action.¹¹

C. Kentucky

In 2010 the Kentucky Public Service Commission opened a proceeding to explore the benefits of gas choice programs at the direction of the Kentucky General Assembly. The commission report¹² concluded that:

[W]hile a [gas choice] program may be crafted to provide an opportunity to achieve savings, actual savings cannot be guaranteed. Evidence was presented that some customers have benefited financially from competition; however, such evidence also indicated that the savings were not consistent, as they are highly dependent on the time period measured and the market price of natural gas, which is, as described by a proponent of competition, one of the most volatile priced commodities. Having reviewed the evidence, the Commission can only conclude that retail natural gas competition programs that include residential and the smallest nonresidential consumers can be crafted to provide opportunities for consumers to benefit based on their unique circumstances. Furthermore, the Commission finds that consumers can be protected against deceptive marketing practices and loss of gas service if the necessary legislation and regulations are in place.¹³

Evidence on customer benefits for the only existing gas choice program in the state showed that:

The Customer Choice program collectively saved \$11.4 million during the first five years of the program. But in the last five years, during a period of extreme price volatility in natural gas markets, *customers in the program collectively paid \$28.7 million more than they would have had they purchased gas from Columbia [Gas of Kentucky] instead of a marketer.*¹⁴ [Emphasis added]

¹¹ Illinois has passed legislation: (a) limiting cancellation fees on contracts to \$50, (b) allowing customers to cancel their contract with a marketer without penalty within 30 days after receiving their first bill with the marketer, and (c) instituting new verification procedures to protect consumers from unauthorized switching.

¹² See the Commission Order for Case No. 2010-00146 and the report titled *An Investigation of Natural Gas Retail Competition Programs* at http://psc.ky.gov/PSCSCF/2010%20cases/2010-00146/20101228_PSC_ORDER.pdf.

¹³ *Ibid.*, 14-15.

¹⁴ Kentucky Public Service Commission, “PSC Says Retail Competition in Natural Gas Has Uncertain Benefits for Residential Customers,” *News Release*, December 28, 2010, 2.

D. Ohio

Ohio's gas choice programs are among the most successful in the country in terms of customer participation rate, but there have been problems. The Columbia Gas CHOICE Program initiated in 1998. Since its inception, according to a 2010 audit, participating choice customers have paid nearly \$545 million more for natural gas than if they had remained with the utility.¹⁵ A series of articles in the *Columbus Dispatch* identified reasons why participating customers incurred these losses and included these observations:¹⁶

- Columbia Gas has offered lower cost gas than marketers most of the time since 2002.
- The worst time to accept a fixed price is when prices have been rising, but customers tend to prefer a fixed price plan at such times because they want stability. They would, however, pay a premium for such a plan as compared to their costs had they remained with the utility.
- If customers buy a one-year contract from a marketer and allow it to renew automatically, they lose timing advantages that might lead to cost savings.

Complaints have arisen about aggressive activities by door-to-door marketers targeting vulnerable customers.¹⁷ Several parties alleged in complaints that a marketer had engaged in unfair and misleading sales tactics.¹⁸

Columbia Gas annually files a report with the commission calculating the effect on the gas bills of those customers who had chosen a marketer.

¹⁵ Exeter Associates, Inc., *Management and Performance Audit of Gas Purchasing Practices and Policies of Columbia Gas of Ohio, Inc.*, prepared for the Public Utilities Commission of Ohio, November 18, 2010, 6-4 at <http://dis.puc.state.oh.us/TiffToPDF/A1001001A10K18B35226A46120.pdf>.

¹⁶ Dan Gearino, "Columbia Gas' Rate Often Best," *Columbus Dispatch*, May 3, 2009.

¹⁷ See Office of the Ohio's Consumers' Counsel, "Residential Customers Reminded to be Cautious about Door-to-Door Solicitations," *News Release*, February 18, 2011 at <http://dis.puc.state.oh.us/TiffToPDF/A1001001A10K18B35226A46120.pdf>.

¹⁸ The marketer in fact rented the incumbent utility's name. See Office of the Ohio's Consumers' Counsel, "OCC Files Complaint against IGS Marketing Tactics," *News Release*, October 21, 2010 at http://cdn.optmd.com/V2/62428/215815/index.html?g=AQB9OiU=&r=www.cleveland.com/consumeraffairs/index.ssf/2011/02/ohio_warns_consumers_to_be_war.html.

