EXECUTIVE SUMMARY

This report presents the results of the staff's evaluation of the natural gas choice programs of the Cincinnati Gas and Electric Company, Columbia Gas of Ohio, and the East Ohio Gas Company. This report is a follow-up to the staff's May 1998 evaluation of the pilot phase of these programs and the issues raised in the Commission's June 18, 1998 Opinion and Order.

Staff reviewed each program in terms of participation levels, complaints and inquiries, Code of Conduct enforcement issues, enrollment procedures, consumer information needs, and the development of functioning and fair competitive markets. Staff also reviewed certain operational issues such as marketer single billing, purchasing of marketer accounts receivables, and the recovery of transition costs. Staff also conducted two surveys of residential customers. The first was a follow-up survey to evaluate whether CG&E's ongoing promotional activities resulted in increased customer awareness of the choice program. The second was a follow-up of Columbia's residential customers to identify common characteristics of customers who choose an alternate provider versus customers that do not choose. As a result of its findings, staff makes recommendations in a variety of areas for the Commission to consider in directing the evolution of the gas choice programs.

Background

Natural gas choice programs are intended to promote competition in the supply of natural gas to all Ohioans. The goal is to make gas transportation service (long available to industrial customers) a competitive alternative for residential and small commercial consumers. Choice programs provide the customers a choice as to who will supply his/her natural gas needs.

Columbia Gas of Ohio Gas

The first phase of Columbia's Customer Choice pilot program, which operated for one year in the greater Toledo area, began April 1, 1997. In its June 18, 1998 Opinion and Order, the Commission noted the success of the pilot program in terms of customer acceptance and degree of marketer participation. The Order directed Columbia to expand the program to its entire service territory.

Cincinnati Gas and Electric Gas Company

On July 2, 1997, the Commission approved a modified stipulation adopting proposed tariffs to implement a gas choice pilot program designed to give all 360,000 CG&E residential and small business customers competitive options in selecting their natural gas supplier. In its June 18, 1998 Order, the Commission found that CG&E should continue to make customer choice available to all customers in the service territory.

The East Ohio Gas Company

On September 25, 1996, the East Ohio Gas Company filed with the Commission a request to implement its proposed Core Market Aggregation Service. The proposed phased-in program would ultimately allow all East Ohio Gas customers to choose their gas supplier. The first phase of the pilot program, which was to run for one year in a 10-county region in the Marietta and Canton areas, began October 1, 1997. In its June 18, 1998 Order, the Commission found that ongoing computer system problems were significant enough to delay system-wide expansion of the program at that time.

Summary of Staff Recommendations

The staff recommends that the Commission adopt the following proposals:

East Ohio Gas

Staff recommends that East Ohio Gas continue to offer its gas choice program only in the 10 county pilot area. The ongoing problems associated with the CAMP computer system make it impractical to expand the program for the upcoming heating season.

Consumer Education

Staff recommends that the Commission find that the Columbia Gas and the Cincinnati Gas and Electric Companies have conducted an effective and reasonable educational campaign and have used their public education funds appropriately.

Apples to Apples Marketer Price Comparison Chart

Staff recommends that the PUCO continue to produce the price comparison chart. Staff also recommends that the Commission strongly urge gas marketers to cooperate with staff by faxing or E-mailing staff to verify marketer and price information by date certain so that staff may produce the charts in accordance with a published production schedule, and authorize the staff to exclude from the chart those who fail to cooperate.

Code of Conduct

Staff recommends that all guidelines for the conduct or actions of marketers are incorporated in the Code of Conduct within the LDC's tariffs and that the Commission re-examine its role in enforcement of Code of Conduct/consumer protection issues.

Telephonic Enrollment

Staff recommends that Columbia's current telephonic enrollment process be continued and that it be used as a model for adopting telephone enrollment in the CG&E and East Ohio programs.

Staff recommends that the Commission reject any proposal to permit marketer initiated telephonic enrollment, unless there is compelling evidence that customers desire, or at the least, will not object to, unsolicited marketer calls.

Internet Enrollment

Staff recommends that the Commission authorize Columbia to continue its Internet enrollment process, and that it be used as the model for adopting Internet enrollment in the CG&E and East Ohio Gas choice programs

Door to Door Solicitation

While staff does not recommend any new restrictions on door to door solicitations, the staff recommends that the Commission adopt the staff recommendation made in the June 2, 1999 Entry in case 99-661-GA-COI. In that entry staff proposes to change the tariffs to provide an improved process for enforcing the Codes of Conduct.

Marketer Enrollment Verification

Staff recommends that the Commission direct Columbia to mail the currently required customer notice of a change in gas suppliers to customers immediately after the customer's application has been successfully processed. The notice should include the date that the customer will begin to receive service from the marketer they have chosen.

Percentage of Income Payment Plan

Staff recommends that the Commission direct East Ohio to evaluate the practicality of aggregating and bidding out all Percentage of Income Payment (PIPP) customers system-wide for the upcoming heating season.

Billing

Staff recommends that LDC's be required to purchase the accounts receivable of marketers for whom the LDC provides billing services.

Staff recommends that Marketers be permitted the option of providing a single bill for commodity and the LDC's distribution services.

GCR Reform

Staff recommends that discussions be organized between staff and the gas distribution companies to explore incentives for the LDC's to file HB 476 applications to divest them of the merchant function.

Additional copies of this Report are available by contacting the PUCO's
Docketing Division at (614) 466-4095.
The Report is also available on the PUCO's website at
http://www.puc.state.oh.us.

SECTION 1
CUSTOMER CHOICE STATUS REPORT

EAST OHIO GAS PROGRAM STATUS

As acknowledged in the 1998 Gas Choice Report, the East Ohio gas Choice Program was significantly constrained due to computer difficulties at East Ohio Gas. These computer difficulties limited East Ohio’s Choice Program availability to a 10-county area, while the Columbia Gas and Cincinnati Gas and Electric Gas Choice Programs were expanded system-wide.

Computer difficulties continue to impact the East Ohio Gas Choice Program limiting the Company’s ability to expand their program for the 1999-2000 heating season. As the status of East Ohio’s overall Choice Program has not significantly changed from the 1998 review, staff’s scope of discussion in this Report will primarily focus on the programs of Columbia Gas and Cincinnati Gas and Electric. The scope of review of the East Ohio Program is largely limited to the following discussion of computer difficulties at the Company and an assessment of East Ohio’s competitive market conditions.

Background

Since the October 1, 1997 onset of the gas choice program at East Ohio Gas, arranging customer billing in conjunction with third party entities, or marketers, has been a major technical hurdle and the primary deterrent for expanding the gas choice program throughout the East Ohio Gas service territory.

In East Ohio's initial six month report submitted April 1, 1998, the Company reported that their billing capabilities "did not meet expectations". The Company maintained that its new CAMP (Customer Activity and Marketing Project) billing system required extensive modifications to accommodate the requirements of its gas choice program. Nevertheless, the Company stated that its billing system would be fully operable within months and recommended that the Energy Choice Program be "made available to all customers during the second quarter of 1999".

The "Staff Evaluation of Ohio's Natural Gas Customer Choice Programs", published May 15, 1998, discusses East Ohio's billing problems in relation to budget billing and reimbursement to marketers, essentially addressing the problems as presented to the staff by the Company. The possibility that these regulatory issues might really be manifestations of computer system shortcomings was not addressed. Thus, staff recommended that "East Ohio consider adopting the same procedures as Columbia Gas for marketer budget billed customers" believing that in accommodating East Ohio's concerns with receivables or reimbursements to marketers, the Company would be able to more quickly expand its gas choice Program. Staff further recommended that the Company respond to its report by May 26, 1998 if further explanation was in order regarding the expansion of the East Ohio gas choice program.

On May 26, 1998, East Ohio responded to staff's "evaluation and recommendations" report. East Ohio's letter to the Commission cited billing issues as the single biggest impediment to system wide expansion of the choice program in the fall of 1998. East Ohio believed its existing billing capabilities could not handle the additional complexities of budget billing regarding marketer accounts and that additional modifications would be required of the CAMP system. More worrisome, East Ohio stated that even if the budget billing problem could be solved, this would not enable East Ohio to expand its program until the CAMP system is fully operational.

On June 18, 1998, the Commission issued its Finding & Order regarding Ohio's natural gas choice programs. Again the issues of third party budget billing and marketer remittance were discussed, but more importantly, the problems related to the CAMP system were reviewed. While the Commission determined not to authorize East Ohio to expand its gas choice program, East Ohio was ordered to "look at all other possible options to fix its budget billing problems…, including outsourcing its billing to Columbia or others, or having marketers do single billing." Furthermore, the Commission ordered East Ohio to "report to the staff and OCC its progress in resolving its billing problems once a week."

East Ohio began submitting reports to the Commission on the progress of the CAMP system on June 19, 1998. Through these reports and meetings between staff and the Company, it has been apparent that East Ohio Gas has been experiencing significant development problems with the CAMP system, including an inability to get the system to run within an acceptable batch window, system design problems, and data integrity issues. East Ohio's CAMP project has also suffered from an inability to find essential project personnel and develop technical skill-sets in key areas, all resulting in the continued missing of project timelines.

East Ohio's periodic reports to the Commission also discuss Company efforts to evaluate alternatives to the CAMP system, as ordered by the Commission on June 18, 1998. While East Ohio appears to have pursued various options in some detail, all options were eventually rejected in favor of continuing to go forward with the CAMP system as the best alternative to the billing problems related to the gas choice program. Importantly, in a July 20, 1998 update report, at least one option was precluded on the premise that it would take too long (approximately 6-9 months of programming) and require too many resources (at least 12 full time employees) before fruition. Since the CAMP system was expected to be ready within that time frame, the Company believed its best option was to concentrate all resources on completing the CAMP project.

In East Ohio's eighteen-month report, dated April 1, 1999, the Company reports that "billing problems continue to beset East Ohio's Energy Choice pilot program." The Company further states that they have "devoted substantial resources since [the gas choice] program implementation to making the necessary programming changes to address those problems", and that "although substantial progress has been made, the Company's ability to continue devoting these resources has been sharply curtailed by the need to address year 2000 (Y2K) preparedness issues." Furthermore, the Company relates that outside the issue of Y2K remediation, CAMP system "programming priorities will first focus on the 'core functionality' of the CAMP application before moving ahead with any programming to remedy the problems associated with third party budget billing for Energy Choice." Nevertheless, in a recent phone interview the Company remained hopeful in projecting that "necessary programming will be completed by the Summer of 2000 in order to allow the expansion of the Choice program for the winter heating season of 2000/2001" (source: Company summary of staff interview performed on April 14, 1999).

Findings

East Ohio's billing system is not ready to meet the functionality the gas choice program demands. Expanding the choice program for all of East Ohio's service territory is not a viable option without incurring a higher level of billing problems and complaints from customers.

East Ohio has not performed up to their own expectations regarding billing system development. The meeting of timelines and data integrity issues are significant problems which have current and future regulatory ramifications. In retrospect, billing options previously declined may have been a better choice than what has transpired to date. System development has suffered from common and expensive problems relating to utility company billing and accounting systems, such as the inability to get the system to process data within an acceptable batch window. Specifically skilled personnel have been difficult to find causing further delays in system development. staff is concerned that the significant development problems with the CAMP system may be building into an inappropriate level of costs for the Company and possibly, for future ratepayers.

With regard to CAMP and Y2K, system planning began in 1994 and development in 1995. It is not clear why the Company would develop a non-Y2K compliant billing system that would experience operability problems within such a short time after its originally planned completion schedule (i.e., September, 1997). Nevertheless, as the Company is still working on "core functionality" of the CAMP system, the Y2K issue is more a problem of resource reallocation and yet another source of delay in meeting project timelines.

Due to East Ohio Gas experiencing numerous project timeline alterations and the continuing need for the Company to focus on "core functionality" before moving ahead with any programming to remedy the problems associated with third party budget billing for Energy Choice, staff has no confidence in any projections for CAMP system availability. Similarly, staff believes the Company's ability to expand their gas choice program for even the 2000-2001 heating season is in doubt given the continued reliance on CAMP as the billing vehicle of choice.

Recommendations

Staff recommends that the Commission withhold authorization for East Ohio Gas to expand its natural gas choice program until such time as East Ohio's computer billing system is capable of handling the additional complexities inherent in third party billing, budget billing, and remittance of payments to participating marketers.

Due to the uncertainty related to the development and completion schedule, other means must be explored to ensure that gas choice for all East Ohio Gas customers is a reality by the 2000-2001 heating season. Thus, staff recommends that the Commission order East Ohio Gas to continue to seek avenues, and revisit options previously declined, to incorporate the choice program into its billing program or address the billing problems in a sufficient manner as to allow the gas choice program to expand to all gas customers residing in the East Ohio Gas service territory.

Finally, staff recommends that the Commission require East Ohio Gas Company to include an evaluation of the CAMP system by a staff approved independent auditor in any future attempt to recover monies used to develop the CAMP system. This evaluation should include a thorough analysis of the management of the CAMP system project with emphasis on the reasonableness of system development time, system capabilities, and system costs as they relate to East Ohio's customer base.

STATUS OF COMPETITION IN EACH CHOICE PROGRAM

Scope and Methodology

This section presents staff's findings on the performance and competitiveness of markets within the choice programs. Any review of performance will be somewhat arbitrary, since few hard and fast rules exist to brand a particular methodology. Naturally, reasonable people can disagree over the appropriateness of particular criteria, their relative importance, and about empirical methods. But, criteria must be selected, methods must be applied, and performance must be measured. The following list summarizes the criteria staff uses to assess market performance, criteria which emphasize market participation and concentration levels.

Market Performance Criteria

Marketer activity by county and by customer class
Customer class eligibility and enrollment rates
The 1, 2 and 4-firm concentration ratios based on current customer count, and on gas deliveries
The Herfindahl-Hirschman Index based on current customer count, and on gas deliveries

Staff examines a program's coverage and openness by looking at its eligibility, enrollment, and overall rates of customer participation The eligibility rate is the percentage of all customers who are eligible to switch suppliers, and as such, helps to specify program coverage. The enrollment rate is the percentage of those eligible to have enrolled in the program by selecting a new supplier. The enrollment rate gives insight about the opinion of marketers and customers to a program's design. The overall rate is the percentage of all customers (both eligible and non-eligible) to have enrolled in the choice program, and helps to measure the extent of customer migration and marketer penetration. Staff also gauges marketer penetration by considering the number of marketers serving customers within a program.

Staff infers market competitiveness by estimating market concentration with the understanding the two vary inversely such that high levels of concentration indicate low levels of competition and vice versa. Market shares underlie all concentration ratios, of which three types are computed: the market share of the top marketer (1-firm CR), the combined market share of the top two marketers (2-firm CR), and the combined market share of the top four marketers (4-firm CR). In addition to firm concentration ratios, staff utilizes the Herfindahl Hirschman Index which derives from market share data as well.

In the 1998 report, staff had information only on the number of customers served by marketers (customer count) to compute market shares, and consequently, our analysis of competition was restricted. This year staff has data on marketer deliveries as well, and this enables a more thorough look at market concentration. Hence, two measures of market concentration are employed to gauge competitiveness: one based on customer count, the other on gas deliveries. The two measures, when compared, offer a glimpse into the portfolio of customers served by a particular marketer, and in so doing, helps to bring out the relationship between marketer size and customer size. Staff bases delivery concentration ratios on volumes delivered during the heating season, that is, from September through March.

As far as interpretation goes, a market is considered weakly competitive if its 1-firm CR exceeds 50 percent, its 4-firm CR exceeds 80 percent, and if its HHI exceeds 2000. The 1-firm CR measures the market share of the top marketer, and when above 50 percent, means the top marketer is a dominant firm. The 2 and 4-firm CR combine the market shares of the top two and four marketers respectively. A 4-firm CR above 80 percent means the combined market share of the top four marketers exceeds 80 percent. By convention, markets with HHIs above 2000 are considered concentrated. The HHI is given as the sum of squared market shares, that is, the share of each participating marketer is first squared, with the sum of the squares equaling the HHI. The HHI can range in value from a low of 0 (perfect competition) to a high of 10,000 (perfect monopoly).[1] At values below 1000 a market is deemed ‘unconcentrated’, between 1000 to 2000 as ‘moderately concentrated’, and at values above 2000 as ‘highly concentrated’.

Generally, it is much easier to determine when a market is not behaving competitively than when it is; however, staff believes the following threshold values for our performance criteria are reasonable, and consistent with theories on competition. Markets meeting the following threshold values are deemed ‘workably competitive’.

Market Threshold Values for the
Presence of Competition

Over five marketers in a customer class
Enrollment rate above 20 percent,
Overall rate above 10 percent.
A 1-firm CR below 40 percent
A 4-firm CR below 80 percent
A HHI below 2000

[1] A monopoly means the market has only 1 firm whose market share is 100 percent. The square of 100 gives a market HHI of 10,000.

Overall Performance

Table A summarizes the overall performance of markets comprising the choice programs as judged by staff's criteria and threshold values. The table's statistics reflect overall service, and as such, does not separately examine performance in the residential and commercial markets. The programs show sufficient marketer activity, each program having over five marketers serving customers. Although the East Ohio program grew modestly since staff's 1998 report, its enrollment rate is good even though its overall rate of participation is quite low due to the limited coverage of the pilot program. The Cincinnati program, open to all customers, has experienced strong growth in enrollments during the year, particularly for residentials, but continues to have only a modest enrollment and overall rate of participation. The Columbia program, opened to all customers, has had strong growth in enrollments during the year, and shows very good enrollment and overall rates of participation.

The market concentration ratios and HHIs suggest only the Columbia market operates competitively. The East Ohio program, the most concentrated, has the top marketer delivering 83 percent of all volumes to choice customers, the top four marketers delivering 93 percent, and a market HHI over 5000. The concentration statistics of the East Ohio program far exceed staff's threshold values. The Cincinnati Gas program has 57 percent of deliveries coming from the top marketer, 84 percent from the top four marketers, and a market HHI over 3000. The statistics of the Cincinnati program likewise exceed staff's threshold values. The Columbia program has only 33 percent of deliveries coming from the top marketer, only 56 percent from the top four marketers, and a market HHI slightly above 1400. These statistics fall well within staff's threshold values, and suggest Columbia's program has given rise to a workably competitive market.

Table A.
Status of Competition
(Overall Program Statistics)

Program	Active Marketers	Enrollment Rate	Overall Rate	1-firm CR	4-firm CR	HHI
East Ohio	11	19.8	2.9	69	93	5168
Cincinnati Gas	15	9.8	9.8	57	84	3614
Columbia Ohio	25	32.2	32.2	33	56	1432

* Concentration statistics based on marketer deliveries

Table A gives only aggregate statistics on program performance. The balance of this section investigates each program individually and in much greater detail. The analysis of participation examines the residential and commercial markets separately, and each county separately. The analysis of market concentration also examines the residential and commercial markets separately basing statistics both on customer count and on customer deliveries. The appendix to this section provides details on individual market shares by customer class in each choice program, using both customer count and gas delivery measures.

East Ohio Gas Choice Program

Participation Analysis

As table 1 shows, approximately 15 percent of residential and commercial customers are eligible to participate in the program, and of those eligible, approximately 20 percent of residentials and 21 percent of commercials have done so. East Ohio's program has shown little new enrollment since staff's 1998 report, registering only a net growth of 2,315 residential enrollees and 278 commercial enrollees. The program's overall participation hovers around 3 percent implying only 3 of every 100 residential and commercial customers take gas supplies from someone other than East Ohio. As discussed earlier in the report, the low overall level of participation stems from East Ohio's inability to expand its program beyond the initial pilot area.

Table 1
Participation Rates by Customer Class
(February, 1999)

	Residential Customers	Commercial Customers
Total	1,121,971	83,870
Eligible	167,229	12,666
Enrolled	32,806	2,607
Eligibility Rate	14.9%	15.1%
Enrollment Rate	19.6%	20.6%
Overall Rate	2.9%	3.1%

Residential data includes PIPP customers

Tables 2 renders a county-by-county look at residential and marketer participation. With the exception of Holmes county, residential enrollments range from a low of 11 percent in Belmont county to almost 20 percent in Wayne county with median enrollment around 14 percent.[2] Again excluding Holmes county, marketer activity ranges from a low of 2 marketers in Knox and Monroe counties to a high of 9 in Wayne and Stark counties with median activity at 4 marketers. Marketer size varies considerably across counties from a low of 16 residentials per marketer in Carroll county to a high of 2203 in Stark county with median size at 111 residentials per marketer.

Table 3 renders a similar look at commercial and marketer participation. Commercial enrollments range from a low of 16 percent in Belmont county, excluding Holmes county, to almost 22 percent in Stark county with median enrollment at 18 percent. Marketer activity ranges from a low of 2 marketers in Carroll county to a high of 11 in Stark county, excluding Holmes county, with median activity at 5 marketers. Marketer size varies from a low of slightly over 1 commercial per marketer in Belmont county to a high of 142 in Stark county with median size at 11 commercials per marketer.

[2] Median enrollment at 14 percent implies half the counties have enrollments below 14 percent and half above 14 percent.

Table 2
County Participation Rates for Residential Customers
(February, 1999)

County	Number Eligible	Number Enrolled	Enrolled Rate	Active Marketers	Average Size
Ashland	1,174	154	13.1%	3	51
Wayne	18,175	3552	19.5%	9	395
Stark	106,199	19826	18.7%	9	2203
Knox	546	78	14.3%	2	39
Tuscarawas	18,219	2741	15.0%	8	343
Holmes	4	0	0.0%	0	0
Carroll	474	79	16.7%	5	16
Belmont	703	76	10.8%	3	25
Monroe	2,358	340	14.4%	2	170
Washington	15,828	2411	15.2%	7	344
Total	163,680	29,257	17.9%		

Excludes PIPP customers

Table 3
County Participation Rates for Commercial Customers
(February, 1999)

County	Number Eligible	Number Enrolled	Enrolled Rate	Active Marketers	Average Size
Ashland	140	30	21.4%	3	10
Wayne	1,698	326	19.2%	10	33
Stark	7,253	1,559	21.5%	11	142
Knox	76	13	17.1%	4	3
Tuscarawas	1,806	382	21.2%	10	38
Holmes	0	0	0%	0	0
Carroll	26	4	15.4%	2	2
Belmont	43	7	16.3%	5	1
Monroe	248	42	16.9%	4	11
Washington	1,376	244	17.7%	9	27
Total	12,666	2,607	20.6%		

The data in tables 2 and 3 yield some interesting relationships among factors associated with participation. For instance, commercial and residential rates of enrollment are strongly correlated indicating counties with high residential rates will likely have high commercial rates as well.[3] Also, a strong correlation exists between the number of marketers serving commercial and residential customers within a county suggesting marketers as a group

[3] The correlation is 0.87.

seek out both types of customers.[4] In fact, every marketer serving commercials serves residentials.

Table 4 lists more correlations among factors associated with participation, that when interpreted, yield mostly expected relationships. Taken together, the correlations suggest that larger counties (measured by eligibility) tend to attract more marketers, aggregate customers into larger groups, and show higher enrollment rates for both residential and commercial customers.

Table 4
Correlation Among Factors Affecting Participation
(Residential and Commercial Results)

Factors Correlated	Residential Market	Commercial Market
Enroll Rate / Eligibility	.42	.39
Enroll Rate / Marketers	.62	.66
Eligibility / Marketers	.63	.72
Eligibility / Marketer Size	.99	.99

Market Concentration Analysis

Table 5 summarizes our findings about concentration in the East Ohio residential market. The concentration levels are quite high, regardless of the measure used, suggesting the market is weakly competitive. There are 11 marketers actively serving residentials, unchanged from last year. The market share of the top marketer, as measured by the 1-firm CR, is a bit daunting serving 83 percent of all customers and delivering 82 percent of all volumes in the choice program. The very large market share designates the top marketer as a dominant firm.. The nearly equal concentration ratios for customer count and volume measures suggest marketers maintain similar customer portfolios in that no marketer's portfolio appears skewed toward serving either large or small volume residentials .[5] Of course, this finding carries less weight due to the presence of a dominant firm.

Table 5
Residential Market Concentration Statistics
(January, 1999)

	Marketers	1-firm CR	2-firm CR	4-firm CR	HHI
Count	11	83%	97%	99%	7059
Volume	11	81%	96%	99%	6882

Count ratios: customers as of January 1999
Volume ratios: September 1998 through January 1999

[4] The correlation is 0.91.

[5] The market leader serves 83% of residentials and delivers 82% of the gas. This implies the balance of marketers serve 17% of residentials and deliver 18% of the gas.

Table 6 presents staff's findings on concentration in the East Ohio commercial market. The ratios and HHI suggest the commercial market is weakly competitive; however, the customer count and volume measures tell a distinctly different story. The commercial market appears highly concentrated based on customer count, but only weakly so based on volume deliveries. For instance, the top marketer serves 53 percent of all commercials, but only delivers 38 percent of all volumes. The HHI is in the 3000 range using customer count, but only in the 2000 range using volume deliveries. The divergence is due to difference in customer portfolios. The top marketers serve a higher proportion of smaller commercials than do the smaller marketers. As the 2-firm CR shows, the top two marketers serve 81 percent of commercials and deliver 69 percent of gas volumes implying the balance of nine marketers serve 19 percent of commercials yet deliver 31 percent of gas volumes. It appears smaller marketers are actively seeking out mostly large commercials.

Table 6
Commercial Market Concentration Statistics
(January, 1999)

	Marketers	1-firm CR	2-firm CR	4-firm CR	HHI
Count	11	53%	81%	89%	3633
Volume	11	38%	69%	83%	2537

Count ratios: customers as of January 1999
Volume ratios: September 1998 through January 1999

Table 7 compares the program's market concentration and participation levels this year with those in staff's 1998 report. Market concentration is measured by customer count. As the statistics indicate, the East Ohio program has shown little change or improvement since last year. The residential and commercial markets remain as highly concentrated as before, with net enrollees growing only meagerly.

Table 7
Change is Concentration and Enrollment Levels
(March 1998 vs. January 1999)

	HHI (3/98)	HHI (1/99)	Change	Enrolled (3/98)	Enrolled (1/99)	Growth
Residential	7419	7059	- 4.9%	30,321	32,806	8.2%
Commercial	3516	3633	3.3%	2329	2607	11.9%

HHIs based on customer count

Cincinnati Gas & Electric Choice Program

Participation Analysis

The CG&E Choice program shows strong growth in enrollees, particularly residential, since staff's 1998 report. As Table 8 summarizes, the program includes all residentials and commercials and presently enrolls close to 10 percent of residentials and 9 percent of commercials. A residential enrollment of 10 percent is not overly impressive in and of itself, however, residential enrollment grew over 600 percent from 4,758 residentials in March 1998 to 33, 507 in February 1999. A portion of this growth stems from a successful bid to serve PIPP customers, yet non-PIPP enrollments alone have climbed by over 400 percent.[6] Commercial enrollment grew steadily also from 2,932 in March 1998 to 3364 in February 1999, a growth of 15 percent.

Table 8
Participation Rates by Customer Class
(February, 1999)

	Residential Customers	Commercial Customers
Total	347,736	37,424
Eligible	347,736	37,424
Enrolled	33,507	3,364
Eligibility Rate	100%	100%
Enrollment Rate	9.6%	9.0%
Coverage Rate	9.6%	9.0%

Residential data includes PIPP customers

Table 9 reports on residential enrollment and marketer activity by county for non-PIPP customers. Residential enrollments range from a low of 1 percent in Adams, Brown, and Clinton counties to 19 percent in Montgomery county with median enrollment around 5 percent. Marketer activity ranges from a low of 3 in Clinton county to a high of 12 in Clermont county with median activity at 7 marketers. Marketer size varies considerably from a low of 4 customers per marketer in Adams county to a high of 1,823 in Hamilton county with median size at 55 residentials per marketer.