E. Georgia

The Atlanta Gas Light (AGL) choice program has the unique feature of requiring all retail customers to receive their gas services, other than metering and distribution, from a marketer. Unlike gas choice regimes in other states, the AGL program provides no regulated price ceiling that marketers and other third-party energy service providers have to beat in order to attract customers. In other words, the market, rather than regulators, determines the price of gas for all retail customers (except for distribution service). This feature of the market makes it particularly imperative that competitive conditions exist. A Blue Ribbon Task Force established by the governor in 2001 assessed the effect of the AGL choice market.¹⁹ The Task Force report made several findings and recommendations, most of which the State General Assembly later adopted.²⁰ One finding was that the AGL choice market is highly concentrated (*i.e.*, oligopolistic) and conducive to market-power outcomes. The report recommended establishing (1) a natural gas bill of rights for retail customers, (2) more customer education, (3) more stringent marketer certification rules, and (4) an adequate safety net for low-income customers.

F. United Kingdom

The United Kingdom's (UK) retail gas markets have been open to competition since 1996. The regulator, the Office of the Gas and Electricity Markets (Ofgem), imposes a price cap on incumbent utilities, which compete with third parties for gas-supply (nondistribution) service. Several empirical studies have scrutinized these markets with respect to customer behavior and benefits. One study noted that:

Welfare gains from the competitive process could be increased either by reducing perceived search costs, so that either more consumers switch or the incumbent

¹⁹ The AGL program was plagued initially by many problems, including slamming (*i.e.*, switching a customer's supplier without the customer's authorization), wrongful disconnection, false billing and marketing practices, marketer bankruptcies, and poor customer service.

²⁰ Blue Ribbon Natural Gas Task Force, Final Report to Governor Roy E. Barnes and General Assembly of the State of Georgia, February 2002 at <http://www.psc.state.ga.us/gas/ngdereg/taskforce.pdf>. Two aspects of the residential segment of the AGL choice market triggered concern. The first was the large gap between the commodity price charged by marketers for variable-price service and the wholesale price of gas (which includes both the wellhead price and interstate pipeline transportation). The second was the high price of marketer gas sold to the residential segment of the AGL choice market relative to the prices being charged by neighboring local gas utilities. In September 2001, for example, the average price of gas in the Georgia deregulated market (including both fixed-price and variable-price service) was about 54 percent higher than the average price of gas sold by a sample of eight gas utilities in southeastern states. See Ken Costello, "The Competitiveness of the Georgia Deregulated Gas Market," prepared for the Georgia Public Service Commission, January 2002 at <http://nrri.org/pubs/gas/02-CO.pdf>.

believes that they will do so; or by reducing the cost of acquiring switchers. If the market is to work better, more consumers need to be aware that the process is not, generally, beset with difficulty.²¹

Another study on UK retail electricity and gas markets remarked that:

Theoretically, consumers impose competitive constraints on suppliers by choosing the best value in the market; for a homogeneous good... Where service quality depends on the distributor and not the retailer, this is usually the cheapest. However, analysis of consumer behavior in 2000, soon after the market was opened, showed that *almost a third of switching consumers moved to a supplier which actually charged more than the incumbent*. The selection of a more expensive supplier is a puzzling outcome, and may be explained by decision errors arising from the inherent complexities of the choices in question. It may also arise from deliberate supplier strategy ('mis-selling'). This is plausible since the number of complaints to the watchdog was considered sufficient to warrant investigation. It is reasonable to surmise that as the number of competitors increases, firms may increasingly rely on mis-selling strategies to profit from reducing the accuracy of consumers' decisions... Consumer error remains high: even in 2005, *less than an eighth of consumers who switched to get lower prices chose the supplier who gave them the best deal*.²² [Emphasis added]

Overall, empirical studies of the UK retail electricity and gas markets have shown that:

- Customers often make the wrong decision, either to stay with the utility, switch to a supplier that has higher prices than the utility, or switch to a supplier that does not offer the best deal.
- Customers are influenced by various factors in switching suppliers, including (in addition to price, the primary factor) sales tactics, customers' perception of a supplier's service, and the supplier's brand.²³ Many customers switch in response to supplier information, rather than shopping around.
- Well-informed and active customers are prerequisites for competitive markets. One important factor for well-informed customers is price transparency. Many customers

²¹ Monica Giulietti et al., "Consumer Choice and Industrial Policy: A Study of UK Energy Markets," Center for the Study of Energy Markets, Working Paper 112, March 2003, 34.