Table 10 summarizes commercial and marketer participation by county. Commercial enrollments range from a low of 5 percent in Adams and Brown counties to a high of over 12 percent in Clermont county with median enrollment around 8 percent. Marketer activity ranges from a low of 3 in Clinton county to a high of 15 in Hamilton county with median activity at 9 marketers. Marketer size varies across counties from a low of 2 customers per marketer in Adams county to a high of 167 in Hamilton county with median size at 11 commercials per marketer.

[6] Of the 33,507 residential customers enrolled during February, 1999, approximately 7826 are PIPP customers implying 25,681 are non-PIPP customers. In March, 1998 only 4758 residentials were enrolled, none of which were PIPP customers. Non-PIPP enrollments went from 4758 to 25,681 for a growth rate of 440%.

Table 9
County Enrollment Rates for Residential Customers
(February, 1999)

County	Number Eligible	Number Enrolled	Enrolled Rate	Active Marketers	Average Size
Adams County	1,632	15	0.9%	4	4
Brown County	2,523	26	1.0%	5	5
Butler County	47,958	3,199	6.7%	8	400
Clermont County	21,815	1,044	4.8%	12	87
Clinton County	666	5	0.8%	3	2
Hamilton County	246,934	20,048	8.1%	11	1,823
Montgomery	351	66	18.8%	3	22
Warren County	25,857	1,278	4.9%	8	160
Totals	347,736	25,681	7.4%		

Excludes PIPP customers

Table 10
County Enrollment Rates for Commercial Customers
(February, 1999)

County	Number Eligible	Number Enrolled	Enrolled Rate	Active Marketers	Average Size
Adams County	192	9	4.7%	4	2
Brown County	349	18	5.2%	6	3
Butler County	4,258	320	7.5%	12	27
Clermont County	2,400	300	12.5%	12	25
Clinton County	111	11	9.9%	3	4
Hamilton County	28,138	2,498	8.9%	15	167
Montgomery	17	0	0.0%	0	0
Warren County	1,959	208	10.6%	12	17
Totals	37,424	3,364	9.0%		

The data in tables 9 and 10 yield many usual relationships among factors affecting participation, but a few surprises emerge as well. For instance, the correlation between residential and commercial enrollment rates, normally positive, is negative when all counties are considered, implying counties with high residential rates will tend to have low commercial enrollment rates. This outcome is driven mostly by Montgomery county which has high residential enrollment, but no commercials enrolled. The normally positive relationship surfaces between commercial and residential enrollment rates when excluding data on Montgomery county.[7] Marketer activity is highly correlated in residential and commercial markets suggesting marketers as a group seek out both customers.[8] In fact, over 70 percent of marketers serving commercials serve residentials.

[7] The correlation is -.54 with Montgomery county included and .41 without.

[8] The correlation is .92.

Table 11 presents several more correlations among factors affecting participation. Somewhat surprisingly, a very weak relationship occurs between market size (measured by eligibility) and enrollment rates even though market size relates strongly to marketer activity and to their size. Marketer activity seemingly has no relationship with residential enrollments; however, a strong relationship emerges with commercials. Again the finding is largely driven by data on Montgomery county which has only 3 active marketers serving residentials yet has the highest rate of residential enrollment of all counties. The relationship changes to strongly positive for marketer activity and residential enrollment rates when excluding data on Montgomery county.

Table 11
Correlation Among Factors Affecting Participation
(Residential and Commercial Results)

Factors Correlated	Residential	Commercial
Enroll rate / Eligibility	.16	.22
Enroll rate / Marketers	-.02	.63
Eligibility / Marketers	.60	.70
Eligibility / Marketer Size	.99	.99

* Residential correlations are (.75, .84, .58, .99) when excluding data on Montgomery county.

Market Concentration Analysis

Table 12 presents staff's findings on concentration in the residential market, and as above, both customer count and delivery based measures are displayed.[9] The top marketer serves 62 percent of residentials, but delivers 73 percent of all gas volumes. The top four marketers serve 91 percent of residentials and deliver 97 percent of all volumes. The HHIs are over twice the staff's threshold value. The statistics suggest a highly concentrated residential market implying little competition. Staff is unable to draw any conclusions about the residential makeup of marketer portfolios because of oddities in the customer data submitted by Cincinnati Gas & Electric.[10]

[9] Deliveries from September 1998 through February 1999 are used to compute market concentration.

[10] An apparent mismatch occurs between delivery and customer count data in the residential market. The oddity is seen readily in the market share data found in Appendix A for Cincinnati Gas & Electric.

Table 12
Residential Market Concentration Statistics
(February, 1999)

	Marketers	1-firm CR	2-firm CR	4-firm CR	HHI
Count	12	62%	81%	91%	4260
Volume	12	73%	89%	97%	5584

Count ratios: customers as of February 1999.
Volume ratios: September 1998 through February 1999

Unlike the residential market, the commercial market appears weakly concentrated as the statistics in Table 13 show, and in fact, meets all staff's criteria of a workably competitive market. The commercial market has over five active marketers, the top marketer has a market share under 40 percent, the top four marketers has a combined market share under 80 percent, and the market has a HHI below 2000. The statistics also show the top two marketers serve a greater proportion of high-usage commercials than do the smaller marketers. The top marketer serves 19 percent of commercials and delivers 26 percent of all volumes, whereas the second top marketer serves 17 percent of commercials and delivers 23 percent of all volumes.

Table 13
Commercial Market Concentration Statistics
(February, 1999)

	Marketers	1-firm CR	2-firm CR	4-firm CR	HHI
Count	15	19%	36%	64%	1274
Volume	15	26%	49%	69%	1587

Count ratios: customers as of February 1999.
Volume ratios: September 1998 through February 1999

Table 14 compares the program's market concentration and participation levels this year with those in staff's 1998 report. Market concentration rose significantly in the residential market (52 percent increase), but dropped significantly (39 percent decrease) in the commercial market. Net program enrollments grew moderately (up 15 percent) in the commercial market, and grew markedly (up 600 percent) in the residential market.

Table 14
Change in Concentration and Enrollment Levels
(March 1998 vs. February 1999)

	HHI (3/98)	HHI (2/99)	Change	Enrolled (3/98)	Enrolled (2/99)	Growth
Residential	2805	4260	51.9%	4758	33,507	604%
Commercial	2038	1247	-38.9%	2932	3,364	15%

HHIs based on customer count.

Columbia of Ohio Choice Program

Participation Analysis

Since staff's 1998 report, Columbia has spread choice to all customers in its service area, thus extending the program from the original 3 counties in Toledo to all 45 counties it serves. Customer participation has grown substantially in result. Table 15 summarizes participation in the Columbia program. Residential enrollment grew from 49,300 customers in March 1998 to 369,939 customers by March 1999, a growth of 650 percent. Commercial enrollment grew from 5,300 to 33,874 customers during this period, a growth of 684 percent. Naturally, most of this growth comes from widening the choice program; however, the Toledo counties also grew impressively from 54,600 to 137,470 customers, a growth of 152 percent. Overall, Columbia of Ohio has about 32 percent of residential and 42 percent of all commercial customers participating in its choice program.

Table 15
Participation Rates by Customer Class
(March, 1999)

	Residential Customers	Commercial Customers
Total	1,177,998	99,385
Eligible	1,177,998	99,385
Enrolled	369,939	41,572
Eligibility Rate	100%	100%
Enrollment Rate	31.4%	41.8%
Overall Rate	31.4%	41.8%

Residential data includes PIPP customers

Table 16 gives data on residential enrollment and marketer activity by county for non-PIPP customers. Residential enrollments range from a low of 18 percent in Lawrence county to a high of 44 percent in Wood county with the median at 27 percent enrollment. The Toledo counties average 42 percent enrollment for residentials, up from 31 percent in March 1998, whereas the balance of counties average 26 percent enrollment with over 260,000 residentials currently participating. Marketer activity ranges from a low of 15 in Hocking county to a high to 25 in Franklin county with the median at 19 marketers. Marketer size varies considerably from a low of 42 residentials per marketer in Tuscarawas county to a high of 3264 in Franklin county with the median at 138 residentials per marketer.

Table 16
County Enrollment Rates for Residential Customers
(March, 1999)

County	Number Eligible	Number Enrolled	Enroll Rate	Active Marketers	Average Size
Ashland	9599	2924	30.5%	19	154
Athens	10238	2585	25.2%	17	152
Belmont	14567	4159	28.6%	20	208
Carroll	3197	869	27.2%	17	51
Champaign	5093	1495	29.4%	16	93
Clark	37806	7565	20.0%	19	398
Columbiana	21084	6784	32.2%	18	377
Coshocton	6272	1342	21.4%	17	79
Crawford	12290	4112	33.5%	19	216
Cuyahoga	92160	24368	26.4%	18	1354
Delaware	22614	6527	28.9%	20	326
Erie	22555	7296	32.3%	20	365
Fairfield	13872	3448	24.9%	21	164
Franklin	341889	81606	23.9%	25	3264
Guernsey	7544	2075	27.5%	19	109
Hancock	16172	5925	36.6%	21	282
Hocking	4223	944	22.4%	15	63
Holmes	3003	784	26.1%	17	46
Huron	12102	4183	34.6%	19	220
Jackson	5398	1349	25.0%	18	75
Jefferson	15475	4285	27.7%	20	214
Knox	9043	2415	26.7%	19	127
Lawrence	10939	1959	17.9%	18	109
Licking	20251	5042	24.9%	21	240
Lorain	78190	21445	27.4%	20	1072
Lucas	135670	58320	43.0%	22	2651
Madison	6248	1291	20.7%	17	76
Mahoning	7790	2010	25.8%	19	106
Marion	16667	5363	32.2%	21	255
Medina	31079	7489	24.1%	18	416
Muskingum	15456	3747	24.2%	17	220
Ottawa	12127	3965	32.7%	20	198
Perry	4685	1057	22.6%	18	59
Pickaway	7762	1878	24.2%	16	117
Richland	32669	10934	33.5%	21	521
Ross	9666	2081	21.5%	17	122
Sandusky	15184	5830	38.4%	20	292
Scioto	12446	2731	21.9%	17	161
Seneca	12432	4872	39.2%	20	244
Stark	14640	3761	25.7%	18	209
Tuscarawas	4108	751	18.3%	18	42
Union	6290	1810	28.8%	17	106
Wayne	5571	1567	28.1%	18	87
Wood	27680	12118	43.8%	22	551
Wyandot	4252	1560	36.7%	18	87

Residential data excludes PIPP customers

Table 17
County Enrollment Rates for Commercial Customers
(March, 1999)

County	Number Eligible	Number Enrolled	Enroll Rate	Active Marketers	Marketer Size
Ashland	900	423	47.0%	20	21
Athens	1246	546	43.8%	14	39
Belmont	1429	585	40.9%	18	33
Carroll	376	161	42.8%	14	12
Champaign	527	247	46.9%	15	16
Clark	2820	1068	37.9%	19	56
Columbiana	2256	1046	46.4%	20	52
Coshocton	718	327	45.5%	15	22
Crawford	1176	551	46.9%	16	34
Cuyahoga	6299	2210	35.1%	21	105
Delaware	1569	630	40.2%	17	37
Erie	2319	1081	46.6%	19	57
Fairfield	842	314	37.3%	19	17
Franklin	24508	8669	35.4%	23	377
Guernsey	938	399	42.5%	16	25
Hancock	1540	650	42.2%	18	36
Hocking	440	160	36.4%	13	12
Holmes	629	287	45.6%	17	17
Huron	1395	687	49.2%	18	38
Jackson	727	336	46.2%	13	26
Jefferson	1439	631	43.8%	17	37
Knox	1052	555	52.8%	17	33
Lawrence	935	313	33.5%	14	22
Licking	1510	658	43.6%	17	39
Lorain	6481	2580	39.8%	21	123
Lucas	11057	5851	52.9%	21	279
Madison	614	259	42.2%	17	15
Mahoning	724	294	40.6%	17	17
Marion	1446	653	45.2%	17	38
Medina	2618	971	37.1%	20	49
Muskingum	1589	615	38.7%	18	34
Ottawa	1092	548	50.2%	19	29
Perry	523	209	40.0%	16	13
Pickaway	688	225	32.7%	16	14
Richland	3451	1555	45.1%	19	82
Ross	1085	434	40.0%	17	26
Sandusky	1461	679	46.5%	18	38
Scioto	1495	684	45.8%	16	43
Seneca	1261	608	48.2%	18	34
Stark	1410	595	42.2%	17	35
Tuscarawas	472	191	40.5%	15	13
Union	677	304	44.9%	17	18
Wayne	481	259	53.8%	16	16
Wood	2630	1299	49.4%	20	65
Wyandot	540	225	41.7%	14	16

Table 17 presents data on commercial enrollment and marketer activity by county. Commercial enrollments range from a low of 33 percent in Pickaway county to a high of 54 percent in Wayne county with median enrollment at 44 percent. The Toledo counties average 52 percent enrollment, up from 46 percent in March 1998, whereas the balance of counties average 40 percent with 34,000 enrollees in total. Marketer activity varies from a low of 13 in Hocking and Jackson counties to a high of 23 in Franklin county with median activity at 17marketers. Marketer size ranges from a low of 12 commercials per marketer in Carroll and Hocking counties to a high of 377 in Franklin county with median size at 34 commercials per marketer.

The data in tables 16 and 17 elicit many relationships found in the other choice programs. For instance, counties with high rates of commercial enrollment tend to have high residential rates as well. Also, strong marketer activity for commercials usually is accompanied by strong activity for residentials.[11] Table 18 lists correlations among other factors of interest. The correlations imply the size of a county (eligibility) appears to have little if any relationship to the proportion of customers actually enrolling for choice, be it residential or commercial, even though more populous counties do seemingly attract greater numbers of marketers and result in marketers of larger size. The correlations further imply that greater marketer activity does improve residential rates of enrollment, but has little effect on commercial rates.

Table 18
Correlation Among Factors Affecting Participation
(Residential and Commercial Results)

Factors Correlated	Residential	Commercial
Enroll rate / Eligibility	0.05	-0.16
Enroll Rate / Marketers	0.48	0.03
Eligibility / Marketers	0.60	0.62
Eligibility / Marketer Size	0.95	0.97

Market Concentration Analysis

The statistics shown in table 19 suggest the market for residential service is behaving competitively. All of staff's threshold values for competition are met: the program shows strong marketer activity and enrollment; the top marketer serves less than 40 percent of the market; the top four marketers serves less than 80 percent of market; and the market HHI is below 2000. The combination of strong marketer activity, high enrollment rates, and low market concentration suggest the residential market is workably competitive. Staff did not compute concentration ratios by county, however, residential service is likely competitive in most if not all counties given the high levels of enrollment and marketer activity.

[11] The correlations are .59 for enrollment rates and .66 for marketer activity.

Table 19
Residential Market Concentration Statistics
(February, 1999)

Customers	Marketers	1-firm CR	2-firm CR	4-firm CR	HHI
Count	25	37%	51%	70%	1880
Volume	25	40%	51%	70%	1971

Count ratios: customers as of February 1999.
Volume ratios: September 1998 through February 1999.

The commercial market also appears workably competitive in light of the concentration ratios listed in table 20; in fact, the commercial market is much less concentrated than the residential market. All of staff's threshold values are met: the market has high levels of marketer activity and enrollment; the top marketer serves less than 40 percent of the market; the top four firms serve less than 80 percent of the market; and the market HHI is well below 2000. The concentration ratios based on customer count exceed those based on deliveries suggesting the top four marketers tend to serve proportionately more low-usage commercials than smaller marketers.

Table 20
Commercial Market Concentration Statistics
(February, 1999)

Customers	Marketers	1-firm CR	2-firm CR	4-firm CR	HHI
Count	26	26%	47%	61%	1324
Volume	26	20%	34%	52%	953

Count ratios: customers as of February 1999.
Volume ratios: September 1998 through February 1999

Table 21 reports on changes in market concentration and enrollment levels since staff's 1998 report. The residential and commercial markets have both become less concentrated as the HHIs evince, particularly the commercial market registering close to a 39 percent decrease in market concentration. Participation rates have grown over 600 percent in both the residential and commercial markets mostly due to extending choice to all customers.

Table 21
Change in Concentration and Enrollment Levels
(March 1998 to February 1999)

	HHI (3/98)	HHI (2/99)	Change	Enrolled (3/98)	Enrolled (2/99)	Growth
Residential	2199	1880	-14.5%	49,500	369,939	650%
Commercial	2164	1324	-38.8%	5,300	41,572	684%

HHIs based on customer count.

Staff Recommendations

Staff has had a difficult time piecing together the information sent by LDCs used to examine each program's market performance. Discrepancies and inconsistencies remain making our findings tentative. For instance, in the Cincinnati Gas program, 'marketer D' serves 5.5 percent of the residentials, yet delivers 72.2 percent of all residential volumes. Meanwhile, 'marketer O' serves 61.8 percent of the residentials, but only delivers 16.2 percent of residential volumes. Staff has noted several other oddities of this type and others in data submitted by the LDCs. As a consequence, staff recognizes the real need to clarify and format reporting standards. The staff therefore recommends the following data and formats be maintained by the LDCs on an ongoing basis and made available to staff upon request.

Data Requests

1. By county, monthly data on the number of PIPP residential customers in the LDC's service area, the number eligible, the number enrolled, and the number of active marketers.

2. By county, monthly data on the number of non-PIPP residential customers in the LDC's service area, the number eligible, the number enrolled, and the number of active marketers

3. By county, monthly data on the number of commercial customers in the LDC's service area, the number eligible, the number enrolled, and the number of active marketers.

4. By county, monthly data on the number of PIPP residential customers served and volumes delivered by each marketer.

5. By county, monthly data on the number of non-PIPP residential customers served and volumes delivered by each marketer

6. By county, monthly data on the number of commercial customers served and volumes delivered by each marketer.

(4) By customer class (PIPP and non-PIPP residentials, and commercial), monthly revenues earned by each marketer.

Appendix 1-A
Status of Competition

Market Share Data

The following tables list market shares in the residential and commercial markets for each choice program. Market shares are computed based on customer count and on volume deliveries. For each basis (customer count and deliveries) the tables give a marketer's rank in the residential and commercial markets. The marketers are coded, assigned letters, and in some instances the letters skip. The skips indicate missing information about the marketer, the marketer has dropped out of the program, or some other discrepancy in the data. The market share listings are percentages, with zero listed for market shares under .05 percent.

The Columbia of Ohio Program

	Customer Count			Volume Deliveries		
Marketer	Residential Customer	Commercial Customer	Rankings (R,C)	Residential Customers	Commercial Customers	Rankings (R,C)
A	1.0	0.8	15,19	1.2	1.5	14,15
AA	0.0	0.1	24,23	0.0	0.1	25,24
B	5.7	2.3	4,13	6.6	3.1	4,12
C	2.5	0.9	9,15	3.5	1.4	7,17
D	37.4	21.3	1,2	39.5	19.7	1,1
E	12.8	0.8	3,18	11.9	0.4	2,22
F	1.6	5.8	11,4	2.2	9.1	10,5
G	4.1	3.7	7,9	4.1	3.7	6,8
H	0.2	8.0	18,3	0.2	9.4	19,3
I	1.5	4.7	12,5	1.3	9.2	12,4
J	1.0	2.8	14,11	1.1	3.3	15,11
K	1.5	2.2	13,14	1.3	2.7	13,13
L	0.1	0.9	21,16	0.3	1.1	18,18
N	13.7	2.5	2,12	11.5	1.4	3,16
O	0.3	0.7	17,20	0.3	1.0	17,20
P	0.0	0.1	25,24	0.0	0.4	24,21
Q	4.8	3.3	6,10	2.9	3.3	9,9
R	3.2	4.1	8,7	3.5	4.3	8,7
S	5.1	4.2	5,6	5.3	3.3	5,10
T	0.1	0.5	22,21	0.1	1.0	22,19
U	0.2	3.8	19,8	0.2	4.4	20,6
V	2.4	25.5	10,1	2.0	14.0	11,2
W	0.0	0.0	26,26	0.0	0.1	26,25
X	0.1	0.0	23,25	0.0	0.0	23,26
Y	0.8	0.8	16,17	0.7	1.9	16,14
Z	0.1	0.2	20,22	0.1	0.4	21,23

The East Ohio Gas Program

	Customer Count			Volume Deliveries		
Marketers	Residential Customers	Commercial Customers	Rankings (R,C)	Residential Customers	Commercial Customers	Rankings (R,C)
A	0.1	2.0	7,6	0.2	2.7	8,7
B	82.9	53.0	1,1	81.3	37.6	1,1
C	0.1	1.9	8,7	0.5	3.7	5,6
D	0.2	1.4	6,10	0.2	1.9	9,9
F	2.1	2.2	3,5	1.6	0.7	3,11
G	13.6	27.8	2,2	14.6	31.1	2,2
H	0.6	0.6	4,11	0.8	0.7	4,10
I	0.4	3.9	5,3	0.5	8.3	6,3
J	0.0	1.9	10,8	0.0	6.2	10,4
K	0.0	3.6	11,4	0.0	4.3	11,5
L	0.0	1.6	9,9	0.3	2.0	7,8

The Cincinnati Gas & Electric Program

Customer Count				Volume Deliveries		
Marketer	Residential Customer	Commercial Customer	Rankings (R,C)	Residential Customer	Commercial Customer	Rankings (R,C)
A	2.0	4.9	7,7	0.9	6.2	6,7
B	0.0	8.8	12,6	0.0	11.5	12,3
C	19.3	14.9	2,3	5.7	23.7	3,2
D	5.5	19.0	3,1	72.7	25.9	1,1
E	4.0	9.2	4,5	2.0	6.9	4,5
F	0.0	2.2	12,10	0.0	3.5	12,8
G	0.0	0.0	12,15	0.0	0.1	12,15
H	3.2	4.6	5,8	1.2	3.3	5,9
I	0.0	0.0	12,16	0.0	0.0	12,16
J	0.0	17.6	11,2	0.0	8.5	10,4
K	0.0	0.5	10,13	0.0	1.5	11,10
L	0.0	0.0	12,16	0.0	0.0	12,16
M	0.0	0.5	9,12	0.0	0.5	9,13
O	61.8	3.7	1,9	16.2	0.8	2,12
P	1.7	12.4	8,4	0.8	6.2	7,6
Q	2.3	0.4	6,14	0.5	0.2	14,11
R	0.0	1.2	12,11	0.0	1.2	12,11

SECTION 2
MARKETER PARTICIPATION ISSUES

MARKETER CODE OF CONDUCT ENFORCEMENT

Staff, by Commission order of June 18, 1998, continues to review the marketer Codes of Conduct for all three choice programs. An emerging area of concern centers around the issue of enforcement when a marketer violates an LDC's marketer Code of Conduct. In the 1998 Report reviewing the three LDC's choice programs, staff concluded that enforcement of the marketer Codes of Conduct was working well. At that time, the programs were limited in size, there were fewer marketers participating, very few complaints were made to the Commission's Hotline, and there was less wide-spread usage of certain solicitation practices. For this evaluation report, staff can no longer say that enforcement of the marketer Codes of Conduct is working well. As a result of a significantly larger customer base (an additional 1.2 million customers eligible), greater numbers of participating marketers, dramatically increased number of contacts to the Consumer Hotline and new unanticipated forms of commodity sales, issues concerning the enforcement of the Code of Conduct have emerged.

Although the customer complaints are tracked in all three programs, the staff has performed its most in-depth analysis of complaints against marketers participating in the largest choice program, Columbia's. Staff wishes to emphasize that although in-depth analysis was done on the Columbia program-related complaints, similar complaints and analogous issues apply to all three programs. This analysis shows that a significant portion of customer complaints involved only a few specific marketers participating in the residential market. The remaining marketers had only a few complaints against them, and some had none at all.

Between August 1, 1998 (the date when the Choice℠ program was opened to customers throughout the Columbia service area) and May 14, 1999, the PUCO's Public Interest Center (PIC) received 1,660 complaints, the majority of which related to door-to-door solicitation. Staff organized and analyzed these complaints into nine categories.

- The largest category contains 875 complaints. Among the complaints in this category are assertions that marketers deceived customers (e.g., by misrepresenting themselves as the local distribution company), or misled customers (e.g., regarding pricing terms). Of these 875 complaints, 816 or 93 percent involved the door-to-door solicitation activities of just two marketers.

- The second largest category, with 220 complaints, involves customer attempts to cancel service with their contracted marketer. For example, some customers were told they could cancel at any time, while their contracts stated the cancellation period was limited to 30 days. As another example, some customers claimed a written cancellation notice was submitted within the prescribed 30-day period, but the marketers claimed no receipt. A third example involves the marketer failing to provide the customer a proper cancellation notice as required by state law. Of the 220 complaints, 184 or 84 percent involve door-to-door solicitation.

- The third largest category contains 173 complaints that the marketer enrolled the customer without obtaining the customer's signature. Of these 173 complaints, 136 (or 79 percent) involved door-to-door solicitation.

- The fourth largest category pertains to enrollment issues and contains 153 complaints of delayed enrollment. This category includes sign-up delays and failure to sign up a customer at all.

- The remaining 5 smaller categories include complaints: (1) that marketers modified or deviated from the contract; (2) that marketers did not respond within 5 days; (3) that the marketer obtained a contract signature from a relative or friend rather than the account holder; (4) that marketers violated local laws (e.g. soliciting in posted "non-soliciting" areas); and (5) that residential customers were solicited telephonically. During the 7-1/2 month period, PIC received a total of 239 complaints across these five categories.

The type of complaints described above involve violations of the LDCs' marketer Code of Conduct. All three LDCs' tariffs prohibit marketers from engaging in fraudulent and misleading practices, require marketers to provide customers with clear and understandable pricing and payment terms, and mandate that marketers explicitly communicate to customers their rights and responsibilities. Clearly, if marketers are forging customer signatures, providing false and misleading information to obtain customer signatures, or are not providing customers proper cancellation information, then they are not living up to the marketer Code of Conduct. The question then becomes what can an aggrieved customer do and what happens to a marketer who violates the Code of Conduct.

Currently when a customer has a complaint against a gas marketer with whom they have contracted for commodity gas, in most cases, they would first seek to resolve any complaint directly with that marketer. Having failed to resolve the issue with the marketer, the customer may also call the Commission or OCC Hotlines and seek the assistance of these two agencies. A consumer also has the right to access the Commission's normal complaint handling procedures. However, COH and CG&E's tariffs provide that the LDC has the discretion to suspend or terminate from the program a marketer that violates the marketer Code of Conduct. EOG's tariffs provide that the Commission may order EOG to impose sanctions against a marketer that violates the Code.

As a result of the process outlined in each LDC's tariffs that permit the Commission staff and the OCC to assist customers in resolving complaints, the Commission, OCC and the LDC are all receiving complaints against gas marketers and are tracking Code of Conduct abuse. Both state agencies have a history of working cooperatively and sharing complaint information to assist customers with complaints. The PUCO also has an extensive history and experience in enforcing customer protection rules. The LDC, however, has no real history of enforcing such rules or customer protection requirements. Moreover, it may be inappropriate for the LDC to have such an enforcement role.