²² Stephen Davies et al., "Competition Policy and the UK Energy Markets," *Consumer Policy Review*, Vol. 17, No.1 (January/February 2007), 5.

²³ This evidence suggests not only that customers are not "inert" (*i.e.*, nonresponsive to lower price offerings), but also that they are disinclined to switch quickly and in large numbers for just a small price differential between suppliers.

have difficulties comprehending and comparing suppliers' prices. This problem can lessen competition among suppliers, allowing them to take advantage of customers.

- Vulnerable customers, such as low-income and senior households, are the least informed customers and the most susceptible to high-pressure sales tactics by suppliers. Vulnerable customers also tend to have high switching costs and exhibit more inertia than other customers (*e.g.*, they tend to stick with a current supplier even when they should switch to another supplier).
- Many customers don't switch because they are uncertain of the cost savings and how long they will realize these savings, and because they fear problems (*e.g.*, poor reliability) that might arise. Risk-averse customers tend not to switch.
- The ability of customers to minimize search costs helps to intensify competition among suppliers. Customers tend to view selecting a supplier and tariff as a complex process that works to the advantage of incumbent suppliers. The result and possibly the intent of offering more tariffs, for example, may be to confuse customers and make their decisions more difficult.²⁴

III. Conclusions from Real-World Gas Choice

Gas choice programs vary widely in terms of size, regulatory rules, the posture of the local gas utility toward choice, the number and offerings of marketers, and participation by residential customers. States such as Illinois, Michigan, Ohio, Virginia, and Wyoming have expanded their choice programs over time to include more eligible customers. Other states, such as Delaware, Wisconsin, and Iowa, have terminated programs.

At the outset, we observed that markets from which small gas customers might benefit should have the following attributes: (1) a sufficient number of sellers to have workable competition and no collusion, (2) well-informed customers, (3) transparent commodity prices, (4) customer responsiveness to price, (5) low transaction costs for customers to change suppliers, and (6) low entry barriers for new suppliers. Evidence from gas choice programs in the U.S. and elsewhere, however, indicates that several of these elements are frequently absent; thus consumer benefits have been mixed and often negative.

²⁴ There is evidence that consumers often become worse off the more choices they have. This effect, known as the "paradox of choice," is consistent with the premise that consumers are more likely to make bad decisions when they have more choices. One possible outcome is that suppliers have less incentive to compete intensively with each other in giving consumers the best deals. *See, e.g.*, Sheena Iyengar, *The Art of Choosing* (Twelve Publishers: New York, NY, 2010).

A. Market and marketer issues

1. Marketers lack advantage vis-à-vis the utility

Marketers purchase gas in a competitive wholesale market and resell it at retail to customers, just as the utility does. It is conceivable that a marketer could outperform a utility in purchasing gas supply. For example, if a utility has a liberal purchased gas adjustment (PGA) mechanism that allows for a monthly pass-through of its actual gas costs, it may not be strongly motivated to optimize its gas purchasing operation. Typically, however, a utility will seek to avoid cost disallowances from subpar performance, and it is far from clear that marketers will be able to outperform the utility on price.²⁵

2. Some gas choice markets may be oligopolistic and minimally competitive

Some gas choice markets have an oligopolistic market structure.²⁶ Under such a structure²⁷ each supplier behaves in conscious interdependency with other suppliers. Some oligopoly markets perform with minimal market-power problems, while others have more serious problems, largely stemming from market characteristics and the ability of individual firms to influence prices. In most instances, firms in oligopolistic markets are able to sustain prices above marginal cost or competitive levels without taking part in overtly collusive

²⁵ A limited situation in which a marketer may be able to offer value while offering customers only “plain vanilla” city-gate service is if the incumbent utility’s gas rates are above-market because of long-term contracts or large hedging costs that proved excessive.