Placing the LDCs in the role of Code of Conduct enforcer is awkward for a number of reasons. First, the LDCs may have a vested interest in the success of their choice programs, particularly if they have a long-term interest in divesting themselves of the commodity sales role. Second, where the LDC has an affiliate participating in the choice program, the LDC could be put in the position of either suspending the sales or terminating the contract of a direct competitor of their affiliate. For these reasons the staff proposed in Commission

Entry 99-661-GA-COI *In the Matter of the Commission's Investigation and Further Consideration of the Language Set Forth in the Tariffs of Columbia Gas of Ohio, Inc., the East Ohio Gas Company and the Cincinnati Gas and Electric Company Regarding the Enforcement of the Customer Codes of Conduct for the Customer Choice Programs*, a process by which the parties – Staff, OCC (where applicable) and the LDC – meet to coordinate the review of the number of complaints, as well as, agree upon any enforcement action, including, where appropriate, a penalty to be levied against a marketer.

Recommendation

Though staff believes this is a step in the right direction, it still questions the role of the LDC in an enforcement action, and believes that any enforcement action, as well as the right to levy penalties, is more appropriately the role of the Commission. For this reason, staff recommends the Commission re-examine its role in enforcement of Code of Conduct and consumer protection issues.

CUSTOMER SIGN-UP AND TRANSFER PROCEDURES

Telephonic Enrollment

When the gas choice pilot programs were implemented in January and July of 1997, the participating marketers were given one option for gaining the authorization of customers to enroll: an actual signature on a contract or enrollment card as proscribed in the approved tariffs. In the 1998 Report, staff recommended that, on a one-year experimental basis the Commission approve an application for a tariff amendment for the Columbia Gas of Ohio program that would allow marketers participating in that program to gain residential customer authorization for enrollment through customer-initiated phone calls and commercial customers authorization through customer- or marketer-initiated calls. The Commission approved the experiment and telephonic enrollment began September 1, 1998.

In its April 1998 – March 1999 report on its CHOICE^{SM} Program, Columbia estimates that 17 percent of customers were enrolled using the telephonic enrollment process. Columbia further reports that initial concerns about increased allegations of slamming due to telephonic enrollment have not materialized in its complaint data. Columbia recommends continuation of this method of enrollment.

Staff has received only a handful of complaints from residential customers regarding telephonic enrollment. Staff is satisfied that this low number of complaints suggests that marketers are generally complying with the restriction on initiating enrollment calls to residential customers. Staff further believes that residential customers are satisfied with the current enrollment process.

A number of marketers participating in the Columbia program advocate the removal of the restriction on marketer-initiated calls for residential enrollment. They suggest that marketer- initiated telephonic enrollment is a convenience to customers and comparatively effective and inexpensive for the marketer.

During the development of the choice programs staff conducted focus group meetings with both residential and commercial customers. The residential customers clearly identified that they did not wish to receive unsolicited telephone calls from marketers. This information continues to be backed up by anecdotal evidence gained from staff discussions with customers at hearings, speaking engagements and other promotional events as well as calls to the Commission's Consumer Hotline.

Columbia's tariffs do not restrict marketers from initiating the call to commercial customers for enrollment. Again, staff has little reason to believe that changes should be made to this enrollment method in the tariffs. However, from August 1, 1998 to May 28, 1999, staff received 72 complaints against one marketer that uses marketer-initiated calls to commercial customers as a principal tool for enrollment. Most of these complaints allege overly aggressive sales tactics, and a significant number (nearly half) allege that the marketer attempted to deceive the customer into enrolling with the marketer. Staff has contacted the specific marketer regarding its practices and has worked with them to alter their communications practices resulting in a decline of the number of complaints reported.

Recommendations

Staff recommends that the Commission carefully consider any requests advanced by marketers to modify Columbia's tariff to permit marketer-initiated calls to enroll residential customers. Staff recognizes that marketer-initiated calls offer a potentially effective and inexpensive way to enroll residential customers. Staff further recognizes that such an enrollment methodology could allow some marketers to effectively compete against other marketers who very successfully employ sophisticated, though comparatively expensive, door-to-door campaigns to enroll residential customers. However, staff cannot ignore information that indicates that customers do not wish to be contacted by marketers via telephone. Nor can we ignore that there are currently 30 marketers actively serving customers in Columbia's program. If all 30 were to begin to initiate unsolicited calls to customers, staff data suggests the Commission and Columbia would likely be on the receiving end of a consumer backlash against the CHOICE^{SM} program. As a result, staff recommends that the Commission reject any proposal to modify the current telephonic enrollment process unless compelling evidence can be presented that customers desire, or at least will not object, to unsolicited marketer calls.

Staff, however, recommends that Columbia's current telephonic enrollment process be adopted in the CG&E and East Ohio programs. Staff believes that the process could help boost customer participation in these programs.

Internet Enrollment

On January 13, 1999, the Commission approved an amendment to Columbia Gas of Ohio's tariff for marketers to gain customer authorization for enrollment via the Internet. The process allows residential and commercial customers to view a marketer's offer at the marketer's web site and then directly enroll. On-line enrollment began for the Columbia Gas of Ohio program on February 1, 1999.

Key features of the Internet enrollment guidelines in the tariff include:

- Only customer-initiated enrollments are permitted;
- The transaction must be encrypted to protect customer information;
- Customers must be prompted to print or save a copy of the gas supply contract and all customer contracts must have a version number for tracking purposes;
- Customers agree to an electronic customer consent form containing uniform language;
- Marketers are required to send an e-mail or regular mail enrollment confirmation to customers;
- Customers have a seven-day right to rescind their enrollment.

Columbia reports that fewer than 1,000 customers have enrolled via the Internet through March 1999. Columbia states in its April 1998 – March 1999 report on it CHOICE^{SM} Program that the rollout for Internet enrollment has been slower than anticipated and attributes the slowness to marketers having difficulty in establishing the security firewalls required in the customer choice tariff.

Staff has received no complaints from customers regarding Internet enrollment.

Recommendation

Despite the slowness of initial rollout and the relatively modest consumer use of the Internet enrollment process, staff believes that the process provides a secure and convenient way for customers to choose a marketer. As a result, staff recommends that the Commission authorize Columbia to continue its Internet enrollment process. Further, to encourage additional customer enrollment in the CG&E and East Ohio programs, staff recommends that the Commission direct CG&E and East Ohio Gas to incorporate an Internet enrollment process identical to Columbia's in their Choice^{SM} program tariffs.

Door-to-Door Solicitation

One enrollment method that was not anticipated during the development of the choice programs was door-to-door sales. There are door-to-door marketers operating in both the CG&E and the Columbia Gas choice programs. This enrollment method has proved to be the most confusing to customers and has resulted in the largest number of complaints to the PUCO's Consumer Hotline. From August 1, 1998 to May 28, 1999 staff received 1,659 customer complaints against marketers participating in Columbia's CHOICE^{SM} program. Of those complaints 1,306, or 79 percent, were against two marketers whose principle enrollment method is door-to-door sales.

Customer complaints to the Consumer Hotline regarding door-to-door solicitation by marketers allege practices that include slamming, using deception to obtain a customer's signature on an enrollment form, accepting the signature of an unauthorized person on an enrollment form, and forging customer signatures on enrollment forms.

Staff believes that the customer complaints may have been caused by four principle factors including:

- customer confusion associated with customer inexperience with commodity sales and sales practices associated with door-to-door sales;
- the compensation structure used by door-to-door marketers that only pays sales representatives for successfully enrolling customers (compensation by commission);
- some confusing and misleading promotional material of some marketers;
- apparent lack of proper management control over the agents conducting the door-to-door solicitation, including insufficient employee training and oversight.

Staff, in cooperation with the OCC, the Ohio Attorney General's Consumer Protection Section, and the LDCs, has worked with these door-to-door marketers to both resolve customer complaints and to mitigate the factors listed above. The marketers involved have been generally cooperative. At the writing of this report, staff has begun to see a decline in the rate of complaints being reported regarding door-to-door marketers. However, it is too early to determine if this decline is a trend in fewer complaints or is a temporary drop as customers think less of gas supply during the warmer months. Similarly, it is too early to conclude that the corrective actions of the marketers to reduce the number of complaints are the cause for the decline.

Recommendation

Door-to-door sales have been both successful and problematic. The marketers employing this enrollment method have been successful in garnering significant market shares in the Columbia and CG&E service areas. In fact, the practice has been so successful that staff is aware of at least four other marketers who are either actively planning to begin or are studying door-to-door sales. However, as reported above, this sales method has also resulted in a large number of customer complaints. Staff believes that the bulk of the complaints made to the Hotline were the result of the factors listed above. As a result, staff believes that continued working with the marketers, and where necessary, improved enforcement of the marketer Codes of Conduct are better solutions to resolving and averting customer complaints than prohibiting door-to-door sales. (See "Marketers Codes of Conduct Enforcement" in this Section.)

Marketer Enrollment Verification

Staff's analysis of all customer complaints received between August 1, 1998 and May 15, 1999 reveal a recurring problem with "slow enrollment." Slow enrollment is where customers assert that they enrolled with a marketer but did not receive service from that marketer for weeks or even months after they enrolled. This problem appears to be unique to the Columbia program, and staff believes it is at least partially caused by the way Columbia processes customer enrollments. Columbia processes customer enrollments only one time per month (on the 15th of the month) and the service begins on the first of the following month. Therefore, a customer who enrolls with a marketer on the 14th of the month can be processed on the 15th for gas service from the marketer on the first day of the following month – a couple of weeks lapse. However, if the customer enrolls on the 16th of the month, the enrollment will not be processed until the 15th of following month for gas service from the marketer to begin on the first day of the then following month -- a 45-day lapse. If at any point in the process the customer or marketer makes a mistake, such as transposing numbers in an account number, then Columbia will inform the marketer of the mistake, but the enrollment could be delayed another 45 days.

While the scenario described above has occurred and explains some related complaints, staff does not believe that such problems explain all of the numerous customer complaints (135 against one marketer) alleging delays of up to four or more months. Staff believes that some of the complaints are the result of a marketer holding the customer's enrollment (as in not submitting the account to the LDC for transfer). In many instances, such delays in enrollment have caused customers harm such as missing out on savings for the winter heating season. Representing savings and then failing to provide the commodity could be argued to be a violation of the Code of Conduct.

Recommendations

Staff recommends a two-pronged approach to mitigating the slow enrollment problem. First, to address customer confusion caused by the 15th of the month processing, staff recommends that the Commission direct the LDCs to send out the currently required customer notice of a change in gas suppliers immediately after the customer's application has been successfully processed. Further, the notice should at a minimum, inform the customer of the date that he/she will begin to receive service from the marketer they have chosen.

Second, staff believes that the solution to delays in enrollment by the marketer lies in improved enforcement of the marketer Code of Conduct.

Automatic Re-enrollment

Automatic re-enrollment is the term used to describe a practice used by most marketers to re-enroll customers after their first year of a multi-year contract in a choice program or at the end of an initial gas supply contract. Each LDCs choice tariff requires marketers to notify customers of their right to terminate or renegotiate their contracts with marketers after the first year of participating in a choice program. At the end of a one-year contract, marketers have included a provision that the contract would renew unless the customer actively responded to the notice of re-enrollment. Similarly, after the first year of a multiple year contract, some marketers have indicated a similar provision. In both cases, the customer must take an action in order NOT to accept renewal or contract extension. No action on the part of the customer is deemed acceptance of the renewal or extension.

The Commission, in its June 1998 Order, required all marketers to send a written notice at least 60, and not more than 90, days prior to renewal of the contract for an additional term. Thus, while marketers are in compliance with the notice requirement, the affirmative action on the part of the customers to NOT accept renewal or contract extension makes the practice tantamount to negative enrollment. Marketers argue that satisfied customers prefer to avoid the paperwork associated with extending or renewing a contract and that dissatisfied customers are provided notice and can easily choose not to renew or extend a contract.

Staff believes that if negative option renewals or contract extensions are used, then the form and content of the notice provided to customers of an impending extension or renewal is crucial. The foundation of the choice programs is the ability for customers to make informed choices. Toward this end, staff believes that the renewal or extension notices sent to customers should clearly inform customers that if they take no action then their contracts will automatically extend beyond the first year or will renew for an additional term.

Columbia has also recognized the importance of the extension and renewal notices. A sub-committee of Columbia's customer collaborative, the Columbia's Marketer Working Group, is working on a set of minimum guidelines for the information that marketers must communicate to customers in extension and renewal notices.

Recommendations

Staff applauds the Working Group's efforts and believes that the Commission should carefully consider any proposals that arise from the Working Group's efforts. In its review, staff recommends that the Commission consider, at a minimum, the following guidelines for a proper notice of renewal or extension of a contract:

- The envelope containing the renewal or extension notice must be labeled in a conspicuous place in a clearly contrasting color and sufficient print size with words such as "IMPORTANT CONTRACT RENEWAL INFORMATION INSIDE."
- The renewal or extension notice be a separate document from any advertising materials.
- The renewal or extension notice be in a sufficiently legible type size of no smaller that 10 points.

- That the renewal or extension notice makes clear to the customer that **no action** on the enclosed notice will result in agreeing to the contract extension or renewal.
- That the renewal or extension notice clearly informs the customer of any changes in the price or terms of the original contract.
- That the marketer should provide a copy of new terms and conditions if the original contract is changed in any material way and be required to get the customer's signature.
- That the renewal or extension notice provide clear instructions for the customer on how to reject the extension or renewal of the contract.

Customer Transfers

Staff defines "customer transfers" as the activity by which an LDC transfers a customer from their own sales service to that of a marketer or transfers a customer from one marketer to another. All transfers are done upon the enrollment of a customer. The methods and responsibilities to accomplish the transfers have been varied among the CG&E, EOG, and the CGO gas choice programs in order to provide the Commission with sufficient data to determine which methods serve all interests best.

For example, if you suppose that a customer is enrolled with Marketer A, the pertinent issues with customer transfers are:

- should the LDC transfer a customer from Marketer A to Marketer B upon receipt of that customer's enrollment from Marketer B without the "release" of the customer from Marketer A?
- should the LDC transfer a customer from Marketer A to its own sales service upon the request of the customer without the "release" of the customer from Marketer A?

In Columbia's program, Columbia has not made the transfer in either case without the release of Marketer A. Therefore, a customer who is displeased with their marketer must obtain a release from that marketer before either returning to the LDC's sales service or selecting another marketer. Columbia argues that transferring a customer from their original marketer (Marketer A) without the marketer's release of the customer would be interference in the customer-marketer contract.

In the CG&E program, CG&E will only make the transfer in the absence of a release from Marketer A if the customer is choosing to return to LDC sales service. CG&E will not transfer that customer from one marketer to another without the first marketer's release of the customer. CG&E argues that it has an obligation to serve its customers upon request, but not an obligation to be involved in a marketer-to-marketer dispute over a customer.

As does Columbia, East Ohio requires the first marketer's release before a customer will be transferred.

Staff's concern with these issues is the implication of each method on true customer choice, free market development, increased reliance on early cancellation penalties by marketers, LDC "policing" of a marketer's choice and the potential for slamming.

Recommendation

At this time, staff has not received significant complaints from customers nor has there developed consensus among marketers and LDCs to make this issue ripe for immediate resolution. However, staff believes that the inconsistencies between the three choice programs on customer transfers will need to be addressed and possibly standardized in the future. Staff recommends that the Commission authorize staff to continue to study the LDC's customer transfer policies and study the impact of similar situations on other utility industries such as telecommunications.

BILLING ISSUES

Purchasing Receivables

In its June 18, 1998 Order, the Commission directed that CG&E follow the Columbia example of purchasing marketers' receivables when the Company is performing the total billing function for itself and the marketer. Columbia issues a single bill to the customer and remits a check to the marketer for the gross revenue amount due the marketer (i.e. based on actual consumption even in the case of a budget billed account). Columbia thus assumes the uncollectible risk. The Commission found this approach reasonable since LDCs are currently compensated for the uncollectibles risk in existing rates.

On October 5, 1998, CG&E filed a Motion for Stay or Waiver of that part of the Commission's Order. CG&E argued, in part, that requiring the LDC to purchase marketers' receivables amounted to a subsidy from the LDC to the marketers by requiring CG&E to pay the costs associated with the gas marketer's delinquent collections. They further argued that uncollectibles were likely to increase as participation in the choice program increased. This would render the bad debt expense in CG&E's current rates insufficient to compensate for the shortfall.

In a November 19, 1998 Entry, the Commission granted CG&E’s motion. The Commission found that a stay was appropriate so that additional information can be gathered and experience gained regarding how CG&E's choice program impacts the level of uncollectibles. The staff was directed to review the matter as part of its review of CG&E’s April 1, 1999 Customer Choice report.

In making a recommendation on this issue, staff is relying heavily on the experience of Columbia Gas. Columbia is the only Choice LDC that purchases marketer's accounts receivable. In their April 15, 1999 Choice Report, Columbia reports three key results from their experience in purchasing receivables. Those key results are:

- Total charge-offs and delinquency dollars have declined;
- Percent of Choice customer charge-offs declined from 1.3 percent to 0.4 percent;
- Average Choice delinquency per customer declined from $195 to $173.

Recommendations

The actual experience of Columbia runs counter to the presumed impact predicted by CG&E and shows an actual reduction in customer arrears. This result is at least partially due to the lower total bills choice customers are experiencing in the Columbia program, a level of savings that currently does not appear to be attainable in the CG&E program. Staff believes the Columbia statistics are nonetheless persuasive enough for staff to recommend the Commission order CG&E to modify their program to include the purchasing of marketers receivables.

In making this recommendation we were further persuaded by CG&E's response to a staff request for information which reported that their current level of customer arrears for period ended December 31, 1998 is $8,091,178. CG&E's current rates reflect an amount of uncollectibles expense which was authorized based on customer payment arrears of $8,909,654. This indicates that on a Company wide basis the introduction of the Choice program has not increased customer arrears beyond the level for which the Company is currently being compensated. Whether this will continue to remain true in the future remains to be seen. In the event arrears do increase substantially with expansion of the program, the Commission can consider ways to address any resulting shortfall in recovery of the uncollectibles expense. Staff does not believe that simply the potential for uncollectibles to increase is sufficient justification for continuing an approach that marketers view as a significant barrier to participation in the program. In staff's view, the Company has not demonstrated a substantial likelihood that purchasing marketers' receivables will have a significant detrimental impact.

In their April 1, 1999 Choice Report, CG&E expressed a willingness to bring the matter of purchasing receivables to members of its collaborative at the annual spring meeting. Although staff is encouraged by the Company's willingness to pursue this issue voluntarily, we recommend the Commission direct that the end result of those discussions be that CG&E will in fact purchase the accounts receivable of marketers participating in their Choice program.

A related issue that has implications for this recommendation is the PUCO's policies regarding service disconnections. Current policy is that a customer's utility service can only be disconnected for non-payment of utility service. Under this policy, the LDC could not disconnect a choice customer for non-payment of the commodity portion of the bill, even though the LDC has assumed that debt. Procedures will need to be adopted to permit the mandatory return of delinquent customers to the LDC prior to initiating the disconnection process. We recommend CG&E work with its marketers to develop such procedures.

Marketer Single Billing

In its June 18,1998 Order, the Commission adopted a staff recommendation that single billing of end-use customers by marketers for both commodity and distribution should be permitted on a trial basis for the expanded Columbia program. The Order specified that the single billing trial be a one year experiment to identify and correct any problems that may arise before it is made part of the expanded program.

In Columbia's Customer Choice Report filed April 15, 1999, they reported the results of the one year trial. They stated that the "marketer one- bill" trial is working well and recommend the continuation of the "marketer one-bill" option. At the present time only two marketers are issuing a significant number of single bills, mostly to commercial accounts. One marketer had a problem with budget-billed customers in situations where the customer carried a positive bill credit. We are informed that this problem has since been corrected. Based on that experience however, Columbia recommends "that any marketer interested in issuing the total bill be required to generate accurate bills from a test file before being permitted to begin issuing the total bill". As was specified in staff's 1998 Report, certain minimum bill requirements should continue to apply to small commercial and residential accounts. The bill must contain:

(1) The name of the utility and its address and toll-free number for reporting service emergencies;

(2) A statement that if the customer smells gas, they must call the utility and provide the utility's toll-free number;

(3) For residential customers, the marketer's toll-free number to be reached in the event that the customer wishes to make billing inquiries, a notice stating that inquiries should be made initially to the marketer and if the matter is unresolved, the residential customer may call the Public Utilities Commission of Ohio’s toll-free numbers (including a TTY-TDD number), or the Ohio Consumers’ Counsel toll-free numbers (including a TTY-TDD number).

(4) For commercial customers, the marketer's toll-free number to be reached in the event that the customer wishes to make billing inquiries, a notice stating that inquiries should be made initially to the marketer, and if the matter is unresolved, the commercial customer may call the Public Utilities Commission of Ohio’s toll-free numbers (including a TTY-TDD number).

(5) The customer's account number;

(6) The beginning and ending dates for the service period;

(7) The billing determinants applicable (beginning meter reading, ending meter reading, demand meter reading, multiplier, consumption, demand);

(8) An indication that a bill is estimated or in some way not based upon actual end-of-period meter readings for the period, if applicable, including end-of-period determinants which are estimated;

(9) The date by which the bill must be paid to keep the account current;

(10) The total charges for the period;

(11) The amount of any late payment charge or gross and net charges if applicable;

(12) Any previous balances, customer credits and total balance;

(13) If the customer is participating in a budget plan, the current balance of the account;

(14) Itemization of the portion of the bill that is due to the marketer for its commodity service and the amount due for the LDC's distribution service; and

(15) Notice informing customers that their local distribution service provided by the LDC cannot be disconnected for nonpayment of the commodity charges due the marketer.

Recommendations

Staff recommends that marketers be required to provide to staff, prior to the initiation of billing or printing of bills, a "sample bill" for review to aid in discussions with customers. Further, until such time as reasonable alternatives can be developed, staff also recommends that marketers who single bill customers, be required to electronically transfer funds to the LDCs on a monthly basis for the distribution costs. This monthly transfer will ensure that the customer's payments are credited to the LDC's distribution charges. Regardless of the billing situation, only the LDC can physically disconnect the customer for nonpayment or partial payment of LDC charges.

Currently, two marketers perform single consolidated billing in the Columbia Customer Choice program. In the course of preparing this report the staff interviewed both marketers. Both agreed that single billing was going well and complimented Columbia for their efforts in providing support for this function. The two marketers participating in single billing customers did have some suggested modifications to the program. Among those recommended modifications were several that staff agrees with and recommends be incorporated. They are the following:

> Recently, under Columbia's program, the utility has begun charging marketers who perform single billing $.02/record for supplying actual or estimated customer usage data via a newly created BIL file. Previously this information was provided by the utility at no charge. Presently, CG&E does not charge marketers for supplying this information. The staff recommends that these charges be dropped unless Columbia can justify these expenses.
>
> It was recommended that Columbia should submit one electronic file per daily billing cycle as opposed to the two that are currently being submitted. It was also recommended that such file should include only that information which is required to single bill customers. Extraneous information such as a distribution utility's consortium number, GMB account number and GTB account number should be eliminated from these files. The staff agrees with these recommendations.
>
> Other issues that were identified by the marketers that staff recommends be implemented are: Columbia provide the marketers notification prior to any changes in the electronic files submitted, and that final bills for Columbia customers be marked that they are, in fact, final bills.

Based on the experience to date, staff agrees with Columbia's recommendation that marketer single billing be continued and made available to all participating marketers. Based on the successful implementation in the Columbia program, we further recommend that CG&E (and East Ohio upon program expansion) also make this option available to marketers participating in its choice program.

SECTION 3
UTILITY ISSUES

TRANSITION COST RECOVERY

Background

Local Distribution Companies (LDCs) procure natural gas from unregulated producers and merchant suppliers for consumption by their native load customers. The LDCs must arrange for the delivery of gas from the producer's field to their individual distribution pipelines (or city gates). Interstate pipelines provide the service of carrying gas from production gathering hubs to an LDC's city gate.

To guarantee the availability of interstate pipeline space (or capacity) necessary for the delivery of their gas, LDCs reserve capacity through negotiated contracts. The LDCs reserve significant capacity to meet peak day requirements through scheduling a combination of pipeline firm transportation service, firm storage service, and storage transportation. The participating customer choice LDCs have various contractual capacity agreements, some of which are in effect past 2010.

The Gas Cost Recovery (GCR) mechanism allows LDCs to recover the costs of prudently acquired natural gas supplies. Thus, the gas itself and the reserved capacity costs are included in the GCR calculation. A potential negative impact of gas supply competition is that prudently negotiated capacity contracts will be unneeded or stranded as GCR customers switch to alternative marketers; yet, these stranded costs will remain in the GCR calculation and be spread over fewer GCR customers.

All approved LDC choice programs embody methodologies for the recovery of stranded and other transitional costs. In its 1998 Report (docketed May 15, 1998), staff recognized that these stranded costs could be greatly reduced if the LDCs were able to shed capacity as customers transferred to alternative natural gas suppliers. The staff recommended that LDCs should attempt to decontract stranded capacity obligations when possible. The Commission, in its Finding and Order issued June 18, 1998, found the staff's recommendation to be appropriate and ordered its adoption.

Cincinnati Gas & Electric

With the initial introduction of the gas choice program, CG&E offered participating marketers the assignment of its upstream pipeline capacity. This voluntary assignment of capacity was rejected by the marketers, who choose to secure their own pipeline capacity to meet customer peak day requirements. CG&E withdrew the offer of direct capacity assignment at the start of the 1998 Summer season.

The withdrawal of the offer to provide direct capacity assignment to marketers corresponds with the Company's efforts to decontract its pipeline capacity. A number of pipeline contracts have expired since the introduction of the gas choice program. CG&E's decontracting efforts documented in Table 3-1 below.

TABLE 3-1
CG&E DECONTRACTING ACTIONS

PIPELINE	MDQ (DTH/D)	CG&E ACTION	EFFECTIVE DATE
Tennessee	19,410	Terminated	Feb. 28, 1998
Columbia	51,406	Terminated	March 31, 1998
Texas Gas	21,000	Terminated	March 31, 1998
Pepl/Tetco	13,000	Reduced	March 31, 1998
Tennessee	41,807	Terminated	Aug. 31, 1998
Pepl/Tetco	27,000	Terminated	March 31, 1999
TOTAL	173,623		

CG&E believes it "has eliminated 100% of unused pipeline capacity due to gas sales customers switching to gas transportation service" [Response to staff Data Request #6]. The Company will also have near-term, future opportunities to continue shedding capacity as customers migrate to alternative natural gas suppliers. CG&E has additional capacity on Texas Gas and Tennessee pipelines whose contractual obligations expire in late 2000.

On July 2, 1997, the Commission issued an Opinion and Order that accepted a Stipulation, which established the CG&E customer choice programs. The Opinion and Order allowed for a number of transition cost recovery riders. Among the riders is the Contract Commitment Cost Recovery (CCCR) rider. The CCCR rider is intended to recover all costs of upstream pipeline contract capacity commitments, propane costs, GSF contract costs, and Rate X-4 and X-5 costs which were incurred to supply firm sale customers who have switched to transportation service. This charge adjusts quarterly, concurrent with the Company's GCR filing and is applied to all firm sale and transportation volumes.

Staff notes that the original authorized CCCR rider was for 0.179 cents per Ccf. The current CCCR rider, effective March 3, 1999, is 0.02 cents per Ccf. Staff believes that the Company's excellent efforts to decontract pipeline capacity have resulted in this greatly reduced charge. Since its inception the CCCR rider has generated $547,139.14, (as of January 31, 1999) all of which has been utilized to reduce stranded capacity charges. [Data Request #5] Primarily, these funds have been returned to GCR customers through the Actual Adjustment component of the GCR mechanism.