²⁶ Oligopoly markets represent the intermediate case between perfect competition and monopoly in which a small number of firms have the ability to raise prices and reduce industry output. Analysis of these markets lacks a unifying theory in producing precise, useful results relating market structure to conduct and performance (*e.g.*, the relationship of price to marginal cost or actual profits to normal profits). Oligopoly theory, for example, does not offer any definite price predictions analogous to the predictions of perfectly competitive and monopoly markets. Most theories predict that prices in oligopoly markets are greater than marginal cost but less than the price of a pure monopolist. Various oligopoly models predict different outcomes because of their varying assumptions about how firms behave, the number of firms in a relevant market, the characteristics of a market and the products sold, and the degree of interaction between firms. *See, e.g.*, Luis M. B. Cabral, *Introduction to Industrial Organization* (Cambridge, MA: MIT Press, 2000), 99-126.

²⁷ “Market structure” refers to the number and concentration of sellers and buyers that consummate trades for specific goods or services and entry conditions affecting those sellers and buyers. The three broad categories of market structure are competitive, oligopolistic, and monopolistic.

activities. Tacit collusion²⁸ allows marketers, however, to exercise market power without explicit communication. Such behavior reduces competitive intensity among firms by maintaining high prices. Tacit collusion may be expected in markets like gas choice where (1) prices may be transparent, (2) the product is homogeneous, and (3) firms have repeated interaction and the ability to monitor and, if necessary, punish each other's pricing behavior, for example by lowering price to temporarily reduce everyone's profit, including the "cheater's."²⁹ In a multi-period market of repeated interaction, firms frequently learn to compete less aggressively with one another.³⁰

3. Marketers have offered few value-added services

Even if marketers do not outperform utilities on price, consumers might yet benefit from choice through different value-added services, such as risk management (*e.g.*, fixed prices over the following two winters), billing, and budget payment plans that marketers may offer. Marketers might also benefit by having greater profit opportunities in selling unbundled services. A marketer that limits itself to selling only natural gas, a commodity in which it may be difficult to outperform the incumbent utility, could find it difficult to justify entering the gas choice market.

To date, marketers have offered utility customers limited new services. For marketers to attract residential customers, they need to work harder to increase consumer benefits, lower customer transaction costs, or both. Marketers might also have to "brand" their service so as to differentiate it from that offered by other marketers, which so far they have not done successfully.

4. Marketer prices lack transparency and confuse customers

As experience with UK and other gas markets has shown, the confusing array of marketer offerings is off-putting to potential customers. Quite often, the sales approach of such firms, while meant to distinguish them from other competitors, consists of a plethora of confusing price

²⁸ Because marketers interact on a day-to-day basis, which increases the prospects for tacit collusion, they have opportunities to retaliate against a marketer who decides to compete aggressively. Thus, mutual behavior by long-term rivals would weaken price competition.

²⁹ For conditions conducive to collusive behavior, see Luis M. B. Cabral, *Introduction to Industrial Organization*, 128-45.

³⁰ One might rightly contend that gas utilities would face increased pressures to lower their purchased gas costs if the regulator used the prices charged by marketers as a benchmark. If the utility's gas costs are clearly higher than the marketers', the regulator might investigate the prudence of the utility's gas-procurement practices. On the other hand, if the gas utility has an affiliated marketer in its "customer choice" program, it might want to draw more customers to the affiliate by charging a higher price for its regulated service. This action would coincide with increasing the overall profits of the parent company.

plans, none of which can readily be compared to the offerings of other marketers, such that the customer is apt to throw up her hands in exasperation. Whether deliberate or not, the effect of this sales approach is that customers lack the ability to compare plans on an apples-to-apples basis. Faced with confusion, customers opt to stay with their present supplier, even when, if they were able to assess options on an easily understood basis, they would save money by changing suppliers.

B. Customer issues

An economic concept called the “Bertrand paradox” predicts that consumers may receive the full benefit from competition even when the number of firms is as small as two.³¹ A crucial condition for such a market to be effective, however, is the presence of *active consumers* who are constantly looking for the best deal. With this assumption—along with others, such as a homogeneous product, no capacity constraints, and all firms having the same marginal cost—firms would tend to set prices at marginal cost to attract customers.³²

Many gas choice programs have seen participation rates reach a plateau, with little growth thereafter or even a reduction from earlier peak participation. This is the classic S-shaped curve, which may be seen in many economic and social contexts ranging from adoption of new technologies to the progress of disease contagion.³³ After the initial growth in the minority of customers exercising choice, the willing adopters have acted and the remaining population—disinclined to switch suppliers because of time constraints, search costs, and confusion—adds slowly, if at all, to the population of gas choice shoppers.

1. Indifference and inertia

For the average household, the potential for cost savings is small relative to income, which may explain why few residential customers choose to expend the time and effort required to collect and analyze the choices presented.

If small customers choose a supplier randomly or fail to seek useful price information from competitors, suppliers will act more like monopolists, setting a price higher than marginal cost with little fear of losing customers. Large commercial and industrial customers, having higher usage, are more likely to act to improve their fuel-cost situation.

³¹ We would see the same result in what economists call “contestable markets.” These markets can have high concentration but produce competitive-like outcomes with minimal entry barriers.

³² Cabral, *supra*, note 31, 102-7.

³³ See, e.g., James F. McKenzie, R. R. Pinger, Jerome Edward Kotecki, *An Introduction to Community Health*, Fig. 16-10, at 491 (6th ed., 2007, Jones & Bartlett Publishers, Inc., Sudbury, Mass.).

2. Lack of information

Well-informed customers who know the products and prices marketers offer will prompt marketers to compete more aggressively. If, instead, customers are ill-informed, marketers recognize that they can maintain higher prices and still retain customers. Ill-informed consumers tend to stay with their utility or current marketer, even though they might benefit from switching to another marketer.

Customer confusion can revolve around price, as well as customer rights and responsibilities.³⁴ In such a market, adequate customer education is critical to shape well-informed decisions and mitigate market power,³⁵ but the education that customers need is too often lacking in real-world gas choice programs.

3. Reluctance to switch when appropriate

The same barriers that make small gas customers reluctant to evaluate and choose among marketers' offerings in the first place—the paucity of potential savings, the difficulty of obtaining price and service information on an apples-to-apples basis, and inertia—render many initial adopters reluctant to switch to another supplier or switch back to the utility when doing so would be in their financial interest.

4. High switching costs as a deterrent

High costs to switch suppliers will also deter customers from considering a switch and render them inactive in the market. For choice markets to function well, switching costs need to

³⁴ As expressed in one report:

There was a fairly widespread feeling that the complexity and range of tariffs offered was not to help the customers by offering them a wide choice, but to confuse the customer and make that choice more difficult. (FDS International, *2011 Vulnerable Customer Research Report*, prepared for the Office of the Gas and Electricity Markets (Ofgem), 2011, 1.)

The choice program of Columbia Gas of Ohio offers customers a large number of marketer plans, rates, and terms that seem to make it difficult for them to choose the best option. See [Columbia Gas of Ohio Apples to Apples Chart - PUCO](#). Programs like Northern Indiana Public Service Company's require standardized contracts to mitigate customer confusion and to increase transparency. (See <http://www.nipsco.com/Our-Services/NIPSCO-Choice/choice-residential-plans.aspx>.)

³⁵ One can argue that in gas choice markets where suppliers offer a homogenous product, consumers only have to compare prices. In many other markets, consumers not only have to compare prices but must also consider the difference in product quality, which can have several dimensions.

be reasonable, especially given the small expected savings from switching suppliers. Switching costs include search costs, time spent in processing the switch, and fees. High switching costs discourage entry by placing incumbent marketers at an advantage, such that they may charge a higher price and still retain their customers. With high switching costs, even when a customer decides to sign on with a marketer, she will tend to stay longer with that marketer than if switching costs were lower.³⁶

IV. What Regulators Should Do

A. Assess the market and its participants

1. Assess the market

Regulators have many ways to secure information about the functioning of the gas choice market. They should examine the spot price of gas over a given period and compare it to the price of supplies contracted by gas utilities and gas marketers over the same period. They should also gauge the degree of customer participation in gas choice over time by securing data from the utility and marketers as to the number of customers who switched from a utility to a marketer, or from one marketer to another, or from a marketer back to a utility during the period.