The Firm Transportation Development Cost (FTDC) rider was set at 0.15 cents per Ccf and applied to all firm sale and transportation volumes. The rider is intended to recover advertising, educational, program roll-out, and administrative expenses related to customer choice programs. As of January 31, 1999, the FTDC rider has generated revenue of $1,092,931.47 [Data Request #4]. Initial program roll-out and related administrative expenses were $ 973,967.58. In its June 18, 1998, Opinion and Order, the Commission directed CG&E to provide additional public education regarding their natural gas choice program. These developmental expenses and FTDC rider revenues are reflected in the Table 3-2.

TABLE 3-2

FTDC Rider Related
<u>Expenses & Revenues</u>

Initial Expenses	$ 973,967.58
Revenues (at 1/31/99)	$1,092,931.47
Surplus	$ 118,963.89
Budget for additional education	$ 611,545.00
Estimated undercollection	$ 492,581.11

It is important to note that the FTDC rider is a temporary surcharge intended to recover program roll-out expenses. Staff believes that the roll-out campaign for CG&E's gas choice program is nearly completed. Staff anticipates that the current FTDC rider will be eliminated from the Company's tariffs before the end of 1999.

Columbia Gas of Ohio

On October 17, 1996, Columbia Gas of Ohio (Columbia or COH) filed its initial application to establish the Customer Choice Program. The filing was amended on January 3, 1997, and the Commission's Opinion and Order, issued January 9, 1997, approved the amended application. The approved gas choice program allowed for voluntary capacity assignment to participating marketers.

A Stranded Cost Recover (SCR) rider, designed to collect stranded capacity costs and other costs arising as a result of implementing the company's choice program, was approved in the Commission's January 9, 1997 decision. This rider was applicable to all COH customers, except for those customers whose rates have been flexed to meet competition and to retain throughput. The SCR rider was fixed at $0.0234 per Mcf during the first year of the program.

On November 28, 1997, the Columbia Collaborative members filed a joint Stipulation and Recommendation regarding, among other things, an alternative to the SCR rider. The Company and collaborative members proposed replacing the SCR rider with a Transition Capacity Cost Recovery Pool. This pool would be financed with interstate pipeline refunds, over-collections from implementation of the FERC Order 636 transition cost surcharge, certain off-system sales revenues and other revenue sources. In an Entry issued January 7, 1998, the Commission approved the new stranded cost recovery method. Table 3-3 shows the status of the Transition Capacity Cost Recovery Pool.

Table 3-3

Choice Program Stranded Costs & Recoveries
As of March 31,1999

Stranded Costs	$69,688,710
Original SCR rider	$ 5,410,177
Balancing Services	$11,451,885
Capacity Assignment	$13,714,977
Order #636 recoveries	$10,674,954
Pipeline Refunds	$20,577,983
Off System Sales	$34,146,163
TOTAL Recoveries	$95,976,138
Net Pool Balance	$26,287,428

The majority of Columbia's pipeline capacity is contractually reserved until the year 2004 and beyond. Only a limited amount of capacity contracts expired since staff's 1998 Report. Contracts terminated since the issuance of the 1998 Report are listed in Table 3-4.

TABLE 3-4

PIPELINE	**MDQ (DTH/D)**	**TERMINATED**
Panhandle Eastern	20000	9/31/98
Columbia Gulf	457693	10/31/98
Columbia Trans	39040	3/31/99

The Company intends to terminate a Texas Eastern Pipeline contact for 11,000 Dth/Day when it expires on October 31, 1999.

In the Summer of 1998, Columbia permanently reduced its daily Columbia Gulf capacity by 42,060 Dth. Columbia has also assigned or released certain capacity on a long-term basis to marketers and end-users. Approximately 215,000 Dth/D of capacity has been released to these marketers and end-users. Additionally almost 400,000 Dth/D of capacity has been turned back to Columbia Transmission. This capacity has been turned back until March 31, 2002, at a price less than the maximum FERC approved rate.

East Ohio Gas Company

The East Ohio gas choice program was approved in July of 1997. Their choice program requires participating suppliers to accept pro rata assignment of interstate pipeline transportation and storage capacity reserved or owned by East Ohio. Under the formula used to assign this capacity, about 80% of East Ohio's reserved capacity is allocated to individual marketers on a per customer basis.

The mandatory assignment of capacity to marketers eliminates the concern that these costs will become stranded in the GCR. As observed in the 1998 Report, marketers generally support voluntary assignment over mandatory assignment of capacity. Again, as they did last year, a number of marketers stated that mandatory capacity assignment is a deterrent to program development and their reason for not participating in the East Ohio choice program.

The 1998 Report recommended that a Company goal should be the removal of assigned capacity from its natural gas choice program. East Ohio was directed to decontract stranded pipeline capacity obligations whenever possible. The Company reports [Data Request 1-5] that "there have been no contractual opportunities for decontracting available to the Company during the last twelve months."

Staff observes that a large number of pipeline contractual obligations will expire between now and March 31, 2001. Staff believes that a Company goal should remain the removal of mandatory capacity assignment from its choice program. Staff anticipates the Company will have ample opportunities to pursue this objective in the near future.

The Commission approved the Transportation Migration Rider Part B as part of East Ohio's choice program. A $0.0211 per Mcf charge is applied to all sales and transportation volumes in the ten county service areas where the program is offered. This rider amount is intended to recover program implementation costs as documented in table 3-5.

TABLE 3-5

Implementation Costs and Recoveries
As of December 31,1998

Employee Education	$ 266,864.00
Customer Education	$ 1,360,438.61
Load Research	$ 543,756.63
Market Research	$ 263,892.00
Trans. Pool Mgt. Sys	$ 1,753,944.29
TOTAL EXPENSES	$ 4,188,895.53
Recoveries	$ 482,523.13
Net over/(under)	($3,706,372.40)

Table 3-5 does not reflect any expenses incurred in connection with the CAMP billing system. Staff recommends that any costs associated with the CAMP billing system be recovered through a separate filing with the Commission. See Section One for a more detailed discussion of the CAMP computer system.

Internet Information

In its 1998 Report, staff noted that some approved program riders (e.g. the Gas Cost Recovery Transition riders) are calculated quarterly in conjunction with an LDC's GCR filing. Staff believes that current rider cost information is important to participating customers. This information is mandatory, if a program customer is to perform month to month bill comparison accurately. Staff suggested that LDCs should post such information at Company Internet Web-sites. The 1998 Report congratulated CG&E's efforts in this area.

The Staff has researched each participating LDC's Internet Web-site. CG&E's Internet Web-site (http://www.cinergy.com/tariffs/rate.htm) continues to provide current billing components for each tariffed service.

East Ohio's site (http://www.cng.com/eog/transerv.htm) offers the option of selecting Page One or Page Two. The first page "contains a comparison of the sales cost (transportation and GCR) rate versus the Energy Choice Program (transportation only) rate and a full description of all riders involved in calculating the rates." The second page "contains a complete listing of all sales and transportation costs in the East Ohio/ West Ohio Division areas."

Staff is unable to discover similar tariff information at Columbia's Internet site (http://www.columbiagasohio.com). Staff continues to believe in the importance of providing this information through the Internet. Staff reiterates its recommendation that Columbia post customer choice tariff information on its corporate Internet Web-site.

Conclusions and Recommendations

The results of each LDCs attempts to mitigate stranded costs, through capacity decontracting, are mixed. CG&E states it "has eliminated 100% of unused pipeline capacity due to gas sales customers switching to gas transportation service". On the other hand, East Ohio confirms that no capacity changes occurred since no contractual decontracting opportunities were available. Staff continues to recommends that the LDCs should attempt to decontract stranded capacity obligations whenever possible.

The recovery methods for stranded and/or transitional costs also varies among the participating LDCs. Columbia, in conjunction with its Collaborative members, established the Transition Capacity Cost Recovery Pool. This Pool has a defined funding mechanism, a known life expectancy (until April 1, 2001), and a contingency true-up adjustment plan. Currently, total revenues credited to the Pool exceed total program stranded costs. This surplus situation is expected to change by the expiration date of the agreement, as additional customers migrate to transportation service.

The Riders applicable to the East Ohio and CG&E choice programs have provided revenues to reduce stranded capacity charges in the GCR and to recover program implementation costs. Unlike the system-wide availability of choice programs at CG&E and Columbia, the East Ohio program remains limited to a ten county area. East Ohio's Transportation Migration Rider-Part B has recovered less than 12% of the program's implementation costs. This rider is applied to sales and transportation volumes only in the counties where the program is available. Staff believes that expansion of the East Ohio choice program would accelerate the current recovery rate. As discussed elsewhere in this Report, staff recommends that East Ohio provide system-wide expansion of its program at the earliest possible date.

AFFILIATE CODE OF CONDUCT

In the Commission's June 18, 1998 Order, an attempt was made to standardize the affiliate Code of Conduct among the three programs. The predominantly uniform affiliate Code of Conduct appears to have adequately addressed the potential problems of having an affiliate marketer compete in the established territory of the regulated affiliate, (with the possible exception being the branding issue). In fact, the staff was not made aware of any significant alleged violations. However to eliminate any confusion and to correct some very minor differences in the tariffs, the staff recommends that the following uniform Code of Conduct be adopted in the tariffs at the appropriate time. The recommended uniform Code of Conduct is as follows:

(1) The utility must apply tariffs in a like manner.

(2) The utility must enforce the tariffs.

(3) The utility may not give its marketing affiliate or customers of its affiliate preference over non-affiliated gas suppliers. For purposes of the company's firm transportation program, any ancillary service provided by company, e.g., billing and envelope service that is not tariffed, will be priced uniformly for affiliated and non-affiliated companies and available to all equally.

(4) The utility must process all similar requests for transportation in the same manner and within the same approximate period of time.

(5) The utility shall not disclose to anyone other than a company employee any information regarding an existing or proposed gas transportation arrangement, unless authorization is granted.

(6) If a customer requests information about suppliers, the utility shall provide a list of all suppliers operating on its system, but shall not endorse any supplier nor indicate that any supplier will receive preference because of a corporate relationship.

(7) Before making customer lists available to any supplier, including any utility marketing affiliate, the company will post on its electronic bulletin board a notice of its intent to make such customer list available.

(8) The utility will, to the extent practicable, separate the activities of its operating employees from its affiliate marketing employees in all areas where their failure to maintain independent operations may have the effect of harming customers or unfairly disadvantaging unaffiliated suppliers under the company's transportation programs.

(9) The utility shall not condition or tie its agreements for gas supply or for the release of interstate pipeline capacity to any agreement by a gas supplier, customer or other third party in which its marketing affiliate is involved.

(10) The utility and its marketing affiliate shall keep separate books of accounts and records.

(11) Neither the utility nor its marketing affiliate shall communicate the idea that any advantage might accrue in the use of company's service as a result of dealing with its marketing affiliate.

(12) The utility shall establish a complaint procedure for issues concerning compliance with these standards of conduct.

(13) If the utility offers its affiliate or a customer of its affiliate a discount, or fee waiver for transportation services, balancing, meters or meter installation, storage, standby service or any other service offered to shippers, it must, upon request, prospectively offer such discounts, rebates or fee waivers to all similarly situated non-affiliated suppliers or customers under similar terms and conditions.

(14) The utility's name and logo will not be used in its marketing affiliate's promotional material, unless the promotional material discloses in plain, legible or audible language, on the first page or at the first point where the company's name and logo appears, that its marketing affiliate is not the same company as the LDC. The LDC is also prohibited from participating in exclusive joint activities with its marketing affiliate including advertising, marketing, sales calls or joint proposals to any existing or potential customers.

Although no significant affiliate Code of Conduct violations have been reported, the staff will use the GCR audit process, to verify that proper procedures are in place for continued compliance with the Code of Conduct. Based on the Opinion and Order in Case No. 98-593-GA-COI, which stated a need to address Code of Conduct complaints in an expeditious manner, and the discussion at the August 20, 1998, Flame Forum, the companies and staff agreed the GCR audit is the proper forum to verify and test that procedures are in place for continued Code of Conduct compliance.

CHOICE IN CAPACITY CONSTRAINED AREAS

Introduction

The Columbia Gas of Ohio (the Company) service area covers much of the territory of the state of Ohio, from parts of southern Ohio along the Ohio River and extending to northern Ohio, serving some communities along Lake Erie. The gas choice program has been developed to incorporate operational considerations for the majority of Columbia Gas of Ohio's customer base.

With the exception of north central Ohio at Lake Erie (Sandusky to Parma area), far eastern Ohio (East Liverpool area), and south central Ohio at the Ohio River (Portsmouth area), the majority of the Company's customers are served by Columbia Gas Transmission Corporation (TCO) facilities in TCO's Operating Area 7. Capacity to TCO's Operating Area 7 is readily available on the secondary pipeline capacity market. Since capacity is so readily available, marketers are able to capture and use this otherwise unused capacity at a rate that is distinctly less than TCO's tariff rate.

The Constrained Areas

In order for marketers to properly serve the extreme north central, eastern, and southern Ohio areas, they generally must obtain firm pipeline capacity or direct assignment from Columbia Gas of Ohio in order to serve these markets, especially during peak periods. It is during these times that secondary pipeline capacity either is not readily available or is not economically available. Without direct firm interstate pipeline capacity assignment from the Company, the marketers may experience difficulties in serving customers in these areas during periods of high demand, but especially in TCO Market Area 2 which is located within TCO's Operating Area 7.

TCO Market Area 2 has been otherwise referred to as the Parma market because the greatest number of customers served by Columbia Gas of Ohio in TCO Market Area 2 are located in the vicinity of the city of Parma. The Columbia Gas Transmission Corporation's operational facilities serving this market literally are at the end of the pipeline. The Parma area has experienced significant growth over the past several years, and the majority of the TCO pipeline capacity into that market is under firm contract and is being primarily utilized by Columbia Gas of Ohio to fulfill its regulated supplier service obligations. As a result, there is little or no secondary pipeline capacity readily available to marketers to serve this market on a year-round basis, or even during peak periods.

Possible Solutions To Serving Constrained Areas

The Parma market area is not in close proximity to alternate interstate transmission pipeline facilities. In addition to Columbia Gas Transmission Corporation, the other existing major interstate pipelines crossing Ohio near the northeastern portion of the state include CNG Transmission (CNGT) and Tennessee Gas Pipe Line (TGPL). Neither company has significant existing transmission facilities in proximity to Parma to be an economically viable alternative or addition to the existing TCO facilities.

The proposed Independence Pipeline (Independence) project is planned to pass nearer to Parma than do the existing major pipeline facilities of CNGT or TGPL. If the Independence

Pipeline project is built, its major transmission facilities are planned to be sited a minimum of 30 or more miles from the Parma market area. Thus, it would not appear on its face to be economically justified at this time as an alternate pipeline to directly feed the Parma market in addition to, or in lieu of, Columbia Gas Transmission.

However, if the Independence Pipeline project is built utilizing the proposed pipeline corridor, it might be able to help TCO better serve the north-central and northeastern Ohio portions of its markets, including the Wellington Storage Field and the Parma market area. An Independence/TCO interconnect is proposed to be built in north-central Ohio. This interconnection, if built, would be capable of directly feeding the TCO transmission line that in turn feeds TCO's Wellington Storage Field. During peak periods, the Parma market is partially supported by the Wellington Storage Field operations, and thus would be indirectly supported by an interconnection with Independence. This interconnection could serve as an additional source of upstream pipeline capacity in a manner to provide TCO with additional operational support in terms of additional gas supplies and boosted operational pressures on these pipeline facilities feeding the Parma area market, especially during peak periods.

An Independence Pipeline interconnection with TCO pipeline facilities feeding the north-central and Parma markets, while perhaps easing operational considerations, may not necessarily provide marketers wishing to serve Columbia Gas of Ohio's northern-most markets with a more economic means to do so. One major advantage to an Independence interconnect would be to introduce increased diversity of supply to serve TCO's northern Ohio markets. The Independence Pipeline Project is being undertaken partially to import Canadian gas coming into the Chicago area on into the midwestern U.S. and eastern U.S. markets. Currently, most of the natural gas on the TCO pipeline system comes from Appalachian and Gulf Coastal production areas.

At this time, it is too preliminary to determine what economic impacts may result from a TCO interconnect with Independence. Nonetheless, for operational and diversity-of-supply considerations alone, an interconnection in that area likely would make sense for TCO to better serve the increasing demand of its existing customers (Columbia Gas of Ohio, the various marketers and end-users in northern Ohio).

Conclusion

As unbundling at the local distribution company level occurs, this leaves open the need to examine how major investments into additional pipeline facilities are going to be supported. Historically, major pipeline investments were supported through longer-term contracts between the LDCs and the pipelines. If marketers and aggregators increasingly assume the deregulated function of the provision of gas supplies to end users, the issue of investment in necessary gas transmission facilities will need to be addressed.

UTILITY/MARKETER COOPERATION

Section 1 of this report discusses in detail the participation levels in the various customer choice programs. From that comparison it is clear that participation rates in the Columbia Gas program far exceeds the others. Several reasons likely account for this difference. In the case of East Ohio, low participation is a result of the limited availability of the program during the ongoing pilot phase. In the case of CG&E the foremost reason is the relatively low GCR rate that reduces the potential margins for marketers. However, staff believes other factors may also be contributing. As discussed in Section 2, staff is recommending the Commission direct that CG&E assume the receivables of marketers in cases where CG&E bills on their behalf. Marketers identify this issue as second only to mandatory capacity assignment in their consideration of whether to participate in a gas choice program.

As a secondary consideration, however, we would be remiss if we did not mention concerns expressed by some marketers about the perceived discrepancy in the relative levels of support for customer choice between Columbia and CG&E. We believe Columbia has set the standard for implementation of customer choice. Their cooperative approach to implementation issues, be it through the collaborative or otherwise, should be a model for all gas choice programs.

By contrast, where Columbia regards marketers as partners, CG&E regards them as competitors. This is explicitly stated in a motion filed with the Commission where CG&E argues that being required to purchase marketers' receivables would give an unfair advantage to their "competitors". (October 5, 1998 Motion for Stay or Waiver of the Public Utilities Commission of Ohio's Opinion and Order Requiring the Cincinnati Gas & Electric Company to Assume the Receivable of Gas Marketers, page 6). We strongly urge CG&E to establish a more cooperative and promotional collaborative which would be charged with making the program more marketer friendly.

CGE should be commended for commodity purchasing practices that have resulted in low natural gas prices for their GCR customers. However, staff does not have a level of comfort, at this point, that the relatively low participation rates in the CGE program are due exclusively to the low GCR rate. Adoption of the recommendations made in this report will help ensure that if CG&E's gas choice program does not reach the same level of participation as other companies, it will not be due to a lack of commitment on the part of CG&E to the success of the program.

SECTION 4
CUSTOMER EDUCATION

On June 18, 1998, the Commission recognized that significant computer billing issues associated with East Ohio Gas would prohibit the effective roll-out of the East Ohio choice program territory-wide. The Commission ordered East Ohio to maintain the status quo in the program which had been offered to the seven contiguous counties of the Canton areas and the three counties of the Marietta area. Therefore, East Ohio Gas was not required to perform any significant customer education activities. For that reason, this staff evaluation focuses primarily on the Columbia Gas of Ohio and Cincinnati Gas & Electric programs, both of which experienced significant changes during the past year.

COLUMBIA GAS OF OHIO

Education Plan Development and Execution

On June 18, 1998, the Commission approved a tariff change by Columbia Gas of Ohio enabling it to offer its Customer CHOICE^{SM} program throughout its service area. The Commission also ordered the company to work with staff in developing the campaign and its contents. Staff met with company representatives as well as OCC representatives through the moratorium period and on a regular basis through the early portion of the 1998 winter heating season.

Columbia Gas of Ohio's educational campaign included:

- 1 company sponsored bill insert
- 1 comprehensive brochure (mailed upon request)
- 1 full page ad (run multiple times)
- 1 60 second radio ad (run multiple times)
- 2 billboards
- Monthly articles in the company's bill insert newsletter "Gaslines" (since June 1998)

In addition, Columbia Gas of Ohio sponsored, in conjunction with the Commission and the Ohio Consumers' Counsel, the Central Ohio Customer CHOICE^{SM} Expo held in Grandview Heights on November 22, 1998. This event was a gathering of participating marketers who set up booths and made customer contacts face-to-face. The company's advertising and public relations efforts, combined with efforts by the PUCO and OCC, succeeded in drawing more than 2,000 eligible customers to the Expo. Customers had the opportunity to obtain a great deal of educational materials from unbiased sources such as the PUCO as well as information from the marketers. While this inaugural event required intense planning and advertising, staff believes the event drew a reasonable crowd and warrants consideration of holding future expos in key areas of the company's service territory.

Because it was already known from other studies that the awareness and participation levels in the Columbia program were high, staff surveyed in February 1999 to determine a demographic profile of customers likely to participate. The results are located in "Customer Survey – Columbia Gas of Ohio," (Section 5).

It is important to note that although Columbia Gas' customers seem to indicate a high level of awareness of the program, awareness does not necessarily mirror the level of understanding. The methodology for the survey was such that Columbia Gas provided two separate mailing lists: one for customers who had chosen an alternative supplier and one for customers who had not selected an alternative supplier. Question 2 asked the respondents to identify their supplier of natural gas and offered boxes to check either "Columbia Gas of Ohio," "Alternative Supplier" or "Don't Know." One would anticipate that every respondent from the list of customers who had selected a supplier would check the "Alternative Supplier" box. However, 19.6 percent of this group identified Columbia Gas of Ohio as their supplier of natural gas. An additional 5.1 percent of this group indicated they did not know who their supplier was. A total of 24.7 percent or nearly a quarter of the participants in the program surveyed was confused about who their natural gas supplier was.

It is possible to argue that the customers who indicated Columbia Gas as their supplier are confused because they continue to receive a bill from Columbia Gas of Ohio; they are confusing "supplier" with "distributor" of their gas; or they have chosen Columbia's affiliate and are confusing the names. It is also possible to argue that those customers who responded "Don't Know" simply forgot the name of the company they had selected. In either case, it is noteworthy that for those customers who are the best educated about the program and who have the greatest interest in the program, there are 24.7 percent who cannot accurately report from whom they are purchasing their gas supply. That a quarter of these customers are confused about this issue is an indication that customer education should continue as an important facet of the CHOICE℠ program.[12]

Recommendations

Based on results of the survey and staff's observations, staff recommends to the Commission that Columbia Gas of Ohio be found to have run an effective and reasonable campaign and that Columbia Gas of Ohio utilized its public education funding appropriately. Further, staff would recommend that Columbia Gas be encouraged to continue customer awareness activities as part of its day-to-day operations to maintain awareness including a particular focus on the more detailed aspects of the program dealing with customer knowledge of their supplier selection.

[12] See the "Customer Surveys – Columbia Gas of Ohio" section for a complete description of the data compiled for customer confusion.

CINCINNATI GAS & ELECTRIC COMPANY

Education Plan Development and Execution

On June 18, 1998, the Commission ordered Cincinnati Gas and Electric to undertake a second public education campaign for its customer choice program for natural gas. The first of such campaigns had been executed in the late summer 1997. Surveying done by the Commission staff in spring 1998 showed a lower awareness and participation rate for CG&E than in the two pilot programs running simultaneously: Columbia Gas of Ohio and East Ohio Gas. In order to ensure that low participation rates were a function of customers *choosing* not to participate rather than not participating out of a *lack of awareness of* the program, the Commission required CG&E to again endeavor to raise awareness rates of the program in the CG&E territory. Staff surveying in early 1998 showed a 49.2 percent awareness rate in the CG&E territory. CG&E surveying in August 1998 showed a 39 percent awareness rate.

CG&E's second education campaign took place from September 1998 through February 1999. The campaign focused on print communications using direct mail, bill inserts and newspaper advertising. The campaign included:

- 3 company sponsored bill inserts
- 1 direct mail piece
- 1 newspaper insert
- 1 full page ad (run multiple times)
- 4 2 col. x 7 in. ads (run multiple times)
- 4 4 col. X 16 in. ads (run multiple times)
- 3 60 second radio ads (run multiple times)

CG&E's second education campaign was developed with input from staff, and CG&E staff apprised PUCO staff regularly on the campaign's status.

In February 1999, staff surveyed the CG&E territory customers in Ohio for the limited purposes of determining if the level of awareness and understanding of the program had increased and determining if the education campaign was successful. The results of this survey were compared to the survey done in the same territory in spring 1998.

Results of CG&E's Second Education Campaign

Staff's survey of the CG&E service area indicates a dramatic improvement in the customer education efforts and the awareness levels of customers achieved. The proportionate number of customers aware of the existence of the program increased from 49.2 percent in the 1998 study to 73.1 percent in the current study. This is nearly a 24- percentage point improvement.[13]

The diversity of the methods used by CG&E to communicate the choice message played a significant role in reaching consumers. Of the 73.1 percent of customers who indicated that they were aware of the program, only 4 percent of them did not learn about the program from the choices listed which reflects the make-up of the campaign. The survey also

[13] See the "Customer Survey – Cincinnati Gas & Electric Company" section for the complete methodology and survey results.

indicated that a large number of respondents relied on multiple ways to get the message. Clearly, a properly integrated marketing approach is the most effective means for reaching customers.

The survey also provided quantitative measures for determining if the greater awareness levels were due to the efforts of the company or some other factor such as increased marketer activity or efforts other parties. In the earlier baseline study, less than half of the customers (41.7 percent) identified CG&E as the most useful source of information. In the current study, more than three-quarters of the customers (76.1 percent) have identified CG&E as a useful source of information about the program. The company's influence in educating customers has increased considerably from the respondents' perspectives. The drop off from CG&E to the next highest frequency (marketer or supplier) was more than 50 percentage points. Thus, it would appear that CG&E's objective of being a vital consumer educator was, to some extent, achieved. One must note, however, that CG&E's awareness levels were nearly 20 percent below the levels of awareness in Columbia Gas of Ohio's service area.

Because the awareness levels in the CG&E service area were measured at greater than 70 percent and participation was significantly lower, we can be reasonably confident that customers are choosing not to participate, rather than not participating out of a lack of awareness. Therefore, we must examine the survey data to determine why customers are choosing not to participate. The most frequently identified reason for not having chosen a supplier other than CG&E is customer satisfaction with their current supplier. Almost half of the respondents have remained with CG&E, because they are satisfied with CG&E. The next highest responses explaining why customers have not chosen is that they want more information about the program (44.7 percent), they don't know how to compare offers (44.5 percent), and they are skeptical about the benefits of the program (41.2 percent). All three of these categories and response rates indicate a continued need for customer education. Staff feels that the company, outside of a massive media advertising campaign, should continue to utilize the expertise of its public relations and advertising offices to maximize its education efforts.

Recommendations

Based on results of this survey, staff recommends to the Commission that CG&E be found to have run an effective and reasonable campaign and to have used its public education funding appropriately. Further, staff would recommend that CG&E be encouraged to continue customer awareness activities as part of its day-to-day operations to maintain awareness, but not order the company to undertake a third customer education campaign.

APPLES TO APPLES PRICE COMPARISON CHART

The Commission has produced and distributed a price comparison chart of marketers' commodity sales offers, dubbed "*Apples to Apples*," since March 1997. The chart was in response to a need identified by staff for pricing information to help residential customers to compare marketer offers in order to make a selection. Surveying done in 1998 for *the Staff Evaluation of the Natural Gas Customer Choice Programs* indicated that price comparison was the number one factor in a customer's decision to participate in a choice program. The PUCO also instituted a toll-free, 24-hour Natural Gas Choice Infoline for customers to call to request the free chart and information. In 1998, 80,644 residential customers called the Infoline to request the chart. Dozens of daily and weekly newspapers throughout the state have periodically printed the chart as a service to its readers.

Production/Frequency

Since the June 18, 1998 Order expanding/continuing the gas choice programs, staff has been producing the *Apples to Apples* chart on a monthly basis for the Columbia Gas of Ohio territory and on a quarterly basis for the Cincinnati Gas & Electric and East Ohio Gas territories. Staff reasoned that the marketers' offers changed far less frequently in the latter programs while offers changed more frequently in the former program. Therefore, the necessity to update the chart was greater for Columbia Gas than for CG&E and East Ohio.

By August 1998, staff responded to the coming heating season and the heightened interest in the programs due to advertising campaigns by producing the charts more frequently. Columbia Gas' *Apples to Apples* chart was produced every two weeks and the charts for Cincinnati Gas & Electric and East Ohio Gas were produced monthly. This level of frequency was maintained for all three programs.

Staff believes that during the non-heating season months, the charts should be produced monthly for all three programs. Staff further believes that August is the appropriate month to consider increasing the frequency of the charts in anticipation of the coming heating season and a heightened interest in the programs. Staff continuously monitors the activity of price changes by marketers and may assess the level of frequency needed in the CG&E program and East Ohio program during the same time period, but produce the chart at least monthly.

Marketer Cooperation

In general, the majority of the marketers participating in the Columbia Gas Customer CHOICE^{SM} Program have been cooperative in supplying information regarding their price options and plans for the *Apples to Apples* chart development. Initially, staff would routinely contact each marketer for updates to price option(s), terms and conditions, and customer service telephone numbers. Some marketers were responsive to the first round of calls, but in some cases despite staff's best efforts, three or more calls were necessary to obtain updates, resulting in unnecessary delays in releasing the *Apples to Apples* chart.

Staff's goal is to equip consumers with timely and accurate information for their decision-making purposes which can be achieved if marketers provide the timely and accurate updates as was directed in Section C (Pg. 11) of the Commission's June 18, 1998 Finding and Order in Case No. 98-593-GA-COI, et al. In an effort to streamline the *Apples to Apples* chart production process and facilitate timely releases, staff published a production schedule and requested marketers to submit updates by fax or e-mail by dates certain. Failure of a marketer to respond to requested updates is a direct violation of the above-mentioned Commission Order.

Recommendation

Staff believes that in a competitive environment timely and accurate information is essential to customers. Staff therefore recommends that the Commission reaffirm its decision in Case No. 98-593-GA-COI, et al, directing all marketers to continue to provide accurate and updated information to staff for the development of the *Apples to Apples* comparison charts.

Staff further recommends that the Commission support staff's decision to exclude any marketer from the current release of the *Apples to Apples* chart who fails to timely respond to requested updates as directed in the above-mentioned Commission Order and Finding.

Apples to Apples Survey Results

In February 1999, staff undertook a survey of Columbia Gas of Ohio customers who had called the PUCO's Natural Gas Infoline from April 1, 1997 to December 1, 1998 requesting information about natural gas choice and the *Apples to Apples* comparison chart. The survey was conducted to determine the customers' perceptions about the usefulness of the chart and their level of satisfaction with the PUCO's service. Specifically, the PUCO wanted to know:

- if customers were receiving requested information in a timely manner;
- if the brochure produced by the PUCO was perceived as helpful;
- if the *Apples to Apples* chart produced by the PUCO was perceived as helpful; and
- if the PUCO should produce these kinds of information for other utility industries.

According to the survey results, 95 percent of the customers felt that the information reached them in a timely manner. All of the customers surveyed had received information about the program and the positive response rate (74.40 percent) is more than twice the current enrollment rate of the program (30 percent as of February 17, 1999). This result suggests a direct correlation between customers that receive the price comparison information and those that decide to participate in the program.

Several questions were asked to let the Commission know whether information provided for natural gas choice was indeed helpful. Customers rated the brochure as helpful 91.92 percent of the time and rated the *Apples to Apples* charts as helpful 92.72 percent of the time. In addition, nearly 95 percent of the customers would like the PUCO to provide this kind of information in other competitive utility industries.

Recommendations

Staff recommends that the *Apples to Apples* chart should continue to be produced by the PUCO to aid customers in making informed utility decisions. Further, staff should continue to investigate methods of distributing the chart to reach the most consumers since there does appear to be a correlation between customers that receive the comparison information and customers that participate in the program.

Staff believes that during the non-heating season months, the charts should be produced monthly for all three programs. Staff further believes that August is the appropriate month to consider increasing the frequency of the charts in anticipation of the coming heating season and a heightened interest in the programs.

SECTION 5
CUSTOMER SURVEYS
COLUMBIA GAS OF OHIO

INTRODUCTION

This report presents the results of a research project designed to collect information regarding the demographic characteristics of the residential customers participating in the Columbia Gas of Ohio Customer Choice Program. The intent of the survey is to reveal characteristics that differentiate customers who have made a choice of natural gas providers versus customers that have not made this choice and continue to have Columbia Gas of Ohio as their supplier. An additional purpose of this research was to study customer perceptions of choice in the potential market for electricity.

The first phase of the Customer Choice Pilot Program, which ran for one year in the greater Toledo area, began April 1, 1997. The area was selected partly based on its rates that, as among the highest in the state, made it an attractive test market for the program. About 160,000 residential and 11,500 small business customers in Lucas and parts of Wood and Ottawa Counties were eligible to participate in the Customer Choice Program.

The Customer Choice Program was initiated by a Commission Order in December 1996. Two previous studies were conducted of residential and business customers of Columbia Gas of Ohio as a part of the staff's evaluation of the Customer Choice Pilot Program. The baseline study was conducted in May 1997. The follow-up study was administered in February 1998. The results of those studies were published in the staff's evaluation of the Choice Programs for the customers of Columbia Gas of Ohio, The Cincinnati Gas and Electric Company, and The East Ohio Gas Company. The Commission approved the statewide expansion of the gas CHOICE programs. This third study of the residential customers participating in the Customer Choice Program of Columbia Gas of Ohio serves as one part of the staff's continued evaluation of these programs.

The purpose of this third study of residential customers is:

To reveal characteristics that differentiate customers who have made a choice of natural gas providers versus customers that have not made this choice;

To determine whether or not past behavior of customers with respect to making a choice of service providers among the natural gas and long-distance telephone companies is predictive of a preference for a competitive choice in the potential electricity market;

To identify the demographic characteristics of people who might be more apt to want a competitive alternative in all areas of utility services;

To identify customers' awareness and understanding of the Gas Choice program; and

To identify the sources of information to which customers are most receptive.

METHODOLOGY

This section of the report describes the basic methodologies employed in the study of the residential customers of Columbia Gas of Ohio. This report presents the results from the current study of the customers who have been participating in the Customer Choice Program. For a complete discussion and explanation of each of these methodological techniques, procedures and issues, please refer to the Methodology chapter in Public Input Research of the Customers in The Cincinnati Bell Telephone Company Service Territory, prepared by Commission staff and published in November, 1997.

The primary purpose of the study was to determine the demographic characteristics of the Choice versus the No Choice residential populations. It was therefore determined that the study would employ a stratified random sample of these two residential populations. This decision was made to ensure that there would be an adequate representation of customers across all of the demographic categories selected for study and that it would be possible to run statistical tests with meaningful numbers of observations.

Based primarily on available resources, it was determined that a cold mail survey would be employed as the data and information collection technique for this project. The same survey instrument was sent to both groups of customers; customers that have made a choice of natural gas suppliers and customers that have not made a choice. The survey instrument included only closed-ended questions. The survey is included at the end of this section of the report. The respondents were guaranteed anonymity and there were no identifying marks of any kind on either the surveys or the envelopes. The surveys were mailed on February 18 through February 20, 1999. A deadline date was placed on the survey to encourage a rapid return of the surveys. Given the time constraints involved in assessing the Customer Choice Program, a deadline of March 5, 1999 was established and printed on the survey. The first surveys were received on February 22, 1999. Every attempt was made to accept as many surveys as possible before closing the sample. The decision to end the acceptance of surveys is determined by a consideration of the following issues: achieving the minimum sample size requirement for the specified confidence level and margin of error; the recognition of the customers' efforts in completing and returning the surveys; the value of the customers' perceptions and opinions in the evaluation and implementation of policies and programs; and the time required to code, enter and analyze the data and information. The last survey was accepted on March 11, 1999.

Question 2 on the survey was a filtering question. This question asked the respondents to identify their supplier. For the No Choice survey, all of the surveys that were returned should have identified Columbia Gas of Ohio as their supplier. Those respondents who identified Columbia Gas of Ohio or who did not know their supplier were included in the data set. There were 58 customers who returned surveys who reported in Question 2 that they had an alternative supplier of natural gas. These were customers who had selected an alternative supplier between the time the sample was drawn in January and when the survey was mailed in February. Since they were no longer customers of Columbia Gas of Ohio, they were removed from the No Choice data set. There were a large number of customers from the Choice data set who reported that Columbia Gas of Ohio was their supplier of natural gas in Question 2. There were 222 customers who were sampled from the Choice population who identified their supplier of natural gas as Columbia Gas of Ohio. While these customers have identified Columbia Gas of Ohio as their supplier, all of them had selected an alternative supplier when the sample was drawn in January. Columbia Gas of Ohio estimates that approximately 10% of the customers have changed to a different alternative supplier. Only a very small number of customers have returned to Columbia Gas of Ohio. The Company estimates that the number is between 1 and 5%. None of these 222 customers were removed from the data set because they were supplied by an alternative supplier when the sample was drawn, and the vast majority remain customers of an alternative supplier. There were 39 customers who responded to the Choice survey who did not respond to Question 2. These surveys were removed as invalid surveys.

The study involves the eligible participants of the Columbia Gas of Ohio's Customer Choice Program. The study populations are defined as the eligible residential customers in Columbia Gas of Ohio's service territory. The total number of Choice customers in this population is 275,603. The total number of No Choice customers in this population is 901,736. It was decided that in order to achieve the research goals defined for this project, the survey instruments would be administered to a random sample of each of these populations. Consistent with the conventions in social science research, it was decided that the research results should be based on a confidence interval of 95% and a margin of error of plus or minus 5%. It is necessary to define a confidence interval and margin of error in order to determine the required size of the sample. Employing these criteria and assuming an infinite population, the sample size for the Choice residential population is 384.2 people. The sample size for the No Choice population is also 384.2 customers. To achieve a return of 385 respondents, it is necessary to determine a response rate for Choice and No Choice populations. The respondent numbers in each case were rounded up to 400 for the purpose of determining the size of the mailing. Based upon experience, a minimum response rate of 10% was assumed for each of the populations for a cold mail survey with no pre-administration or post-administration contacts. Consequently, it was determined that 4,000 Choice surveys and 4,000 No Choice surveys would be mailed to the populations in order to meet the research goals. Columbia Gas of Ohio selected both random samples on January 7, 1999.

There were 610 surveys completed and returned by No Choice customers. There were 1,193 surveys completed and returned by Choice customers. Of the 4,000 No Choice surveys mailed, there were 56 surveys returned with bad addresses, and 58 were invalid surveys or were received after the surveys were no longer being accepted. Of the 4,000 Choice surveys mailed, there were 18 surveys returned with bad addresses, and 39 were invalid surveys or were received after the surveys were no longer being accepted. Invalid surveys were surveys that were returned with none of the questions answered or only the demographic questions answered. Response rates are the percentage of the total number of respondents sent questionnaires that complete and return the questionnaire:

$$\text{Response Rate} = \frac{\text{number of completed questionnaires}}{\text{number of eligible respondents}}$$

The number of eligible respondents is equal to the number of questionnaires sent minus the number returned because of incorrect addresses, invalid surveys, or surveys received after the completion of data entry. The response rate for the No Choice residential survey is 15.70%. The response rate for the Choice residential survey is 31.04%.

With a No Choice, residential sample size of 610 and a level of confidence of 95%, the No Choice data presented in this report has a margin of error of no greater than plus or minus 3.97%. This margin of error is calculated for those questions in which there are two selections offered to the respondent, such as the “Yes” and “No” choices that appear on the survey. For those questions which include larger numbers of choices, the margin of error is smaller. As the number of choices increase, the margin of error decreases.

With a Choice residential sample size of 1,193 and a level of confidence of 95%, the No Choice data presented in this report has a margin of error of no greater than plus or minus 2.84%. This margin of error is calculated for those questions in which there are two selections offered to the respondent.

There were three separate data sets that were used for the analysis: Choice, No Choice and Total. The subjects in the Choice data set consisted of 1,193 customers, those who chose an alternative natural gas supplier. The subjects in the No Choice data set consisted of 610 customers, those who chose to remain with Columbia Gas of Ohio as their natural gas supplier. The third data set is labeled Total. The Total data set was constructed to represent the total residential population in the Columbia Gas of Ohio service territory. The Total data set was employed to study the questions that pertain to the issue of electricity choice. This data set serves as a proxy for the residential customers in the state of Ohio. Within the Columbia Gas of Ohio service territory, 23.4% of the customers switched from Columbia Gas to an alternative gas supplier and 76.6% of the customers in Columbia’s territory have not selected an alternative supplier. In order to create a data set that contained the same characteristics of Columbia Gas of Ohio’s service area, 186 surveys were randomly selected from the Choice data set and combined with all 610 surveys from the No Choice data set in order to create a total data set. This generated a data set that contained a total of 796 surveys, 23.4% of whom had selected an alternative supplier and 76.6& of whom had remained with Columbia Gas of Ohio.

Question 1 of the survey was also a filter question. For customers who were not aware of the CHOICE program, they were instructed not to answer questions about gas choice. These survey questions were designed to elicit information from customers who had thought about and participated in the Choice process. Residential “Unaware” customers answered Questions 1, and 4 through 10 of the survey. They were instructed not to respond to Questions 2 and 3 of the survey. If they did provide responses, they were not coded or recorded in the data set. There were 20 Choice customers who indicated that they were not aware of the Customer CHOICE Program. Of the 610 residential customers who completed and returned the No Choice survey, there were 41 residential customers who indicated they were not aware of the Customer CHOICE Program.

There are two analytical approaches employed and presented in the current study of the Columbia Gas of Ohio Customer CHOICE Program participants. The first approach entails a comparison between the response frequencies of the Choice and No Choice surveys. The presentation of the frequency analysis includes the questions verbatim as they appeared on the surveys. In each case, the number of respondents answering the question is provided, as well as the percentage this response represents of the total number of people who answered that particular question.

The second approach entails cross-tabulation and statistical analysis. During the process of designing the study, it was determined which survey questions provided independent variables that would be salient in explaining each of the dependent variables. This process generated a unique list of independent variables for each of the dependent variables. In those cases where the cross-tabulation analysis is presented, the dependent and independent variables are identified, the number of missing respondents are reported, and a cross-tabulation table is presented that includes both the frequency of respondents and the row percentages for each of the categories defined as the independent variables. The number of missing respondents reflects the number of respondents who did not answer all of the questions employed in the particular cross-tabulation analysis.

The data and information from the surveys were coded and entered into a spreadsheet for analysis. A detailed statistical analysis of the data was performed employing SAS. The questions have been coded and were analyzed employing various quantitative techniques. The findings were based on the results generated from SAS GLM, Duncan Multiple Range tests and profile plots. SAS GLM is a procedure that is used to investigate the significance of the main effects of explanatory variables (independent variables) and their interactions on each of the response variables (dependent variables). SAS GLM allows a researcher to assess the statistical significance of independent variables using the F-statistic. In addition, the SAS GLM procedure is able to analyze data that are unbalanced; i.e., when the number of observations in some of the experimental groups are not the same. Another feature of this procedure is the ability to test for main effects and their interactions. A main effect refers to the effect of an individual independent variable such as Question 8, Question 9 or Question 10 on a response variable such as Question 1, Question 3, Question 5 or Question 7. The interaction effect refers to the simultaneous effect that two or more independent variables have on a response variable. For this analysis, a significance level of 5% was used as the criteria for determining whether or not a main effect or an interaction effect, was significant.

The profile plot is a graphical presentation of the interaction effect generated from a model. These plots were used to analyze all of the two-way interaction effects and to locate any unusual occurrences of individual interaction effects for further investigation.

The Duncan Multiple Range test is a test that allows the capability of further assessing the differences among sample means for any individual main effect. While the SAS GLM procedure tests for the overall significance of each individual effect (i.e., points out if there is a significant difference between at least one pair of sample means within a particular effect), the Duncan test reveals which combination of sample means are significantly different from one another. A significance level of 5% was used as the criteria.

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1. ***Are you aware of Columbia Gas of Ohio's Customer CHOICE natural gas program?***

- ***Yes***
- ***No***

Frequency Analysis

CUSTOMERS WHO REMAINED WITH COLUMBIA GAS

Of the 604 respondents that answered Question 1,563 or 93.2% are aware of the program, whereas 41 or 6.8% are not aware of the program.

Aware of program?

	Frequency	Percentage
Yes	563	93.2
No	41	6.8

CUSTOMERS WHO CHOSE AN ALTERNATIVE SUPPLIER

Of the 1,184 respondents that answered Question 1, 1,164 or 98.3% indicated they are aware of the program, whereas 20 or 1.7% indicated they are not aware.

Aware of program?

	Frequency	Percentage
Yes	1,164	98.3
No	20	1.7

COMPARISON

When comparing the Columbia Gas of Ohio customers vs. those customers that chose an alternative gas supplier, there were slight differences in the distribution of customers when asked for their awareness of the Customer CHOICE program. Those customers who indicated they had chosen an alternative gas supplier were slightly more aware of the customer CHOICE program then the Columbia Gas of Ohio customers.

Aware of program?

	No Choice	Choice
Yes	93.2	98.3
No	6.8	1.7

Statistical and Cross-tabulation Analysis

CUSTOMERS WHO REMAINED WITH COLUMBIA GAS

There were 610 surveys returned from residential customers who chose to stay with Columbia Gas of Ohio as their natural gas supplier. Of the 610 surveys, 521 were used in this analysis; there were 521 customers who responded to Questions 1, 8, 9 and 10. The SAS GLM revealed significant main effects for Question 8 (age) and Question 9 (income) and the interaction between Question 8 and Question 9 on Question 1 (customer awareness of Columbia Gas of Ohio's Customer CHOICE natural gas program). Further investigation shows that the small number of observations in certain cells caused the two-way interaction effects to be significant in the analysis. Otherwise, the graphs displayed no signs of significant 2-way interaction effects. A second SAS GLM which was run only on the main effects (excludes all two-way interaction terms) revealed that Question 8 (age) was the only significant factor that affected awareness. The Duncan test showed that subjects in the age group of 34 and under were significantly less aware than the subjects in all of the other age groups. The Duncan test also showed no significant effects for all levels of Question 9 (income) and Question 10 (area) on Question 1.

The relationship of current Columbia Gas of Ohio customers' age vs. their level of awareness of Columbia Gas of Ohio's Customer CHOICE natural gas program are reflected in the table below. A linear relationship occurs in the range of age categories; as a gas customer's age decreases so does their level of awareness. Conversely, as a gas customer's age increases, there is an increase in awareness in the gas CHOICE program. The 35-49 year old category, 50-64 year old category, and the 65 year and over category were proportionately close in awareness of the gas Choice program. There was a significant decrease in awareness in the 34 and under category; they were not as aware of the gas Choice program as the other age categories. It is interesting to note that 41 Columbia Gas of Ohio customers indicated "No," they were not aware of the customer CHOICE program. The 34 and under category of current Columbia Gas of Ohio customers were proportionately less aware of the customer CHOICE natural gas program vs. the other age categories.

Table: Q8 (INDEPT) VS Q1 (DEPENDENT)

	No	Yes
34 and under	12 19.67	49 80.33
35-49 years old	15 8.93	153 91.07
50-64 years old	8 5.13	148 94.87
65 and over	6 2.83	206 97.17

The table below reflects the relationship between current Columbia Gas of Ohio customers and their annual household income vs. their level of awareness of the gas CHOICE program. The annual income categories less than $10,500, $10,500 to $24,999, $25,000 to $49,999, and $75,000 to $100,000 were proportionately similar as to their level of awareness of Columbia Gas of Ohio's Customer CHOICE natural gas program. It is interesting to note that the other two income categories were proportionately lower in awareness: the $50,000 to $74,999 annual income category and the greater than $100,000 annual income category, although the differences were minor.

Table: Q9 (INDEPT) VS Q1 (DEPENDENT)

	No	Yes
Less than $10,500	2 6.06	31 93.94
$10,500 to $24,999	10 7.35	126 92.65
$25,000 to $49,999	10 5.24	181 94.76
$50,000 to $74,999	11 11.11	88 88.89
$75,000 to $100,000	2 3.92	49 96.08
Greater than $100,000	3 11.54	23 88.46

The table below reflects the relationship of current Columbia Gas of Ohio customers' area of residence vs. their awareness of Columbia Gas of Ohio's Customer CHOICE natural gas program. Regardless of the area of residence, the current Columbia Gas of Ohio customers were proportionately aware of the customer CHOICE program.

Table: Q10 (INDEPT) VS Q1 (DEPENDENT)

	No	Yes
Mainly Rural	10 8.33	110 91.67
Mainly Suburban	20 6.19	303 93.81
Mainly Urban	10 7.04	132 92.96

Summary

The residential customers that chose to stay with Columbia Gas of Ohio as their supplier of natural gas were, for the most part, aware of the customer CHOICE program.. The 34 and under age category were not as aware of the Customer CHOICE program as compared to the other age categories. The table reflected a linear relationship; as a Columbia Gas customer's age increases so does their level of awareness. As the 34 and under age category reflected, as a Columbia Gas customer's age decreases, so does their level of awareness. The statistical analysis revealed that income did not impact level of awareness of the program. Across all income categories, the vast majority of customers are aware of the CHOICE program. The statistical analysis reflected that a current Columbia Gas of Ohio customers' area of residence does not effect their level of awareness. For the most part, the current Columbia Gas of Ohio customers' level of awareness of the gas CHOICE program is high across all age, income, and location categories. The lowest proportionate response is offered by those customers who are 34 and under and their response is 80.33%.

CUSTOMERS WHO CHOSE AN ALTERNATIVE SUPPLIER

There were 1,193 surveys returned from residential customers who chose an alternative natural gas supplier. Of the 1,193 surveys, 1,051 were used in this analysis; 1,051 customers responded to Questions 1, 8, 9 and 10. The SAS GLM revealed no significant main effects or their interaction on Question 1 (customer awareness of Columbia Gas of Ohio's Customer CHOICE natural gas program). The Duncan test showed significant effects for two of the independent variables: income (Question 9) and location (Question 10) on customer awareness of the program (Question 1).

The relationship of a gas customer's age vs. their awareness of Columbia Gas of Ohio's Customer CHOICE program are reflected in the table below. For those residential gas customers who chose an alternative gas supplier, all age categories were proportionately similar in their awareness of the gas CHOICE program. A person's age made no difference as to whether they were aware of the program. It is interesting to note that 20 alternative gas CHOICE customers stated they were not aware of the program, although they have chosen an alternative gas supplier.

Table: Q8 (INDEPT) VS Q1 (DEPENDENT)

	No	**Yes**
34 and under	3 2.88	101 97.12
35-49 years old	7 2.41	284 97.59
50-64 years old	4 1.14	347 98.86
65 and over	6 1.39	427 98.61

The table below reflects the relationship between customers that have chosen an alternative gas supplier and whether household income effects their awareness of the program. For those residential gas customers who chose an alternative gas supplier, all income categories were proportionately similar in their awareness of the gas CHOICE program. Those customers with annual incomes of less than $10,500 were slightly less aware of the program than those customers with incomes between $50,000 and $100,000.

Table: Q9 (INDEPT) VS Q1 (DEPENDENT)

	No	**Yes**
Less than $10,500	3 4.92	58 95.08
$10,500 to $24,999	5 2.25	217 97.75
$25,000 to $49,999	5 1.56	316 98.44
$50,000 to $74,999	1 0.40	248 99.60
$75,000 to $100,000	1 0.88	113 99.12
Greater than $100,000	3 2.88	101 97.12

This last table reflects the relationship of the alternative gas Choice customers' area of residence vs. their awareness of Columbia Gas of Ohio's Customer gas CHOICE program. For those residential gas customers who chose an alternative gas supplier, all of the respondents regardless of area of residence were aware of the gas CHOICE program. While the awareness levels are very high across all areas of residence, the mainly rural customers are slightly less aware than the mainly suburban customers.

Table: Q10 (INDEPT) VS Q1 (DEPENDENT)

	No	Yes
Mainly Rural	6 3.70	156 96.30
Mainly Suburban	6 0.90	663 99.10
Mainly Urban	8 2.42	323 97.58

Summary

As one would expect, almost all of the residential customers that chose an alternative natural gas supplier are aware of Columbia Gas of Ohio's Customer CHOICE program. Based upon the statistical analysis, it was determined that while awareness levels were very high across all of the demographic categories, there were very slight differences between some income and residence groups. Those customers with incomes of less than $10,500 and those customers who live in mainly rural areas were slightly less aware than other customers.

2. Who is your current supplier of natural gas?

- ***Columbia Gas of Ohio***
- ***Alternative supplier (name of supplier) ___________***
- ***Don't know***

Frequency Analysis

CUSTOMERS WHO REMAINED WITH COLUMBIA GAS

Of the 539 respondents that answered Question 2, 511 or 94.8% identified "Columbia Gas of Ohio" as their supplier of natural gas and 12 or 2.2% selected "don't know."

Current supplier of natural gas.

	Frequency	Percentage
Columbia Gas of Ohio	511	94.8
Don't know	12	2.2

CUSTOMERS WHO CHOSE AN ALTERNATIVE SUPPLIER

Of the 1,130 respondents that answered Question 2, 850 or 75.2% indicated that they receive natural gas from an "alternative supplier," 222 or 19.6% indicated "Columbia Gas of Ohio," and 58 or 5.1% indicated "don't know."

Current supplier of natural gas.

	Frequency	Percentage
Alternative supplier	850	75.2
Columbia Gas of Ohio	222	19.6
Don't know	58	5.1

COMPARISON

One would have expected that all of the customers who have not selected an alternative supplier would have identified Columbia Gas of Ohio as their supplier of gas. The results indicate that only 94.8% of the customers have done so. There were 2.2% of these Columbia Gas of Ohio customers who did not know their supplier. Likewise, one would have expected that all of the customers who had selected an alternative supplier would have identified "alternative supplier" as their supplier of gas. There were almost 20% of these respondents who reported that Columbia Gas of Ohio was their supplier of natural gas. There were slightly over 5% of these customers who did not know their supplier.

Current supplier of natural gas.

	No Choice %	Choice %
Columbia Gas of Ohio	94.8	19.6
Alternative Supplier		75.2
Don't know	2.2	5.1

Summary

Almost a quarter of the customers who have selected an alternative supplier are confused about what company is their natural gas supplier. There were almost 20% of these customers who identified Columbia Gas of Ohio as their supplier and about 5% reported that they did not know their supplier.

3. Do you prefer or not prefer having a choice of natural gas suppliers?

- ***Prefer***
- ***Not prefer***

Frequency Analysis

CUSTOMERS WHO REMAINED WITH COLUMBIA GAS

Of the 610 customers who responded to the survey, there were 536 or 87.9% who responded to this question. Of the 536 respondents, 415 or 77.4% "Prefer" to have a choice of natural gas suppliers while 121 or 22.6% responded that they do “Not Prefer” to have a choice of natural gas suppliers.

Do you prefer or not prefer having a choice of natural gas suppliers?