Regulators should also compare the prices and performance of the utility and marketers in a given area with that of utilities and marketers in adjacent areas within the state, and with utilities and marketers in adjacent states.

Ultimately, regulators should analyze the relative difference in gas bills when customers switch from a utility to a marketer. For empirical purposes, the change in consumer surplus—the consumer benefit—is equivalent to the change in customers' total gas bills. The analysis should cover at least three to four years; it would be no surprise if customers received negative benefits for some years. A well-functioning gas choice program, however, should produce positive benefits over a number of years for customers who exercise the opportunity to switch suppliers. If it does not, one can ask why customers would continue purchasing gas from a marketer when they receive no cost savings, or why a regulator would allow such a situation to continue.

2. Assess the performance of the utility

The regulator should determine whether the utility has informed its customers as to the nature of the gas choice program, the volatile nature of the natural gas market, and how the customer might evaluate potential savings and services offered by different marketers.

³⁶ To attract customers, a marketer may offer low or promotional prices during an initial signup period. We have observed the phenomenon of new market entrants offering low prices and other inducements to lure utility customers into some gas choice programs.

The regulator should determine whether the utility facilitates switching by small customers, including switching from the utility to a marketer, from one marketer to another, and from a marketer back to the utility.

The regulator should determine whether the utility has a marketing affiliate operating in the area and, if so, (a) how the utility's pricing compares to that of its affiliate and (b) what steps the utility has taken to assure that it does not exercise undue market power or unduly advantage its unregulated affiliate at the expense of the utility's own customers.

3. Assess the performance of marketers

The regulator should assess the performance of gas marketers through publicly available data and interaction with marketers. If information on marketer pricing is not publicly available, the regulator should obtain access to marketers' pricing under a promise of confidentiality. The regulator should determine whether each marketer offers different price plans (*e.g.*, fixed price, variable price, or time-differentiated pricing) and whether two or more marketers offer plans sufficiently similar such that prospective customers should be able to compare those plans.

The regulator should ascertain whether marketers offer potential customers value-added services aside from simple gas-supply, city-gate service.

The regulator should review marketers' switching rules, including the cost to switch, to determine whether they are reasonable in permitting customers to change marketers or return to their utility.

The regulator should ascertain whether marketers have experienced difficulty in complying with rules of the gas utility.

The regulator should require marketers to provide information on how many customers have filed complaints against the marketer, as well as the nature of the complaints and whether the number has increased or decreased over time.

Finally, the regulator should determine how many new customers each marketer connected and disconnected over a given time period

4. Survey gas customers

The regulator should seek to understand better the small customer experience with gas choice—why customers do or do not choose to seek cost savings by studying supplier choices and choosing the best option. The best way to do this might be to sponsor a demographically valid survey of such customers to determine answers to the following questions, among others:

- What are the major reasons customers did (or did not) switch to a marketer?
- What are the major reasons customers did (or did not) remain with the utility?

- Are customers generally aware of their rights and responsibilities under choice?
- How do customers secure price information?
- Is the customer confused by pricing or other information—or misinformation—received from marketers? From the utility?
- Does the customer who switched to a marketer believe it benefited from doing so? If so, how?
- Does the customer who did not switch to a marketer believe it benefited from not doing so? If so, how?
- Has the customer been “slammed”—*i.e.*, had its supplier switched without the customer’s consent?
- Did the customer experience billing problems with the marketer?

B. Analyze the market based on the assessment

The regulator should determine the following:

- The number of marketers in a given service area has grown or diminished, and the cause of such change;
- Whether competition among marketers is weak because of high market concentration or other conditions;
- Whether there is any evidence of collusion by marketers;
- Whether there is evidence of deceptive sales practices³⁷ by marketers;
- What cost savings choice customers have received or losses they have sustained over time, and the reasons for such savings or losses;
- What methodology was applied to estimate these savings;
- What benefits if any, other than gas-cost savings, choice customers received; and
- How much greater savings might customers have realized had they switched to another supplier—the utility or a different marketer.

³⁷ If marketers are found to mislead and intentionally confuse customers, hide fees, or receive preferential treatment from a utility affiliate, regulators need to intervene to protect consumers.