	Frequency	Percentage
Prefer	415	77.4
Not Prefer	121	22.6

CUSTOMERS WHO CHOSE AN ALTERNATIVE SUPPLIER

Of the 1,193 customers who responded to the survey, there were 1,124 or 94.2% who responded to this question. Of the 1124 respondents, 1,036 or 92.2% “Prefer” to have a choice of natural gas suppliers while 88 or 7.8% responded that they do “Not Prefer” to have a choice of natural gas suppliers.

Do you prefer or not prefer having a choice of natural gas suppliers?

	Frequency	Percentage
Prefer	1036	92.2
Not Prefer	88	7.8

COMPARISON

Comparing No Choice and Choice surveys, 77.4% of customers who responded to this question on the No Choice survey “Prefer” to have a choice of natural gas suppliers. On the Choice survey, 92.2% of the customers who responded to Question 3 “Prefer” to have a choice of natural gas suppliers. Of the customers who responded to this question, 22.6% of No Choice customers and 7.8% of Choice customers would “Not Prefer” to have a choice of natural gas suppliers.

Do you prefer or not prefer having a choice of natural gas suppliers?

	No Choice %	Choice %
Prefer	77.4	92.2
Not Prefer	22.6	7.8

Statistical and Cross-Tabulation Analysis

CUSTOMERS WHO REMAINED WITH COLUMBIA GAS

There were 610 surveys returned from residential customers who chose to stay with Columbia Gas of Ohio as their natural gas supplier. Of the 610 surveys, 461 were used in this analysis; 461 customers responded to Questions 3, 8, 9 and 10. The SAS GLM initially revealed that there were no significant differences for the main effects and the two-way interactions. After dropping the two-way interactions from the analysis model, the SAS GLM uncovered a significant main effect for Question 8 (age) on Questions 3 (preference on having a choice of a natural gas supplier). The Duncan test showed that subjects in the age group of 65 and older were less likely to prefer having a choice of natural gas supplier than those who were 49 or younger. The Duncan test also indicated that those with incomes of more than $100,000 on the average had more of an affinity to prefer having a choice of natural gas suppliers than those who made less than $25,000. The Duncan test did not find significant effects for Question 10 (location) on Question 3.

The relationship of a gas customer's age vs. their preference of having a choice of natural gas supplier are reflected in the table below. As the age of residential gas customers increases, the less likely they were to prefer having a choice of electricity supplier. There is a significant difference in preference between the age groups of 65 and older and 49 and younger.

Table: Q8 (INDEPT) VS Q3 (DEPENDENT)

	Prefer	**Not Prefer**
34 and under	39 86.67	6 13.33
35 – 49 years old	128 85.91	21 14.09
50 – 64 years old	110 76.92	33 23.08
65 and over	132 68.75	60 31.25

In the table below, as a customer's annual income increases over $25,000, the preference of having a choice of natural gas suppliers increases. There is a significant difference between customers with incomes of more than $100,000 and customers with incomes of less than $25,000.

Table: Q9 (INDEPT) VS Q3 (DEPENDENT)

	Prefer	**Not Prefer**
Less than $10,500	20 76.92	6 23.08
$10,5000 to $24,999	90 73.77	32 26.23
$25,000 to $49,999	132 78.11	37 21.89
$50,000 to 74,999	68 80.00	17 20.00
$75,000 to $100,000	40 83.33	8 16.67
Greater than $100,000	22 95.65	1 4.35

There appeared to be no effect on preference for choice due to geographic location of customers. The results are almost identical across all of the categories.

Table: Q10 (INDEPT) VS Q3 (DEPENDENT)

	Prefer	Not Prefer
Mainly Rural	80 76.92	24 23.08
Mainly Suburban	225 77.32	66 22.68
Mainly Urban	96 76.80	29 23.20

Customers who chose an alternative supplier

There were 1,193 surveys returned from residential customers who chose an alternative natural gas supplier. Of the 1,193 surveys, 1,000 were used in this analysis; there were 1,000 customers who responded to Questions 3, 8, 9 and 10. The SAS GLM revealed no significant main effects or their interaction on Question 3 (preference on having a choice of a natural gas supplier). The Duncan test showed no significant effects for all three independent variables (Question 8, Question 9, and Question 10) on Question 3.

The responses are almost identical across all of the age categories. Age has no effect on preference for customers who selected an alternative supplier.

Table: Q8 (INDEPT) VS Q3 (DEPENDENT)

	Prefer	Not Prefer
34 and under	93 93.00	7 7.00
35 – 49 years old	260 93.53	18 6.47
50 – 64 years old	307 91.37	29 8.63
65 and over	371 91.60	34 8.40

Again, the difference between income levels did not show a significant effect on the preference for choice of natural gas suppliers. There appears to be a slight increase in preference for choice among customers with a $25,000 to $100,000 income level.

Table: Q9 (INDEPT) VS Q3 (DEPENDENT)

	Prefer	Not Prefer
Less than $10,500	49 87.50	7 12.50
$10,5000 to $24,999	187 89.90	21 10.10
$25,000 to $49,999	289 94.14	18 5.86
$50,000 to 74,999	224 94.12	14 5.88
$75,000 to $100,000	102 93.58	7 6.42
Greater than $100,000	89 89.90	10 10.10

The minor differences between the geographic areas are not significant. Across all geographic locations most customers prefer choice.

Table: Q10 (INDEPT) VS Q3 (DEPENDENT)

	Prefer	Not Prefer
Mainly Rural	133 91.72	12 8.28
Mainly Suburban	600 93.17	44 6.83
Mainly Urban	287 90.82	29 9.18

Summary

There were 77.4% of the customers who remained with Columbia Gas of Ohio who prefer a choice of natural gas suppliers. For the customers who have selected an alternative supplier, there are 7.8% who do not prefer a choice of natural gas suppliers. Among the customers who remained customers of Columbia Gas of Ohio, those who are 65 and older are less likely to prefer choice than those who are 49 or younger. For those who have not made a choice, those with annual incomes of more than $100,000 prefer choice more than those with incomes of less than $25,000. As would be expected, for those customers who have selected an alternative supplier, most of the customers prefer choice. Those who prefer choice are represented by more than 90% of the respondents across almost all of the demographic categories.

3. How would you most like to receive information about your utility choices? (Check all that apply.)

- ***Bill insert from utility company***
- ***Direct mail from a public service agency***
- ***Direct mail from a supplier***
- ***Direct mail from utility company***
- ***Friends, family and other customers***
- ***Internet***
- ***Local public meetings***
- ***Local television news***
- ***Newspaper articles and advertising***
- ***Personal meetings with a supplier***
- ***Radio advertising***
- ***Telephone contact from a supplier***
- ***Television advertising***
- ***Toll-free hotline***
- ***None of the above choices***

Frequency Analysis

CUSTOMERS WHO REMAINED WITH COLUMBIA GAS

Of the 610 customers who responded to the survey, there were 584 or 95.7% who responded to this question. Of the 584 respondents, 182 or 31.2% provided 1 response, 97 or 16.6% provided 2 responses, 103 or 17.6% provided 3 responses, 81 or 13.9% provided 4 responses, 41 or 7% provided 5 responses, 23 or 3.9% provided 6 responses, 9 or 1.5% provided 7 responses, 12 or 2.1% provided 8 responses, 1 or 0.2% provided 9 responses, 4 or 0.7% provided 10 responses, 1 or 0.2% provided 12 responses, 1 or 0.2% provided 13 responses, and 1 or 0.2% provided 14 responses. "None of the above choices" was chosen by 28 or 4.8% of the customers that responded to this question.

How would you most like to receive information about your utility choices?

	Frequency	Percentage
1 response	182	31.2
3 responses	103	17.6
2 responses	97	16.6
4 responses	81	13.9
5 responses	41	7.0
None of the above choices	28	4.8
6 responses	23	3.9
8 responses	12	2.1
7 responses	9	1.5
10 responses	4	0.7
9 responses	1	0.2
12 responses	1	0.2
13 responses	1	0.2
14 responses	1	0.2

CUSTOMERS WHO CHOSE AN ALTERNATIVE SUPPLIER

Of the 1,193 customers who responded to the survey, there were 1,165 or 97.7% who responded to this question. Of the 1,165 respondents, 380 or 32.6% provided 1 response, 214 or 18.4% provided 2 responses, 212 or 18.2% provided 3 responses, 162 or 13.9% provided 4 responses, 81 or 7% provided 5 responses, 46 or 3.9% provided 6 responses, 21 or 1.8% provided 7 responses, 13 or 1.1% provided 8 responses, 9 or 0.8% provided 9 responses, 4 or 0.3% provided 10 responses, 2 or 0.2% provided 11 responses, and 1 or 0.1% provided 14 responses. There were 20 or 1.7% of the customers that responded "None of the above choices."

How would you most like to receive information about your utility choices?

	Frequency	Percentage
1 response	380	32.6
2 responses	214	18.4
3 responses	212	18.2
4 responses	162	13.9
5 responses	81	7.0
6 responses	46	3.9
7 responses	21	1.8
None of the above choices	20	1.7
8 responses	13	1.1
9 responses	9	0.8
10 responses	4	0.3
11 responses	2	0.2
14 responses	1	0.1

COMPARISON

Comparing the No Choice and Choice surveys, 31.2% of the customers who responded to this question on the No Choice survey gave 1 response to the way in which they prefer to receive information about their utility choices. On the Choice survey, 32.6% of the customers who responded to Question 3 gave 1 response to the way in which they prefer to receive information about their utility choices. Of the customers who responded to this question, 17.6% of No Choice customers and 18.2% of Choice customers gave 3 responses as to how they prefer to receive information about their utility choices. There were 16.6% of No Choice customers and 18.4% of Choice customers who gave 2 responses. On both surveys, 13.9% of the customers gave 4 responses, 7% gave 5 responses and 3.9% gave 6 responses to the question. "None of the above choices" was chosen by 4.8% of No Choice customers, while 1.7% of Choice customers answered the same. Of the customers who answered this question, 2.1% of No Choice customers and 1.1% of Choice customers gave 8 responses to this question, 1.5% of No Choice customers and 1.8% of Choice customers gave 7 responses; 0.7% of No Choice customers and 0.3% of Choice customers gave 10 responses; and 0.2% of No Choice customers and 0.8% of Choice customers gave 9 responses to the question. On the No Choice survey, 0.2% of customers gave 12 responses and 0.2% of customers gave 13 responses; 0.2% of No Choice customers and 0.1% of Choice customers responded to all of the choices of means in which they prefer to receive information about their utility choices. There were 11 responses given by 0.2% of the customers on the Choice survey in response to Question 4.

How would you most like to receive information about your utility choices?

	No Choice	Choice
1 response	31.2	32.6
3 responses	17.6	18.2
2 responses	16.6	18.4
4 responses	13.9	13.9
5 responses	7.0	7.0
None of the above choices	4.8	1.7
6 responses	3.9	3.9
8 responses	2.1	1.1
7 responses	1.5	1.8
10 responses	0.7	0.3
9 responses	0.2	0.8
12 responses	0.2	--
13 responses	0.2	--
14 responses	0.2	0.1
11 responses	--	0.2

Customers who remained with Columbia Gas

Of the 584 customers who have responded to Question 4, 289 or 47.4% would most like to receive information by “Bill insert from utility company.” There were 229 or 37.5% who selected “Direct mail from a public service agency,” 221 or 36.2% selected “Direct mail from a supplier,” and 196 or 32.1% selected “Direct mail from utility company.” Continuing, of the customers who responded to this question, 83 or 13.6% selected “Friends, family and other customers,” 34 or 5.6% selected “Internet,” 43 or 7% selected “Local public meetings,” 117 or 19.2% selected “Local television news,” 131 or 21.5% selected “Newspaper articles and advertising.” “Personal meetings with a supplier” was selected by 19 or 3.1%; 43 or 7% selected “Radio advertising,” 25 or 4.1% selected “Telephone contact from a supplier,” and 73 or 12% selected “Television advertising.” There were 96 or 15.7% who selected “Toll-free hotline,” and 28 or 4.6% of the customers that responded to this question indicated that they would like to receive information by “None of the above choices.” The following table summarizes the customer responses to the question.

How would you most like to receive information about your utility choices?

	Frequency	Percentage
Bill insert from utility company	289	47.4
Direct mail form a public service agency	229	37.5
Direct mail from a supplier	221	36.2
Direct mail from utility company	196	32.1
Newspaper articles and advertising	131	21.5
Local television news	117	19.2
Toll-free hotline	96	15.7
Friends, family and other customers	83	13.6
Television advertising	73	12.0
Local public meetings	43	7.0
Radio advertising	43	7.0
Internet	34	5.6
None of the above choices	28	4.6
Telephone contact from a supplier	25	4.1
Personal meetings with a supplier	19	3.1

CUSTOMERS WHO CHOSE AN ALTERNATIVE SUPPLIER

Of the 1,165 customers who have responded to this question, 695 or 58.3% would most like to receive information by "Bill insert from utility company." There were 461 or 38.6% who selected "Direct mail from a public service agency," 507 or 42.5% selected "Direct mail from a supplier," 421 or 35.3% selected "Direct mail from utility company," 135 or 11.3% selected "Friends, family and other customers," 62 or 5.2% selected "Internet," 45 or 3.8% selected "Local public meetings," 177 or 14.8% selected "Local television news," 283 or 23.7% selected "Newspaper articles and advertising," 43 or 3.6% selected "Personal meetings with a supplier," 67 or 5.6% selected "Radio advertising," 38 or 3.2% selected "Telephone contact from a supplier," 97 or 8.1% selected "Television advertising," 150 or 12.6% selected "Toll-free hotline," and 20 or 1.7% of the customers that responded to this question indicated that they would like to receive information by "None of the above choices." The following table summarizes the customer responses to the question.

How would you most like to receive information about your utility choices?

	Frequency	Percentage
Bill insert from utility company	695	58.3
Direct mail from a supplier	507	42.5
Direct mail form a public service agency	461	38.6
Direct mail from utility company	421	35.3
Newspaper articles and advertising	283	23.7
Local television news	177	14.8
Toll-free hotline	150	12.6
Friends, family and other customers	135	11.3
Television advertising	97	8.1
Radio advertising	67	5.6
Internet	62	5.2
Local public meetings	45	3.8
Personal meetings with a supplier	43	3.6
Telephone contact from a supplier	38	3.2
None of the above choices	20	1.7

COMPARISON

Comparing the No Choice and Choice surveys, 47.4% of the No Choice customers and 58.3% of the Choice customers preferred "Bill insert from utility company" to receive information about their utility choices. On the No Choice survey, 37.5% of the customers who responded to Question 3 chose "Direct mail form a public service agency," as well as 38.6% of the Choice customers, 36.2% of No Choice customers and 42.5% of Choice customers prefer to receive information about their utility choices by "Direct mail from a supplier," 32.1% of No Choice customers and 35.3% of Choice customers prefer "Direct mail from a utility company." Of the customers who answered this question, 21.5% of No Choice customers and 23.7% of Choice customers prefer to receive information about utility choices by "Newspaper articles and advertising," 19.2% of No Choice customers and 14.8% of Choice customers chose "Local television news." There were 15.7% of No Choice customers and 12.6% of Choice customers who prefer to receive information about their utility choices through "Friends, family, and other customers." There were 12% of No

Choice customers and 8.1% of Choice customers who chose "Television advertising;" 7% of No Choice customers and 3.8% of Choice customers who prefer "Local public meetings," and 7% of No Choice customers and 5.6% of Choice customers who prefer "Radio Advertising." "Internet" was a preferred means of receiving information on utility choices by 5.6% of No Choice customers and 5.2% of Choice customers, 4.6% of No Choice customers and 1.7% of Choice customers indicated "None of the above choices." "Telephone contact from a supplier" was preferred by 4.1% of No Choice customers and 3.2% of Choice customers; 3.1% of No Choice customers and 3.6% of Choice customers prefer to receive information about their utility choices by "Personal meetings with a supplier."

How would you most like to receive information about your utility choices?

	No Choice	Choice
Bill insert from utility company	47.4	58.3
Direct mail form a public service agency	37.5	38.6
Direct mail from a supplier	36.2	42.5
Direct mail from utility company	32.1	35.3
Newspaper articles and advertising	21.5	23.7
Local television news	19.2	14.8
Toll-free hotline	15.7	12.6
Friends, family and other customers	13.6	11.3
Television advertising	12.0	8.1
Local public meetings	7.0	3.8
Radio advertising	7.0	5.6
Internet	5.6	5.2
None of the above choices	4.6	1.7
Telephone contact from a supplier	4.1	3.2
Personal meetings with a supplier	3.1	3.6

Summary

There were remarkable similarities between the Choice and No Choice customers in the ways that they would like to receive information about the CHOICE programs. The four highest responses for both groups included the information that is mailed to the customers. The highest response for both was "Bill inserts from utility company." This response was offered by almost half of the No Choice customers and by almost 60% of the Choice customers. All of the responses among both groups for information that is mailed to the customer were above 30%. Most of the customers wanted multiple methods for receiving information. Approximately a third of both the Choice and No Choice customers would rely on only one method of receiving information. About 20% of the customers from both groups are interested in receiving information through newspaper articles and through television news. Around 10% or fewer of the customers would like to receive this information through advertising. Only about 5% of both the Choice and No Choice customers want the information from the Internet. There were very low responses offered by both groups for the methods that involved direct contact with the people providing the information. Both groups offered very low responses for telephone contact and personal meetings.

4. Choice of a supplier is also being discussed for the <u>electric</u> industry. Would you prefer or not prefer to have a choice of electricity supplier?

- ***Prefer***
- ***Not prefer***

Frequency Analysis

CUSTOMERS WHO REMAINED WITH COLUMBIA GAS

Of the 610 customers who responded to the survey, there were 588 or 96.4% who responded to this question. Of the 588 who have responded to this question, 428 or 72.8% “Prefer” to have a choice of an electricity supplier, while 160 or 27.2% responded that they do “Not Prefer” to have a choice of an electricity supplier?

Would you prefer or not prefer to have a choice of electricity supplier?

	Frequency	Percentage
Prefer	428	72.8
Not Prefer	160	27.2

CUSTOMERS WHO CHOSE AN ALTERNATIVE SUPPLIER

Of the 1,193 customers who responded to the survey, there were 1,158 or 97.1% who responded to this question. Of the 1,158 who have responded to this question, 988 or 85.3% “Prefer” to have a choice of an electricity supplier, while 170 or 14.7% responded that they do “Not Prefer” to have a choice of an electricity supplier?

Would you prefer or not prefer to have a choice of electricity supplier?

	Frequency	Percentage
Prefer	988	85.3
Not Prefer	170	14.7

COMPARISON

When comparing the Columbia Gas of Ohio customers vs. those customers that chose an alternative gas supplier, the customers that chose an alternative gas supplier were proportionately more likely to prefer having a choice of electric supplier. The majority of both Choice and No Choice customers prefer electricity choice.

Would you prefer or not prefer to have a choice of electricity supplier?

	No Choice	Choice
Prefer	72.8	85.3
Not Prefer	27.2	14.7

Statistical and Cross-Tabulation Analysis

COMBINED

There were 796 surveys representing the total population of residential customers in the Columbia Gas service territory. The population is composed of the proportionate number of customers who remained with Columbia Gas of Ohio and those who selected an alternative supplier. Of the 796 surveys, 671 were used in this analysis; there were 671 customers who responded to Questions 5, 8, 9, and 10. The SAS GLM initially revealed that there were no significant differences for the main effects and the two-way interactions. After dropping the two-way interactions from the analysis model, the SAS GLM revealed a significant main effect for Question 8 (age) on Question 5 (preference on having a choice of an electricity supplier). The Duncan test showed that subjects in the age group of 65 or older were less likely to prefer having a choice of electricity than all other age groups. The Duncan test did not find any significant effects for Questions 9 and 10 (income and location) on Question 5.

The relationship of a gas customer's age vs. their preference of having a choice of electricity supplier is reflected in the table below. For those residential gas customers who are 65 and over, they were less likely to prefer having a choice of electricity supplier than all other age categories. The first three categories were proportionately similar in their preference for having a choice of electricity suppliers. It is interesting to note that the 35-49 year old category had the highest proportionate percentage for those customers who prefer having a choice of electricity supplier.

Table: Q8 (INDEPT) VS Q5 (DEPENDENT)

	Prefer	Not Prefer
34 and under	63 82.89	13 17.11
35-49 years old	182 85.45	31 14.55
50-64 years old	166 78.67	45 21.33
65 and over	172 66.41	87 33.59

The table below reflects the relationship between customers' preference of having a choice of electricity supplier and their annual incomes. Those customers with incomes between $50,000 to $74,999 had the highest preference in having a choice of electricity supplier, while those with annual incomes of less than $25.000 reported the lowest preference for having a choice.

Table: Q9 (INDEPT) VS Q5 (DEPENDENT)

	Prefer	Not Prefer
Less than $10,500	25 69.44	11 30.56
$10,500 to $24,999	114 69.09	51 30.91
$25,000 to $49,999	183 78.21	51 21.79
$50,000 to $74,999	121 83.45	24 16.55
$75,000 to $100,000	53 82.81	11 17.19
Greater than $100,000	34 80.95	8 19.05

The following table reflects the relationship between customers' residence and their preference for having a choice of electricity supplier. The statistical analysis revealed that area of residence has no significant effects as to a customer's preference of having a choice of electricity supplier. The results are proportionately similar across all of the residence categories.

Table: Q10 (INDEPT) VS Q5 (DEPENDENT)

	Prefer	Not Prefer
Mainly Rural	104 77.04	31 22.96
Mainly Suburban	326 77.43	95 22.57
Mainly Urban	143 75.26	47 24.74

Summary

The Choice customers reported a higher frequency of those who prefer electricity choice than the No Choice gas customers. For both groups, however, more than three-quarters of the customers prefer electricity choice. When age was considered as effecting a customer's preference for having a choice of electricity supplier, those customers 65 and over were less likely to prefer a choice of electricity supplier. Those customers with annual incomes between $50,000 to $74,999 were more likely to prefer a choice of electricity supplier vs. those customers with annual less than $25,000. The analysis of area of residence had no significant effects on customers' preference for having a choice of electricity supplier.

5. WHAT PERCENTAGE OF SAVINGS FROM YOUR CURRENT ELECTRIC BILL WOULD A COMPETITIVE ELECTRIC COMPANY HAVE TO OFFER YOU IN ORDER TO GET YOU TO CONSIDER SWITCHING AWAY FROM YOUR CURRENT ELECTRIC COMPANY? (CHOOSE ONLY ONE RESPONSE)

- ***Less than 5%***
- ***5-10%***
- ***11-15%***
- ***16-20%***
- ***21-40%***
- ***I would not switch***
- ***Price would not be a factor in my consideration of switching electric companies.***

Frequency Analysis

CUSTOMERS WHO REMAINED WITH COLUMBIA GAS

Of the 610 respondents that answered the survey, there were 564 or 93% that responded to Question 6. Of the 564 respondents, there were 130 or 23.0% that chose between 11-15%, when asked what percentage of savings from your current electric bill would a competitive electric company have to offer you in order to switch from your current supplier. Continuing, there were 124 or 22.0% that chose between 16-20%, 94 or 16.7% that chose between 5-10%, 89 or 15.8% responded "I would not switch," 80 or 14.2% chose between 21-40%, 36 or 6.4% responded "Price is not a factor," and 11 or 2.0% chose less than 5%.

Savings from Electric Bill

	Frequency	Percentage
11-15%	130	23.0
16-20%	124	22.0
5-10%	94	16.7
I would not switch	89	15.8
21-40%	80	14.2
Price not a factor	36	6.4
Less than 5%	11	2.0

CUSTOMERS WHO CHOSE AN ALTERNATIVE SUPPLIER

Of the 1,193 respondents that answered the survey, there were 1,127 or 94.5% that responded to Question 6. Of the 1,127 respondents, there were 339 or 30.1% that chose between 11-15%, when asked what percentage of savings from your current electric bill would a competitive electric company have to offer you in order to switch from your current supplier. Continuing, there were 267 or 23.7% that chose between 5-10%, 231 or 20.5% chose between 16-20%, 139 or 12.3% chose between 21-40%, 78 or 6.9% responded "I would not switch," 40 or 3.5% responded "Price is not a factor," and 33 or 2.9% chose less than 5%.

Savings from Electric Bill

	Frequency	Percentage
11-15%	339	30.1
5-10%	267	23.7
16-20%	231	20.5
21-40%	139	12.3
I would not switch	78	6.9
Price not a factor	40	3.5
Less than 5%	33	2.9

COMPARISON

The results from both the Choice and No Choice respondent groups produced remarkably similar results. Both groups chose the same percentage of savings as their first three choices. Only the order of percentage chosen was different for the second and third choices. Both sets of survey respondents reported similar percentages of savings (11-15%) as their first consideration when asked if they would switch away from their current electric company. Both the "Choice" and "No Choice" survey respondents indicated they would have to receive a savings between 11-15% off their current electric bill to consider switching electric suppliers. The second response of the "Choice" customers was a savings of between 5-10% vs. 16-20% for the "No Choice" customers. Continuing, the third highest response for the "Choice" customers was a savings between 16-20% vs. 5-10% for the "No Choice" customers. The fourth highest selection for the "Choice" customers was a savings of between 21-40%, while the "No Choice" customers indicated they would not switch. The fifth highest selection of the "Choice" customers was that they would not switch, while the "No Choice" customers indicated savings between 21-40%. Both of the survey respondent groups indicated "Price not a factor," as their sixth highest consideration of savings. Both of the survey respondent groups selected "Less than 5%" as their last choice of savings, to consider a switch to a new electric supplier. If electric companies anticipate customers switching to a new supplier of electricity, they will have to offer more than 5% in savings off their current bill.

Savings from Electric Bill

	No Choice %	Choice %
11-15%	23.0	30.1
16-20%	22.0	20.5
5-10%	16.7	23.7
I would not switch	15.8	6.9
21-40%	14.2	12.3
Price not a factor	6.4	3.5
Less than 5%	2.0	2.9

Summary

It would be expected that the "No Choice" respondents that indicated "I would not switch" would be a higher percentage than reported by the "Choice" respondents. Both groups of survey respondents are "price sensitive" as to what percentage of savings they would have to receive to motivate them to switch to a new electric supplier. There were 74% of the

“Choice” respondents that selected some percentage of savings as one of their three highest selections. Conversely, there were 62% of the “No Choice” respondents that selected the same percentages of savings as their first three selections. Price is a major consideration for both respondents to switch, but more than twice the number (22%) of the “No Choice” vs. the “Choice” respondents (10%) indicated, “Price is not a factor and I would not switch.” So regardless of the savings, there were notable numbers of both respondents that would not switch.

6. Over the past decade you have had a choice of your long-distance telephone company. Over this period of time, have you ever chosen a long-distance company other than AT&T?

- ***Yes***
- ***No***
- ***Don’t Know***

Frequency Analysis

CUSTOMERS WHO REMAINED WITH COLUMBIA GAS

Of the 610 customers who responded to the survey, there were 603 or 98.9% who responded to this question. Of the 603 who have responded to this question, 328 or 54.4% have chosen a long-distance company other than AT&T, while 266 or 44.1% have not chosen another long-distance company. Only 9 or 1.5% responded that they “Don’t Know” if they have ever chosen a long-distance company other than AT&T.

Have you ever chosen a long-distance company other than AT&T?