One state regulator, the Indiana Utility Regulatory Commission, recently required one utility to present evidence on customer benefits from its gas choice program.³⁸ Another regulator, the Pennsylvania Public Utility Commission, initiated an investigation of choice in electricity markets in part to “assess the status of the current retail market and explore what changes need to be made to allow customers to best realize the benefits of competition.”³⁹

Regulators should identify problems that are causing low or negative customer benefits. Problems may include high search costs for customers, artificial barriers to switching, weak competition among marketers, and ill-informed and inactive customers. They can then rank these problems based on their adverse effects on customers.

C. Determine a course of action based on the analysis

The Appendix includes three categories of questions that regulators should ask in their investigation of “gas choice” programs. These questions focus on whether and to what extent “choice” customers have benefited. Answers to these questions will empower regulators to make better-informed decisions on the future status of “gas choice.”

Drawing on the information obtained through its review of the functioning of the market, the respective performance of utilities and marketers, and the quantity and quality of information and education received by small gas customers, the regulator should determine whether (1) the small customer gas choice market is functioning in a satisfactory way in its present state, (2) whether changes in its administration might improve competition and customer satisfaction, or (3) whether no change is likely to render the program useful and effective and it therefore should be abandoned.

³⁸ The Commission order stated that:

[D]espite the increased participation by NIPSCO [Northern Indiana Public Service Company] customers and gas marketers, and almost 13 years of experience with this program, no witness was able to speak to the impact on the Choice program. *Indeed, when asked at the hearing, NIPSCO witnesses admitted that no studies or analyses were conducted on customer satisfaction or whether customers had saved money by participating in the Choice program.* The Commission realizes that savings may not be the only impetus for customers to enroll in the Choice program; as part of its next petition seeking extension of the program, NIPSCO should provide evidence concerning customer satisfaction and results of participating in Choice so that the Commission has an adequate basis to determine whether Choice should continue beyond 2012 (or, conversely, whether similar programs would be valuable to other LDCs). [Emphasis added] (*See* Order for Cause 43837, March 31, 2010, 15-6.)

³⁹ Pennsylvania Public Utility Commission, *Investigation of Pennsylvania’s Retail Electricity Markets*, Order, Docket No. I-2011-2237952, April 28, 2011, 2.

1. The choice market is functioning satisfactorily

In this case the regulator need do nothing except serve notice that it will continue to review the performance of the market, the utility, and marketers, as well as customer satisfaction with the program.

2. The market is functioning suboptimally, but changes in its administration should improve performance to a satisfactory level

Given the limitations of the gas choice market, it would be unrealistic to consider the small-customer retail gas market competitive. One could not label the market “workably competitive” either, as such a designation generally requires that entry be relatively free, that market power be minimal, and that consumers benefit as much as possible.⁴⁰ While entry to the gas choice market may be relatively free, the real-world examples in Section II make clear that consumers have not benefited to the extent anticipated. As well, it is unclear that market power under many choice programs is minimal.

Nevertheless, it may be possible for gas choice markets to approach the “workably competitive” designation if certain conditions are met. If small gas customers can be educated about the gas choice opportunity to save money and empowered by being offered transparent pricing and other desirable services, they should be able to benefit, and market power would at least be reduced.

To facilitate a workably competitive market, the regulator should promulgate a rule applicable to all marketers that (1) requires marketers to include at least two regulator-specified standard offers in their price plans so that customers may readily make price comparisons, (2) urges marketers to offer services that customers would value other than price plans, and (3) reserves the right to revoke a marketer’s certificate or license for mis-selling, slamming, or otherwise misleading customers.

Regulators should also require the utility to provide customers with educational materials explaining the purpose of gas choice, including the option to remain a utility customer or switch to a gas marketer for supply; the right to receive reliable service under state regulation, whichever company is the gas supplier; and the right to switch suppliers, including returning to the gas utility for supply, without undue penalty charges. The regulator should also require the utility to remove any obstructions it may impose to marketer entry and to show no favoritism to any marketer, including any company with which the utility is affiliated.

⁴⁰ There is no consensus over what precisely constitutes workable competition, but all bodies that administer competition policy in effect employ some version of it. An interesting discussion on the subject is found in G. Reid, *Theories of Industrial Organization*, ch. 7 (Blackwell, Oxford, 1987). See also F.M. Scherer and D. Ross, *Industrial Market Structure and Economic Performance*, 53-54 (Houghton Mifflin, Boston, 1990).

Regulators should oversee performance of the gas market on a continuous basis. Doing so can assist regulators in (1) ensuring marketer and utility compliance with commission rules and regulations, (2) identifying problems with potential harm to consumers, and (3) taking appropriate action to mitigate problems.⁴¹

3. The market is structurally incapable of providing customers with net benefits over time, because of market power and customer inertia that the regulator cannot remedy.

In this event, there is nothing to be done, in the absence of possible legislative intervention, except to terminate the choice program to avoid further injury to consumer welfare.⁴²

⁴¹ For a general discussion on market monitoring, see Ken Costello, *How Performance Measures Can Improve Regulation*, NRRI 10-09, June 2010 at http://www.nrri.org/pubs/multiutility/NRRI_utility_performance_measures_jun10-09.pdf.

⁴² Some might view a regulator's action to terminate gas choice as an affront to consumer sovereignty, believing that consumers should be the sole judges of their own welfare. According to this view, even if consumers make decisions that are not in their best interest, so long as they are offered choices, regulators should consider this state of affairs acceptable. In markets like gas choice, food production and sale, and pharmaceuticals, among many others, government often acts to protect the public through consumer protection and environmental laws, and in testing, labeling, and publishing warnings about the health effects of certain substances.

**Table 1. Residential Customer Participants Rates for “Choice” Programs,
2004 and 2009**

Jurisdiction	2004	2009
District of Columbia	12.0%	8.9%
Illinois	7.7	9.3
Indiana	31.9	62.4
Kentucky	32.1	24.1
Maryland	14.5	12.0
Michigan	7.1	10.8
New Jersey	5.2	2.2
New York	7.8	16.0
Ohio	37.0	58.2
Pennsylvania	7.0	7.0

Source: U. S. Energy Information Administration, “Natural Gas Residential Choice Programs – U.S. Summary, 2009,” Table 2 at http://www.eia.doe.gov/oil_gas/natural_gas/restructure/state/us.html. The participation rates are as of December 2004 and December 2009.

Appendix: Questions Regulators Should Ask

General information

1. How has the number of customers who switch to a marketer changed over time?
2. How many marketers serve the residential market? How has this number changed over time?
3. What are the major reasons that customers switch to a marketer?
4. What are the major reasons that customers stay with their utility?
5. Do marketers offer different price arrangements (*e.g.*, fixed price, variable price)?
6. Do marketers offer any value-added services in addition to city-gate service?
7. Are customers generally aware of “choice”?
8. How do customers access price information?
9. Do customers know their rights and responsibilities under “choice”?
10. Are switching costs and rules reasonable in facilitating customers to change marketers or return to their utility?

Problems

1. Have customers expressed confusion over the information (*e.g.*, prices) they receive from marketers?
2. Has “slamming” occurred?
3. How many “choice” customers did marketers disconnect?
4. Did customers experience billing problems with their marketer?
5. Is there any evidence of deceptive sales practices by marketers?
6. Has “retail choice” seen, over time, more exiting of marketers than entering of new marketers?
7. Do marketers complain about regulatory rules or their treatment by the gas utility?
8. How many customers have filed complaints against their marketers? Has the number increased or decreased over time?

9. Is competition among marketers weak because of high market concentration and other conditions?
10. Is there any evidence of collusion by marketers?
11. Is there any evidence that the gas utility has shown favoritism toward an affiliated marketer?

Benefits to “choice” customers

1. What cost savings, if any, have “choice” customers received over time?
 - a. What methodology was applied to estimate these savings?
 - b. What data was used?
2. How much have “choice” customers under fixed-price plans saved in gas costs?
3. How much have “choice” customers under variable-price plans saved in terms of gas costs?
4. What benefits, other than gas-cost savings, have “choice” customers received? How were these benefits determined?
5. Do customers who switch to a marketer feel that they have benefited?
6. Do “choice” customers regularly change marketers in trying to get the best deal?
7. What percentage of “choice” customers on an annual basis paid more for natural gas than they would have if they had remained with their utility?
8. How much more cost savings would “choice” customers have received if they had switched to marketers offering them the best deals?