	Frequency	**Percentage**
Yes	328	54.4
No	266	44.1
Don’t Know	9	1.5

CUSTOMERS WHO CHOSE AN ALTERNATIVE SUPPLIER

Of the 1,193 customers who responded to the survey, there were 1,183 or 99.2% who responded to this question. Of the 1,183 who have responded to this question, 742 or 62.7% have chosen a long-distance company other than AT&T, while 431 or 36.4% have not chosen another long-distance company. Only 10 or 0.8% responded that they “Don’t Know” if they have ever chosen a long-distance company other than AT&T.

Have you ever chosen a long-distance company other than AT&T?

	Frequency	**Percentage**
Yes	742	62.7
No	431	36.4
Don’t Know	10	0.8

COMPARISON

When comparing the Columbia Gas of Ohio customers vs. those customers that chose an alternative gas supplier, the overall distribution of customers that chose an alternative gas supplier were proportionately higher in choosing a long-distance telephone company other than AT&T. Current Columbia Gas customers have been less likely to choose.

Have you ever chosen a long-distance company other than AT&T?

	No Choice %	Choice %
Yes	54.4	62.7
No	44.1	36.4
Don't Know	1.5	0.8

Statistical and Cross Tabulation Analysis

TOTAL POPULATION

There were 796 surveys representing the total population of residential customers in the Columbia Gas service territory. The population is composed of the proportionate number of customers who remained with Columbia Gas of Ohio and those who selected an alternative supplier. Of the 796 surveys, 688 were used in this analysis; there were 688 customers who responded to Questions 7, 8, 9 and 10. The SAS GLM revealed significant main effects for Question 8 (age) and Question 10 (location) on Question 7 (choosing a long-distance telephone company other than AT&T). The Duncan test showed that subjects in the age group of 34 or younger were more likely to have switched to another long-distance telephone company than those who were 65 or older. The Duncan test also indicated that those with incomes over $100,000 were more likely to have switched long-distance telephone companies than those with incomes of less than $10,500. Finally, the Duncan test indicated that those living in rural areas were more likely to have switched than those living in mainly suburban areas.

The relationship between gas customers' age vs. their choice of a long-distance company other than AT&T are reflected in the table below. There is a linear relationship between a customer's age and their choice of a long-distance company other than AT&T. As customers' age increases, they are less likely to have chosen another long-distance carrier. The 34 and under age category were the most likely to have switched to another long-distance telephone company.

Table: Q8 (INDEPT) VS Q7 (DEPENDENT)

	No	Yes	Don't Know
34 and under	20 25.97	56 72.73	1 1.30
35-49 years old	65 29.95	149 68.66	3 1.38
50-64 years old	78 36.28	133 61.86	4 1.86
65 and over	157 58.15	112 41.48	1 0.37

The table below reflects the relationship between customers' annual household income and whether or not they have chosen a long-distance telephone company other than AT&T. The statistical analysis revealed that customers with income levels below $10,500 were less likely to have chosen a long-distance carrier other than AT&T. Conversely, those customers with annual income levels above $100,000 were the most likely customers to have chosen a long-distance carrier other than AT&T. The proportionate difference was close to double when comparing the percentage variance; those earning over $100,000 were twice as likely to have chosen a long-distance carrier other than AT&T.

Table: Q9 (INDEPT) VS Q7 (DEPENDENT)

	No	Yes	Don't Know
Less than $10,500	22 59.46	14 37.84	1 2.70
$10,500 to $24,999	77 45.03	91 53.22	3 1.75
$25,000 to $49,999	101 41.74	137 56.61	4 1.65
$50,000 to $74,999	48 32.65	98 66.67	1 0.68
$75,000 to $100,000	28 43.75	36 56.25	0 0.00
Greater than $100,000	13 30.95	29 69.05	0 0.00

The table below reflects the relationship between customers' residence and whether they have chosen a long-distance telephone company other than AT&T. The statistical analysis indicated that those customers residing in mainly rural areas were more likely to have switch long-distance telephone companies than those customers residing in mainly suburban areas.

Table: Q10 (INDEPT) VS Q7 (DEPENDENT)

	No	Yes	Don't Know
Mainly Rural	49 35.00	86 61.43	5 3.57
Mainly Suburban	184 42.89	243 56.64	2 0.47
Mainly Urban	80 40.40	116 58.59	2 1.01

Summary

The No Choice customers were slightly less likely to have switched long-distance companies than the Choice customers. There were 54.4% of the No Choice customers who switched long-distance companies, while 62.7% of the Choice customers made the change. Those customers that are 34 and under were most likely to have switch long-distance telephone companies. A customer's income level had a significant effect on whether customers switched long-distance carriers. Those customers earning less than $10,500 were less likely to have chosen another long-distance carrier than those earning more than $100,000. Area of residence also effects whether customers chose a long-distance carrier other than AT&T. Those customers residing in rural areas were more likely to have switched long-distance carriers than their suburban counterparts.

7. Please place a check next to the range that includes your age.

- ***34 and under***
- ***35-49 years old***
- ***50-64 years old***
- ***65 and over***

Frequency Analysis

CUSTOMERS WHO REMAINED WITH COLUMBIA GAS

Of the 610 residential customers that responded to the survey, 601 or 98.5% responded to this question. There were four age groupings defined for the purpose of cross-tabulation and statistical analyses. The 4 categories are: “34 and under,” “35-49,” “50-64,” and “65 and over.” There were 61 or 10.1% who are “34 and under,” 169 or 28.2% who are “35-49,” 158 or 26.2% who are “50-64” and 213 or 35.5% who are “65 and over.” The following table presents the results for Question 8.

Customers ages

	Frequency	Percentage
65 and over	213	35.5
35-49 years old	169	28.2
50-64 years old	158	26.2
34 and under	61	10.1

Question 8 was treated as an independent variable in the research design.

CUSTOMERS WHO CHOSE AN ALTERNATIVE SUPPLIER

Of the 1,193 residential customers, 791 or 99.2% responded to this question. There were four age groupings defined for the purpose of cross-tabulation and statistical analyses. The four categories are: “34 and under,” “35-49,” “50-64,” and “65 and over.” There were 104 or 8.8% who are “34 and under,” 292 or 24.6% who are “35-49,” 351 or 29.5% who are “50-64” and 441 or 37.1% who are “ 65 and over.” The following table presents the results for Question 8.

Customers ages

	Frequency	Percentage
65 and over	441	37.1
50-64 years old	351	29.5
35-49 years old	292	24.6
34 and under	104	8.8

Question 8 was treated as an independent variable in the research design.

COMPARISON

When comparing the age categories for the customers that remained with Columbia Gas of Ohio vs. those customers that chose an alternative gas supplier, the overall distribution of customers across the age categories were proportionately similar. When taking into account the margin of error, there is almost no difference between the two populations.

Customers ages

	No Choice %	Choice %
65 and over	35.5	37.1
35-49 years old	28.2	24.6
50-64 years old	26.2	29.5
34 and under	10.1	8.8

8. Please place a check next to the range that includes your annual household income.

- ***Less than $10,500***
- ***$10,500 to $24,999***
- ***$25,000 to $49,999***
- ***$50,000 to $74,999***
- ***$75,00 to $100,000***
- ***Greater than $100,000***

Frequency Analysis

CUSTOMERS WHO REMAINED WITH COLUMBIA GAS

There were 540 or 88.5% of the residential customers that answered this question. Of the 540 respondents, there were 34 or 6.3% who identified “Less than $10,500,” 136 or 25.2% identified “$10,500-$24,999,” 193 or 35.7% identified “$25,000-$49,999,” 100 or 18.5% identified “$50,000-$74,999,” 51 or 9.4% identified “$75,000-$100,000,” and 26 or 4.8% identified “Greater than $100,000” as their annual household incomes. The following table presents the results of Question 9.

Annual household Income

	Frequency	Percentage
$25,000-$49,999	193	35.7
$10,500-$24,999	136	25.2
$50,000-$74,999	100	18.5
$75,000-$100,000	51	9.4
Less than $10,500	34	6.3
Greater than $100,000	26	4.8

Question 9 was treated as an independent variable in the research design.

Customers who chose an alternative supplier

There were 1,077 or 90.3% of the residential customers that answered this question. Of the 1,077 respondents, there were 61 or 5.7% who identified "Less than $10,500," 225 or 20.9% identified "$10,500-$24,999," 323 or 30.0% identified "$25,000-$49,999," 250 or 23.2% identified "$50,000-$74,999," 114 or 10.6% identified "$75,000-$100,000," and 104 or 9.7% identified "Greater than $100,000" as their annual household incomes. The following table presents the results of Question 9.

Annual household Income

	Frequency	Percentage
$25,000-$49,999	323	30.0
$50,000-$74,999	250	23.2
$10,500-$24,999	225	20.9
$75,000-$100,000	114	10.6
Greater than $100,000	104	9.7
Less than $10,500	61	5.7

Question 9 was treated as an independent variable in the research design.

COMPARISON

While there were not major differences between the distribution of Choice and No Choice customers across annual household income categories, there were some interesting distinctions. For those customers who had annual household incomes of under $25,000, the No Choice customers (60.9%) were more highly represented among this group than the Choice customers (50.9%). For those customers who had annual household incomes of greater than $100,000, the Choice customers (9.7%) were more highly represented among this group than the No Choice customers (4.8%).

Annual household Income

	No Choice %	Choice %
$25,000-$49,999	35.7	30.0
$10,500-$24,000	25.2	20.9
$50,000-$74,999	18.5	23.2
$75,000-$100.00	9.4	10.6
Less than $10,500	6.3	5.7
Greater than $100,000	4.8	9.7

9. Select the choice that best characterizes the area where you live.

- ***Mainly Rural***
- ***Mainly Suburban***
- ***Mainly Urban***

Frequency Analysis

CUSTOMERS WHO REMAINED WITH COLUMBIA GAS

Of the 610 residential customers in the sample, 590 or 96.7% responded to this question. There were 122 or 20.7% of the respondents who reported that they live in a "Mainly Rural" area, 326 or 55.3% reside in a "Mainly Suburban," area and 142 or 24.1% reside in a "Mainly Urban" area. The following table presents the results for Question 10.

Residential Location

	Frequency	Percentage
Mainly Suburban	326	55.3
Mainly Urban	142	24.1
Mainly Rural	122	20.7

Question 10 was treated as an independent variable in the research design.

CUSTOMERS WHO CHOSE AN ALTERNATIVE SUPPLIER

Of the 1,193 residential customers in the sample, 1,170 or 98.1% responded to this question. There were 162 or 13.8% of the respondents who reported that they live in a "Mainly Rural" area, 675 or 57.7% reside in a "Mainly Suburban," area and 333 or 28.5% reside in a "Mainly Urban" area. The following table presents the results for Question 10.

Residential Location

	Frequency	Percentage
Mainly Suburban	675	57.7
Mainly Urban	333	28.5
Mainly Rural	162	13.8

Question 10 was treated as an independent variable in the research design.

COMPARISON

When comparing the area of residence of Columbia Gas of Ohio customers vs. those customers that chose an alternative gas supplier, some differences were apparent. For those customers who remained with Columbia Gas of Ohio, they were more likely to reside in a rural area as compared to the alternative gas supplier customers. Given the margin of error, the mainly suburban and mainly urban categories were almost the same between the two populations.

Residential Location

	No Choice %	Choice %
Mainly Suburban	55.3	57.7
Mainly Urban	24.1	28.5
Mainly Rural	20.7	13.8

Analysis of utility choice

The following analysis focuses on whether customer experience with having chosen an alternative gas supplier and an alternative long-distance telephone company has influenced customer preference for a competitive choice of electricity companies. In other words, is previous customer experience with utility choices an influence on customer preference for competitive choice for electricity service? The analysis includes a comparison between the customer groups who chose an alternative gas supplier, who chose an alternative long-distance company and prefer electricity choice with customers who did not chose an alternative gas supplier, who did not chose an alternative long-distance company and do not prefer electricity choice.

There were 796 surveys returned from residential customers that were used to describe the service area population of Columbia Gas of Ohio. Of the 796 surveys, 761 were used in this analysis; there were 761 customers who responded to Questions 5 and 7. The SAS GLM initially revealed that only the main effect for Question 7 (choosing a long-distance telephone company other than AT&T) was significant. After dropping out the two-way interaction from the analysis model, the main effects for Question 7 and CHOICE (those who chose a gas supplier other than Columbia Gas) on Question 5 (preference on having a choice of an electricity supplier) were both significant. The Duncan test indicated there was a significant difference between those who made a choice about their natural gas supplier versus those who stayed with Columbia Gas of Ohio. It further indicated that those who did make a choice of a natural gas supplier were more likely to prefer having a choice of an electricity supplier than the No Choice group. The Duncan test was also performed on the main effect for Question 7 on Question 5. The test revealed that there was a significant difference between those who chose a long-distance phone company other than AT&T and those who did not. It also indicated that there was a stronger preference for having a choice of electricity suppliers for those who changed their long-distance company. These main effects are demonstrated in the following cross-tabulation analyses.

Question 7 (Independent Variable) Vs Question 5 (Dependent Variable)
Data Set: No Choice (Did not choose an alternative gas supplier)

	Prefer Electricity Choice	Not Prefer Electricity Choice
No Choice of Long-Distance Alternative: AT&T Customer	177 68.08%	83 31.92%

Question 7 (Independent Variable) Vs Question 5 (Dependent Variable)
Data Set: Choice (Chose an alternative gas supplier)

	Prefer Electricity Choice	Not Prefer Electricity Choice
Choice of Long-Distance Alternative	115 94.26%	7 5.74%

For those customers who did not choose a natural gas or long-distance telephone company alternative, 68.08% prefer electricity choice. This compares to the 94.26% of the customers who prefer electricity choice who have selected a gas and a long-distance company alternative. Likewise, there are 31.92% of the customers who did not choose natural gas and long-distance telephone company alternatives that do not prefer electricity choice. There are only 5.74% of the customers who do not prefer electricity choice who did choose natural gas and long-distance telephone company alternatives.

As noted above, having made a choice of an alternative supplier of natural gas is predictive of preferring a choice of electricity suppliers. Additionally, having made a choice of an alternative long-distance provider is predictive of preferring a choice of electricity suppliers. Interestingly, there is no interactive effect between having chosen a natural gas supplier and an alternative long-distance provider on preference for electricity choice. In other words, having chosen a gas supplier in combination with having selected an alternative long-distance provider is not predictive of whether the customer will prefer electricity choice.

There are a number of possible explanations for this result. First, the customers who are selecting alternative natural gas suppliers and the customers who are selecting alternative long-distance companies are not the same people. The analysis considered that there might be a group of people in the population who prefer choice for their utility services. The evidence does not support this conclusion. A second possible explanation of this result is that customers do not place natural gas service, electricity service and long-distance telephone service into a meaningful single category, i.e., utility services. It is possible that while for those people involved in the regulation of these industries, there is a relationship between these services, for the consumer, these could be three disparate services that are not thought of as belonging to the same category.

The following section of this analysis focuses on a demographic analysis of those customers who chose an alternative gas supplier, selected a long-distance company other than AT&T and reported a preference for electricity choice. The analysis provides a description of the age, income and location results for the customers who have indicated that they prefer choice for their utility services. The analysis also includes a discussion of the demographic characteristics of the population that did not chose an alternative gas supplier, did not select a long-distance company other than AT&T and reported that they do not prefer a choice of electricity suppliers. There is a description of the age, income and location results for these customers who have indicated that they do not prefer choice for their utility services. Finally, there is a comparative analysis of the utility choice and no utility choice populations.

There are some interesting differences between the utility choice and no utility choice populations regarding their distribution across the age classifications. As might be expected, the Choice population is a younger population than the No Choice population. The magnitude of the difference is notable. The 34 and under group among the Choice population is almost proportionately twice as large as the No Choice population. Those customers who are less than 50 years old is proportionately more than double the No Choice population. There are 64.4% of the Choice population between the ages of 35 and 64 years old. There are 57.3% of the No Choice population who are 65 and older. This is proportionately the single largest category of ages among both of the populations. Almost 60% of the No Choice population are older than 65 years of age.

Age of customers who chose an alternative gas supplier, who chose an alternative long-distance company and prefer electricity choice

	Frequency	Percent
34 and under	61	9.5
35-49 years old	192	30.0
50-64 years old	220	34.4
65 and over	167	26.1

Age of customers who did not chose an alternative gas supplier, who did not chose an alternative long-distance company and do not prefer electricity choice

	Frequency	Percent
34 and under	4	4.9
35-49 years old	12	14.6
50-64 years old	19	23.2
65 and over	47	57.3

As was the case with age, there are important differences between the distribution of customers across income categories for those among the utility choice population as compared to the No Choice population. Generally, the Choice population represents higher income customers than the No Choice population. There are proportionately more than double the numbers of customers with annual household incomes less than $25,000 in the No Choice population as compared to the Choice population. Among the Choice population, there are 19.2% of the customers with annual household incomes of less than $25,000. Among the No Choice population, there are 41.6% of the customers with annual household incomes of less than $25,000. There are proportionately more than double the numbers of customers with annual household incomes of more than $50,000 among the Choice population as compared to the No Choice population. Among the Choice population, there are 50.3% of the customers with annual household incomes of greater than $50,000. Among the No Choice population, there are only 25% of the customers with annual household incomes of greater than $50,000.

Income of customers who chose an alternative gas supplier, who chose an alternative long-distance company and prefer electricity choice

	Frequency	Percent
Less than $10,500	18	3.1
$10,500 to $24,999	94	16.1
$25,000 to $49,999	178	30.5
$50,000 to $74,999	153	26.2
$75,000 to $100,000	75	12.8
Greater than $100,000	66	11.3

Income of customers who did not chose an alternative gas supplier, who did not chose an alternative long-distance company and do not prefer electricity choice

	Frequency	Percent
Less than $10,500	5	6.9
$10,500 to $24,999	25	34.7
$25,000 to $49,999	24	33.3
$50,000 to $74,999	8	11.1
$75,000 to $100,000	7	9.7
Greater than $100,000	3	4.2

There are only very minor differences in the distribution of customers across the location categories between the utility Choice and No Choice populations. The Choice population is slightly more suburban than the No Choice population. The No Choice population is slightly more rural than the Choice population.

Location of customers who chose an alternative gas supplier, who chose an alternative long-distance company and prefer electricity choice

	Frequency	Percent
Mainly Rural	87	13.7
Mainly Suburban	382	60.2
Mainly Urban	166	26.1

Location of customers who did not chose an alternative gas supplier, who did not chose an alternative long-distance company and do not prefer electricity choice

	Frequency	Percent
Mainly Rural	16	20.0
Mainly Suburban	44	55.0
Mainly Urban	20	25.0

As an aspect of the analysis, there was an attempt to identify the composite demographic characteristics of those customers who prefer utility choice as compared to the composite characteristics of those customers who do not prefer utility choice. This analysis was performed by identifying the age, income and location of each customer who responded that they chose an alternative gas supplier, chose an alternative long-distance company and prefers electricity choice. Likewise, the age, income and location was identified for each customer who responded that they did not chose an alternative gas supplier, did not chose an alternative long-distance company and did not prefer electricity choice.

As can be seen in the table below, the no utility choice population is fairly widely and evenly distributed across the demographic categories. There are few clusters of characteristics which mirror the results noted above regarding this population being older than the Choice population and with lower annual household incomes. The highest frequencies are found among three composite groups. There were 9 individuals who are 65 and over with annual household incomes of $10,500 to $24,999 whom live in mainly urban areas. There were 8 individuals who are 65 and over with annual household incomes of $10,500 to $24,999 whom live in mainly suburban areas. There were 8 individuals who are

65 and over with annual household incomes of $25,000 to $49,999 whom live in mainly suburban areas.

Composite Demographic Characteristics: Analysis of results from customers who did not chose an alternative gas supplier, did not chose an alternative long-distance company and do not prefer electricity choice.

34 and under	$25,000 to $49,999	Mainly Urban	1
34 and under	$50,000 to $74,999	Mainly Rural	1
34 and under	$50,000 to $74,999	Mainly Suburban	1
34 and under	Greater than $100,000	Mainly Suburban	1
35-49 years old	$10,500 to $24,999	Mainly Rural	1
35-49 years old	$10,500 to $24,999	Mainly Suburban	1
35-49 years old	$25,000 to $49,999	Mainly Suburban	2
35-49 years old	$25,000 to $49,999	Mainly Urban	1
35-49 years old	$50,000 to $74,999	Mainly Suburban	2
35-49 years old	$50,000 to $74,999	Mainly Urban	1
35-49 years old	$75,000 to $100,000	Mainly Suburban	3
35-49 years old	Greater than $100,000	Mainly Suburban	1
50-64 years old	Less than $10,500	Mainly Suburban	1
50-64 years old	$10,500 to $24,999	Mainly Suburban	2
50-64 years old	$25,000 to $49,999	Mainly Rural	2
50-64 years old	$25,000 to $49,999	Mainly Suburban	4
50-64 years old	$25,000 to $49,999	Mainly Urban	1
50-64 years old	$50,000 to $74,999	Mainly Rural	1
50-64 years old	$75,000 to $100,000	Mainly Suburban	2
50-64 years old	Greater than $100,000	Mainly Suburban	1
65 and over	Less than $10,500	Mainly Rural	3
65 and over	Less than $10,500	Mainly Suburban	1
65 and over	$10,500 to $24,999	Mainly Rural	3
65 and over	$10,500 to $24,999	Mainly Suburban	8
65 and over	$10,500 to $24,999	Mainly Urban	9
65 and over	$25,000 to $49,999	Mainly Rural	2
65 and over	$25,000 to $49,999	Mainly Suburban	8
65 and over	$25,000 to $49,999	Mainly Urban	3
65 and over	$50,000 to $74,999	Mainly Urban	1
65 and over	$75,000 to $100,000	Mainly Suburban	1
65 and over	$75,000 to $100,000	Mainly Urban	1

There are no clear results evidenced from the utility choice population. The three highest frequencies among this population are found for the 41 individuals who are 50-64 years old with annual household incomes of $50,000 to $74,999 who live in mainly suburban areas. There were 37 individuals who are 35-49 years old with annual household incomes of $50,000 to $74,999 that live in mainly suburban areas. There were 32 individuals who are 65 and over with annual household incomes of $25,000 to $49,999 whom live in mainly suburban areas.

Determination of Composite Demographic Characteristics: Analysis of results from customers who chose an alternative gas supplier, who chose an alternative long-distance company and prefer electricity choice.

34 and under	Less than $10,500	Mainly Urban	1
34 and under	$10,500 to $24,999	Mainly Rural	2
34 and under	$10,500 to $24,999	Mainly Suburban	2
34 and under	$10,500 to $24,999	Mainly Urban	1
34 and under	$25,000 to $49,999	Mainly Rural	3
34 and under	$25,000 to $49,999	Mainly Suburban	14
34 and under	$25,000 to $49,999	Mainly Urban	2
34 and under	$50,000 to $74,999	Mainly Rural	2
34 and under	$50,000 to $74,999	Mainly Suburban	10
34 and under	$50,000 to $74,999	Mainly Urban	3
34 and under	$75,000 to $100,000	Mainly Suburban	7
34 and under	$75,000 to $100,000	Mainly Urban	2
34 and under	Greater than $100,000	Mainly Suburban	4
35-49 years old	Less than $10,500	Mainly Urban	2
35-49 years old	$10,500 to $24,999	Mainly Suburban	9
35-49 years old	$10,500 to $24,999	Mainly Urban	1
35-49 years old	$25,000 to $49,999	Mainly Rural	12
35-49 years old	$25,000 to $49,999	Mainly Suburban	19
35-49 years old	$25,000 to $49,999	Mainly Urban	12
35-49 years old	$50,000 to $74,999	Mainly Rural	9
35-49 years old	$50,000 to $74,999	Mainly Suburban	37
35-49 years old	$50,000 to $74,999	Mainly Urban	17
35-49 years old	$75,000 to $100,000	Mainly Rural	9
35-49 years old	$75,000 to $100,000	Mainly Suburban	21
35-49 years old	$75,000 to $100,000	Mainly Urban	4
35-49 years old	Greater than $100,000	Mainly Rural	2
35-49 years old	Greater than $100,000	Mainly Suburban	18
35-49 years old	Greater than $100,000	Mainly Urban	4
50-64 years old	Less than $10,500	Mainly Rural	2
50-64years old	Less than $10,500	Mainly Suburban	1
50-64years old	Less than $10,500	Mainly Urban	4
50-64years old	$10,500 to $24,999	Mainly Rural	6
50-64years old	$10,500 to $24,999	Mainly Suburban	10
50-64years old	$10,500 to $24,999	Mainly Urban	12
50-64years old	$25,000 to $49,999	Mainly Rural	5
50-64years old	$25,000 to $49,999	Mainly Suburban	26
50-64years old	$25,000 to $49,999	Mainly Urban	20
50-64years old	$50,000 to $74,999	Mainly Rural	8
50-64years old	$50,000 to $74,999	Mainly Suburban	41
50-64years old	$50,000 to $74,999	Mainly Urban	11
50-64years old	$75,000 to $100,000	Mainly Rural	1
50-64years old	$75,000 to $100,000	Mainly Suburban	17
50-64years old	$75,000 to $100,000	Mainly Urban	4
50-64years old	Greater than $100,000	Mainly Rural	1
50-64years old	Greater than $100,000	Mainly Suburban	28
50-64years old	Greater than $100,000	Mainly Urban	3
65 and over	Less than $10,500	Mainly Rural	2
65 and over	Less than $10,500	Mainly Suburban	4
65 and over	Less than $10,500	Mainly Urban	2
65 and over	$10,500 to $24,999	Mainly Rural	10
65 and over	$10,500 to $24,999	Mainly Suburban	24
65 and over	$10,500 to $24,999	Mainly Urban	15
65 and over	$25,000 to $49,999	Mainly Rural	7
65 and over	$25,000 to $49,999	Mainly Suburban	32
65 and over	$25,000 to $49,999	Mainly Urban	21
65 and over	$50,000 to $74,999	Mainly Suburban	8
65 and over	$50,000 to $74,999	Mainly Urban	6
65 and over	$75,000 to $100,000	Mainly Rural	1
65 and over	$75,000 to $100,000	Mainly Suburban	8
65 and over	$75,000 to $100,000	Mainly Urban	1
65 and over	Greater than $100,000	Mainly Suburban	2
65 and over	Greater than $100,000	Mainly Urban	4

CONCLUSIONS

CUSTOMER AWARENESS, CONFUSION AND EDUCATION

Questions 1, 2 and 4 solicited information about customer awareness of the gas choice program, customer confusion about the program and the methods customers preferred to receive information about the program. Both the Columbia Gas of Ohio customers and the customers who had selected alternative suppliers demonstrated high levels of awareness of the program. There were 93.2% of Columbia Gas of Ohio customers who reported awareness of the program, while 98.3% of the customers who chose alternative suppliers reported awareness of the program. One would have anticipated that all of the customers having chosen an alternative supplier would have indicated awareness of the program. These are important results because they demonstrate that most of the customers who have remained with Columbia Gas of Ohio as their supplier have done so as a conscious decision, and not due to their not being aware that they have a choice of gas suppliers.

An analysis of the demographic variables offers additional insights into these results. For those customers who have selected an alternative supplier, their awareness of the program is high and it is high across all of the demographic characteristics. These customers have demonstrated an interest in the program that is apparent from the response rates to the survey. The response rate for the customers who have remained with Columbia Gas of Ohio was 15.7%. The response rate for those customers who have selected an alternative supplier was 31%. That the response rate for the customers who chose an alternative supplier was twice that of those who remained with Columbia Gas is a reflection of their greater interest in the program.

For those customers who have remained customers of Columbia Gas of Ohio, age did influence customer awareness. There was a linear relationship between age and awareness; as customer age increases, there is a corresponding increase in the awareness levels of the program. The lowest levels of awareness were among those customers who are 34 and under. It may be that those who are 34 and under are the least interested in devoting time to learn about the program.

For those customers who have remained customers of Columbia Gas of Ohio, awareness of the program is high across all of the income categories. For those customers with annual household incomes of less than $10,500, 93.9% were aware of the program. For those customers with annual household incomes of $10,500 to $24,999, there were 92.7% aware of the program. These results are important, because it is these income groups who could most benefit from a program that offered energy savings. They appear to be aware of the program and are making a decision not to switch. They are certainly customers who could benefit from targeted education. It would also be important to better understand why they are choosing not to switch to an alternative supplier.

Question 2 asked the respondents to identify their supplier of natural gas. Columbia Gas of Ohio segmented the customers into two groups before the samples were drawn. All of the customers who had selected an alternative supplier should have reported that their supplier of natural gas was an “alternative supplier.” For this customer group, there were 19.6% who had identified Columbia Gas of Ohio as their supplier of natural gas. It is possible that these customers are confused about their supplier, because they continue to receive a bill from Columbia Gas of Ohio. There were also 5.1% of these customers who do not know their supplier of natural gas. For those customers who are the best educated about the program and who have the greatest interest in the program, there are 24.7% who cannot accurately report from whom they are purchasing their gas supply. That a quarter of these customers are confused about this issue is an indication that customer education should continue as an important facet of the Choice program.

The Choice and No Choice customers offered remarkably similar responses as to how they would like to receive information about the program. Most of the customers indicated that they were interested in receiving information by more than one method. The four highest categories of responses for both groups were to receive information through the mail. Almost half of the No Choice respondents reported that they would like to receive information from bill inserts from the utility company, while almost 60% of the Choice customers offered this response. There were moderate numbers of responses indicating that they would like to receive information about the program through newspaper articles and through television news. Advertising was not perceived as a good method for receiving information. Among the lowest responses for both groups was telephone contact and personal contact. It is apparent from the results that most customers would prefer to receive information in a manner that permits them control over their time. They do not want to be personally contacted to receive information. Interestingly, only about 5% of the respondents indicated that they would like to receive information over the Internet.

PREFERENCE FOR GAS CHOICE

Question 3 in the survey solicited information from the customers about their preference for having a choice of natural gas suppliers. As would be expected, for those customers who had selected an alternative supplier of natural gas, 92.2% reported that they prefer having this choice. Their preference for choice was high across all of the demographic categories; almost all of the categories had response rates of over 90%. One might have expected that all of the customers who had made the choice would report a preference for choice. That 7.8% of these customers responded that they do not prefer choice could be an indication of their dissatisfaction with the program. Customer satisfaction with the choice program is an important area for further study.

For those customers who have remained with Columbia Gas of Ohio, there were 77.4% who reported a preference for natural gas choice. More than three-quarters of the customers who have not selected a supplier recognize that there is some benefit to having this choice. It may be that they would like the option of making this selection some time in the future. It may also be that they believe that competition could improve customer service, reliability, prices, and other features of their service from Columbia Gas of Ohio. Those Columbia Gas of Ohio customers who are 65 and older were less likely to prefer choice that those who are 49 and younger. The customers who are 65 and older are also more aware of the Choice program than any of the other age categories. To the extent there is interest in educating customers as to why switching is beneficial, this is an age category that would benefit from this targeted effort. They are aware of the program, but are not convinced that they should select an alternative supplier. Those Columbia Gas of Ohio customers with incomes of more than $100,000 are more likely to prefer choice than those with incomes of less than $25,000. As stated earlier, to the extent that there are savings that accrue from making a choice, those customers who are in the lowest income categories would benefit most from making a choice of an alternative supplier. It could be important to target education efforts for these customers.

PREFERENCE FOR ELECTRICITY CHOICE

Questions 5 and 6 were designed to solicit information regarding customer preference for electricity choice. The research also focused on whether customer experience in gas choice and long-distance telephone choice had an influence or was predictive of customer preference for electricity choice. As one might expect, those customers who have selected an alternative gas supplier prefer choice at a higher rate than those customers who have remained with Columbia Gas of Ohio. There are 85.3% of the Choice customers who prefer electricity choice, while 72.8% of the Columbia Gas of Ohio customers prefer electricity choice. Interestingly, there are 77.4% of the Columbia Gas of Ohio customers who report that they prefer gas choice. As noted earlier, even though these customers have not made the selection themselves, they recognize a benefit to competition in the gas market. This perception seems to be applied to a potential electricity market, as well. Among both the Choice and No Choice customers, the majority report a preference for electricity choice.

Among the total population of customers in the Columbia Gas of Ohio service territory, the highest preference for electricity choice was reported by customers who are 49 and under. The lowest response was offered by those customers who are 65 and over. These results mirror the results reported for the preference for gas choice. Likewise, the lowest preference for electricity was reported by those customers with annual household incomes of under $25,000. To the extent that there is an interest in educating customers about an electricity program, and encouraging participation of customers in an electricity market, there is going to need to be a concerted effort to educate customers who are older than 65 and who have annual household incomes of under $25,000.

Cost savings is a major factor for both the gas choice and gas no choice customers regarding a consideration of switching to an alternative electricity supplier. Among the choice respondents, there were 74% that selected some percentage of savings as one of their three highest choices. There were 62% of the No Choice respondents who selected the same percentage of savings as their first three selections. Both groups reported as their highest selection that it would require an 11-15% savings from their current bill to get them to switch to an alternative electricity supplier. Of the No Choice customers, there were 61.7% who indicated that it would require between 5% and 20% of savings from their current bill to motivate a switch to an alternative electricity supplier. Among the Choice customers, there were 74.3% who reported that it would require between a 5% and 20% savings to make this change. For both the Choice and No Choice customers, very few would consider switching for savings of less than 5%.

Among the No Choice customers, 15.8% indicated that they would not switch electricity suppliers. This was twice the number of Choice customers (6.9%) who indicated that they would not switch. Likewise, there were 6.4% of the No Choice customers who indicated that price would not be a factor for them in their consideration to switch electricity suppliers, while 3.5% of the Choice customers offered this response.

The final analysis focused on whether customer experience with having chosen an alternative gas supplier and an alternative long-distance telephone company had influenced customer preference for a competitive choice of electricity companies. In other words, was previous customer experience with utility choices an influence on customer preference for competitive choice for electricity service?

Having made a choice of an alternative supplier of natural gas is predictive of preferring a choice of electricity suppliers. Additionally, having made a choice of an alternative long-distance provider is predictive of preferring a choice of electricity suppliers. Interestingly, there is no interactive effect between having chosen a natural gas supplier and an alternative long-distance provider on preference for electricity choice. In other words, having chosen a gas supplier in combination with having selected an alternative long-distance provider is not predictive of whether the customer will prefer electricity choice.

There are a number of possible explanations for this result. First, the customers who are selecting alternative natural gas suppliers and the customers who are selecting alternative long-distance companies are not the same people. The analysis considered that there might be a group of people in the population who prefer choice for their utility services. The evidence does not support this conclusion. A second possible explanation of this result is that customers do not place natural gas service, electricity service and long-distance telephone service into a meaningful single category, i.e., utility services. It is possible that while for those people involved in the regulation of these industries, there is a relationship between these services, for the consumer, these are three disparate services that are not thought of belonging to the same category.

There was also a demographic analysis performed of those customers who chose an alternative gas supplier, selected a long-distance company other than AT&T and reported a preference for electricity choice. The analysis provides a description of the age, income and location results for the customers who have indicated that they prefer choice for their utility services. The analysis also includes a discussion of the demographic characteristics of the population that did not chose an alternative gas supplier, did not select a long-distance company other than AT&T and reported that they do not prefer a choice of electricity suppliers. There is a description of the age, income and location results for these customers who have indicated that they do not prefer choice for their utility services. Finally, there is a comparative analysis of the utility Choice and No utility Choice populations.

There are some interesting differences between the utility Choice and No utility Choice populations regarding their distribution across the age classifications. As might be expected, the Choice population is a younger population than the No Choice population. The magnitude of the difference is notable. The 34 and under group among the Choice population is almost proportionately twice as large as the No Choice population. Those customers who are less than 50 years old are proportionately more than double the No Choice population. There are 64.4% of the Choice population between the ages of 35 and 64 years old. There are 57.3% of the No Choice population who are 65 and older. This is proportionately the single largest category of ages among both of the populations. Almost 60% of the No Choice population is older than 65 years of age.

As was the case with age, there are important differences between the distribution of customers across income categories for those among the utility Choice population as compared to the No Choice population. Generally, the Choice population represents higher income customers than the No Choice population. There are proportionately more than double the numbers of customers with annual household incomes less than $25,000 in the

No Choice population as compared to the Choice population. Among the Choice population, there are 19.2% of the customers with annual household incomes of less than $25,000. Among the No Choice population, there are 41.6% of the customers with annual household incomes of less than $25,000. There are proportionately more than double the numbers of customers with annual household incomes of more than $50,000 among the Choice population as compared to the No Choice population. Among the Choice population, there are 50.3% of the customers with annual household incomes of greater than $50,000. Among the No Choice population, there are 25% of the customers with annual household incomes of greater than $50,000.

There are only very minor differences in the distribution of customers across the location categories between the utility Choice and No Choice populations. The Choice population is slightly more suburban than the No Choice population. The No Choice population is slightly more rural than the Choice population.

The demographic results reported for the utility Choice and No Choice populations reinforce the results previously reported for customer preference for gas choice, long-distance telephone company choice and electricity choice. Lower income and elderly customers are the least likely groups to participate in these programs. These are also the customers who could most benefit from these programs, because the savings would accrue to those customers who likely have the smallest disposable incomes. It is imperative that customer education programs be targeted to these groups and offer sufficient information to assist these customers in evaluating these markets or potential markets. These customers are generally aware of the programs; they require information that would motivate them to switch to an alternative supplier. It would also be important to perform additional research on these populations to arrive at a better understanding of the perceived impediments for their participation in these programs. There needs to be a better understanding of why these customers are the least likely to participate.

SECTION 6
CUSTOMER SURVEYS
CINCINNATI GAS & ELECTRIC

INTRODUCTION

On June 18, 1998, the Commission ordered The Cincinnati Gas and Electric Company to undertake a second public education campaign for its customer choice program for natural gas. The first of such campaigns had been executed in the late summer of 1997. Surveying done by the Commission staff in the spring of 1998 indicated a lower awareness and participation rate for The Cincinnati Gas and Electric Company than in the other two pilot programs of Columbia Gas of Ohio and East Ohio Gas. In order to ensure that lower participation rates were a function of customers choosing not to participate rather than not participating out of a lack of understanding about the program, the Commission required CG&E to again endeavor to raise awareness rates of the program in the CG&E service territory.

Staff surveying in early 1998 indicated that 56% of the customers in The Cincinnati Gas and Electric Company's service territory were aware of the choice program. The Cincinnati Gas and Electric Company surveying in August 1998 showed a 39% awareness rate.

The Cincinnati Gas and Electric Company's second education campaign took place between September 1998 and February 1999. The campaign focused on print communications including one direct mail piece sent to all CG&E customers in Ohio, a series of print advertisements and a series of bill inserts.

The current study of residential customers in The Cincinnati Gas and Electric Company service territory is for the exclusive purpose of determining whether the level of awareness and understanding of the program has increased and, therefore, determining if the education campaign was successful.

Based on the results of this survey, staff will recommend to the Commission that The Cincinnati Gas and Electric Company be found to have run an effective and reasonable campaign, that The Cincinnati Gas and Electric Company utilized its public education funding appropriately or that The Cincinnati Gas and Electric Company should be required to undertake further education activities.

METHODOLOGY

This section of the report describes the basic methodologies employed in The Cincinnati Gas and Electric Company customer research project. This report presents the results from the study of the residential customers who are eligible to participate in the Customer Choice Program. For a complete discussion and explanation of each of these methodological techniques, procedures and issues, please refer to the Methodology chapter in <u>Public Input Research of the Customers in The Cincinnati Bell Telephone Company Service Territory</u>, prepared by Commission staff and published in November, 1997. Based primarily on available resources, it was determined that a cold mail survey would be employed as the data and information collection technique for this project. A survey was designed for residential customers eligible for participation in the Customer Choice Program. The intent of the study is to provide information to staff and the Commission for the purpose of evaluating the effectiveness of the customer education programs, both in terms of the substantive content and the means employed for the dissemination of the information.

There have been two previous studies conducted of residential customers eligible for the customer choice program in The Cincinnati Gas and Electric Company service territory. A residential survey had been administered in The Cincinnati Gas and Electric Company service territory in January 1998. The purpose of the survey research was to perform an evaluation of The Cincinnati Gas and Electric Company Customer Choice Program from the perspective of the residential customers. A follow-up study was administered on February 9, 1998 to offer some longitudinal perspective regarding the core issues of the research and to measure customer satisfaction with the Customer Choice Program.

The current study is based on a survey instrument that contains eight closed-ended questions. The survey is included at the end of this section of the report. The respondents were guaranteed anonymity, and there were no identifying marks of any kind on the surveys or the envelopes. The residential surveys were mailed on January 28, 1999. A deadline date was placed on the survey to encourage a rapid return of the surveys. Given the time constraints involved in evaluating the Customer Choice Program, a deadline of February 19, 1999 was established and printed on the survey. The first surveys were received on February 3, 1999. Every attempt was made to accept as many surveys as possible before closing the sample. The decision to end the acceptance of surveys is determined by a consideration of the following issues: achieving the minimum sample size requirement for the specified confidence level and margin of error; the recognition of the customers' efforts in completing and returning the surveys; the value of the customers' perceptions and opinions in the evaluation and implementation of policies and programs; and the time required to code, enter and analyze the data and information. The last residential surveys were accepted on February 24, 1999.

The study involves the eligible participants of The Cincinnati Gas and Electric Company's Customer Choice Pilot Program. The study populations are defined as the eligible residential customers in The Cincinnati Gas and Electric Company's service area. The total number of residential customers in this population is 326,314. This is the universe from which the sample was drawn and does not include any of the PIPP customers in The Cincinnati Gas and Electric Company's service territory. It was decided that in order to achieve the research goals defined for this project, the survey instruments would be administered to a random sample of this population. Consistent with the conventions in social science research, it was decided that the research results should be based on a confidence interval of 95% and a margin of error of 5%. It is necessary to define a confidence interval and margin of error in order to determine the required size of the sample. Employing these criteria and assuming an infinite population, the sample size for the residential population is 384.2 people. To achieve a return of 385 respondents, it is necessary to determine a response rate for the residential population. The respondent numbers in each case were rounded up to 400 for the purpose of determining the size of the mailing. Based upon experience, a minimum response rate of 10% was assumed for the population for a cold mail survey with no pre-administration or post-administration contacts. Consequently, it was determined that 4,000 residential surveys would be mailed to the population in order to meet the research goals.

Through a coordinated effort between The Cincinnati Gas and Electric Company and the PUCO staff, a random sample of 4,000 residential customers was drawn from a sample frame defined by the Company as all eligible residential customers in the Customer Choice Program. There are no PIPP customers in the sample, since these customers are not able to make a choice.

There were 1,058 valid residential surveys completed and returned by residential customers. Of the 4,000 residential surveys mailed, there were 191 surveys returned with bad addresses. There were eight invalid surveys. Invalid surveys were surveys that were returned with Question 1 not having been answered. Since this was a filtering question that determined whether they should respond to the remaining questions on the survey, these surveys could not be used. Response rates are the percentage of the total number of respondents sent questionnaires that complete and return the questionnaire:

$$\text{Response Rate} = \frac{\text{number of completed questionnaires}}{\text{number of eligible respondents}}$$

Where the number of eligible respondents is equal to the number of questionnaires sent minus the number returned because of incorrect addresses and invalid surveys. The response rate for the residential survey is 27.83%.

With a residential sample size of 1,058 and a level of confidence of 95%, the residential data presented in this report has a margin of error of no greater than plus or minus 3.1%. This margin of error is calculated for those questions in which there are 2 selections offered to the respondent, such as the "Yes" and "No" choices that appear on the survey. For those questions that include larger numbers of choices, the margin of error is smaller. As the number of choices increases, the margin of error decreases.

The data and information from the surveys were coded and entered into a spreadsheet for analysis. A frequency and statistical analysis of the data was performed employing SPSS. The closed-ended questions have been coded and were analyzed employing various quantitative techniques.

The survey focuses on residential customers' experiences with the Customer Choice Program. This experience includes learning about the program, making decisions about suppliers, and working with The Cincinnati Gas and Electric Company and, in some cases, a new supplier of natural gas. If customers were first learning about the program through the receipt of the survey, their responses to the survey questions would not be appropriate. If customers responded that they were not aware of the program in Question 1, they were asked to not complete the remaining questions in the survey, but to return it. These customers make up the numbers who are not aware of the customer choice program.

There were 285 customers who indicated that they were not aware of the Customer Choice Program. Of the 1,058 residential customers who completed and returned the survey, there were 773 residential customers who were aware of the Customer Choice Program before they received the survey. It is these 773 residential customers who responded to the entire survey and whose responses are the focus of this study.

The analytical approach employed and presented in this study of The Cincinnati Gas and Electric Company Customer Choice Program participants includes both a frequency analysis and also a comparison to the baseline and follow-up survey questions. The analysis compares the current survey questions to the most recent data from the previous studies. There were different questions asked in the baseline and follow-up studies. Only a frequency analysis is performed on those questions that are being asked for the first time.

The presentation of the frequency analysis includes the questions verbatim as they appeared on the current, baseline and follow-up surveys. In each case, the number of respondents answering the question is provided, as well as the percentage this response represents of the total number of respondents who completed and returned the survey. The frequencies are presented for each response for each question and the percentage that response represents of the total number of people who answered that particular question. The comparative analysis of the questions focuses on the similarities and differences in response frequencies between the two surveys.

Analysis

CUSTOMER AWARENESS OF THE CHOICE PROGRAM

1. Are you aware of CG&E's natural gas customer choice program?

- ***Yes***
- ***No***

(If you selected "No," please stop here and drop your survey in the mail.)

As described in the methodology, Question 1 is a filtering question and determined which respondents would complete the remaining questions in the survey. Question 1 is also a critical element of the assessment of the customer education programs, because it indicates whether the respondent was aware of the program.

The total number of customers who responded to the survey is 1,058. Of the total number of respondents, 773 or 73.1% of the respondents indicated they are aware of the natural gas customer choice program, while 285 or 26.9% indicated they are not aware of the program.

Are you aware of CG&E's natural gas customer choice program?

	Frequency	**Percentage**
Yes	773	73.1
No	285	26.9
Total	1058	100.0

Question 1 may be compared to Question 3 from the follow-up study.

Customer Awareness: Comparison to Previous Study

3. If you are a Percentage of Income Payment Plan (PIPP) customer or if you are not aware that you are able to choose between The Cincinnati Gas and Electric Company and other natural gas suppliers, please check the appropriate box.

- ***Not aware of choice***
- ***PIPP customer***

There were 337 or 44.7% of the total 754 residential respondents to the survey who identified themselves as customers "Not Aware of Choice."

In the follow-up survey, customers were asked to identify whether they were not aware of a choice in natural gas suppliers or whether they were PIPP customers. The question was asked both as a filter to separate the 46 PIPP customers and the 337 unaware customers from the rest of the 371 aware respondents, and to determine customer awareness of the program. In the follow-up survey, the random sample that was used included PIPP customers. PIPP customers are not eligible for the choice program, therefore, these customers were asked to identify themselves so they would not be counted as eligible customers of the program in the survey analysis. In the current study, PIPP customers were not included in the random sample and, therefore, they were not included in Question 1. In both cases, the unaware customers did not respond to the remaining questions in the survey.

Proportionately, compared to the follow-up study, the results of the current study show a substantial increase in the number of respondents that indicated that they are aware of the customer choice program. In the follow study, there were 49.2% of the customers who were aware of the program. In the current study, there are 73.1% of the respondents aware of the program. This increase in awareness could be a result of more effective customer education efforts by The Cincinnati Gas and Electric Company. There remain more than 25% of the residential customers who are not aware of the choice program. Thus, for more than a quarter of the customers, there is no customer choice.

THE WAYS CUSTOMERS LEARNED ABOUT THE PROGRAM

2. How did you learn of the customer choice program? (Check all that apply.)

- ***Bill inserts***
- ***Direct mail***
- ***Friends, family and other customers***
- ***Newspapers***
- ***Radio or Television***
- ***None of the above choices***

Question 2 was asked to assist in evaluating which education approaches were most effective in delivering information to customers. Of the 773 aware respondents, 755 provided a response to Question 2. Of these 755 respondents, 366 provided one response, 238 provided 2 responses, 120 provided 3 responses, 25 provided 4 responses, and 6 provided 5 responses. Of the 755 customers that provided responses to Question 2, 476 or 63.0% indicated they learned about the program from “bill inserts.” “Direct mail” was selected by 194 or 25.7% of the respondents, “Friends, family and other customers” was selected by 85 or 11.3% of the respondents, “Newspapers” was selected by 279 or 37.0% of the respondents, “Radio or television” was selected by 268 or 35.5% of the respondents, and “none of the above” was selected by 30 or 4.0% of the respondents.

How did you learn of the customer choice program?

	Frequency	**Percentage**
Bill inserts	476	63.0
Direct mail	194	25.7
Friends, family and other customers	85	11.3
Newspaper	279	37.0
Radio or Television	268	35.5
None of the above choices	30	4.0

Question 2 may be compared to Question 10 from the follow-up study.

Learning About the Program: Comparison to Previous Study

10. ***How would you like to receive information about your natural gas choices? Please check all that apply.***

- ***Bill insert***
- ***Newspaper articles***
- ***Advertising on radio***
- ***1-800 phone hotline***
- ***PUCO Internet site***
- ***Direct mail***
- ***Advertising in newspapers***
- ***TV advertising and news***
- ***Public meetings***
- ***Other***

Question 10 was both a closed-ended and open-ended question. The frequency represents the number of times the above choices were selected by a respondent and the percentage is calculated based on the 309 residential customers who answered this question. For the closed-ended part of the question, 238 or 77.0% of the residential customers indicated that "Direct mail" was their preference as to how they would like to receive information about their natural gas choices. Continuing, there were 164 or 53.1% of the customers who indicated "Bill insert," 61 or 19.7% indicated "Newspaper articles," 52 or 16.8% indicated "1-800 phone hotline," 50 or 16.2% indicated "TV Advertising and news," 46 or 14.9% indicated "Advertising in newspapers," 45 or 14.6% indicated "PUCO Internet site," 24 or 7.8% indicated "Advertising on radio," and 19 or 6.1% indicated "Public meetings" as the ways they would like to receive information about their natural gas choices. There were no customers who offered an "Other" response as to their preference regarding how they would like to receive information. The following table summarizes the customer responses to the closed-ended portion of Question 10.

Ways to receive information

	Frequency	Percentage
Direct mail	238	77.0
Bill insert	164	53.1
Newspaper articles	61	19.7
1-800 phone hotline	52	16.8
TV advertising and news	50	16.2
Advertising in newspapers	46	14.9
PUCO Internet site	45	14.6
Advertising on radio	24	7.8
Public meetings	19	6.1
Other	0	0.0

In the follow-up CG&E survey, the question was written to find out how the customers would ***like*** to receive information about the program. In the current survey, respondents were asked to identify how they learned of the choice program. The choices offered to the respondents in the current survey have changed from the follow-up survey. The choices that have remained the same are “bill inserts” and “direct mail”. Various forms of previous choices were used in the current survey; “newspaper articles” and “advertising in newspapers” were changed to “newspaper,” “advertising on radio” and “TV advertising and news” were changed to “radio and television,” and “other” was changed to “none of the above choices.” “PUCO Internet site,” “public meetings,” and “1-800 phone hotline” were deleted as choices in the current survey, while “friends, family and other customers” were added as a choice.

There are some substantial differences between the results of the current study and the follow-up study. In the follow-up study, more than three-quarters of the respondents indicated that they wanted to receive information through direct mail. In the current study, that choice dropped to the fourth choice and was selected by only one-quarter of the respondents as the way they learned of the program. “Bill inserts” was the most frequently indicated choice in the current study and was proportionately higher than in the earlier follow-up study. The interest in “Newspapers” as a way to learn about the program has almost proportionately doubled from the earlier follow-up study. “Newspapers” became the second most frequently reported choice as the way the customers learned about the program. As compared to the earlier selections of “Television” (“TV advertising and news”) and “Radio” (“Advertising on radio”), the current choice of “Radio or Television” demonstrated an increase in frequency. Only 4% of the current respondents did not learn about the program from the choices listed. There also appeared to be proportionately larger numbers of people who relied on multiple ways to learn about the program, and the choices were more evenly distributed across the categories than in the earlier study.

CUSTOMER PERCEPTIONS OF ORGANIZATIONS PROVIDING INFORMATION ABOUT THE PROGRAM

3. Who has provided you with information about the natural gas choice program? (Check all that apply.)

- ***CG&E***
- ***Friends, family and other customers***
- ***Marketer or supplier***
- ***Ohio Consumers’ Counsel (OCC)***
- ***Public Utilities Commission of Ohio (PUCO)***
- ***None of the above choices***

Question 3 was asked to assist in evaluating the education program by identifying which organizations were effective in delivering information to customers.

Of the 773 aware respondents, 748 provided a response to Question 3. Of these 748 respondents, 496 provided one response, 188 provided 2 responses, 52 provided 3 responses, and 12 provided 4 responses. Of the 748 respondents that answered Question 3, 569 or 76.1% indicated “CG&E” provided them with information about the gas choice program. “Friends, family and other customers” was selected by 69 or 9.2%, “Marketer or supplier” was selected by 166 or 22.2%, “Ohio Consumers’ Counsel (OCC),” was selected by 43 or 5.7%, “Public Utilities Commission of Ohio (PUCO)” was selected by 145 or 19.4%, and “none of the above” was selected by 84 or 11.2%.

Who has provided you with information about the natural gas choice program?

	Frequency	Percentage
CG&E	569	76.1
Friends, family and other customers	69	9.2
Marketer or supplier	166	22.2
Ohio Consumers' Counsel (OCC)	43	5.7
Public Utilities Commission of Ohio (PUCO)	145	19.4
None of the above choices	84	11.2

Question 3 may be compared to Question 10 from the baseline study.

Organizations Providing Information: Comparison to Previous Study

10. Who has provided you with the most useful information that has helped or is helping you make your decision about a natural gas supplier? Please check as any choices as you like.

- ***The Cincinnati Gas and Electric Company***
- ***Friends, family, other customers***
- ***Local government***
- ***Natural gas suppliers***
- ***Ohio Consumers' Counsel***
- ***Public Utilities Commission of Ohio***
- ***No one***
- ***Other***

Question 10 was both a closed-ended and open-ended question. Of the 312 aware residential customers, 247 or 79.2% answered this question. The frequency represents the number of times the above choices were selected by a respondent and the percentage is calculated based on the number of customers that answered the question. For the closed-ended part of the question, 121 or 49.0% indicated "No one" had provided the most useful information. Continuing, there were 103 or 41.7% of the respondents that indicated "The Cincinnati Gas and Electric Company," 29 or 11.7% indicated "Public Utilities Commission of Ohio," 20 or 8.1% indicated "Natural gas suppliers," 15 or 6.1% indicated "Friends, family, other customers," 4 or 1.6% indicated the "Ohio Consumers' Counsel," 4 or 1.6% selected "Other," and 2 or 0.8% selected "Local government" as a provider of the most useful information. The following table summarizes the customer responses to the closed-ended portion of Question 10.

Who Has Provided the Most Useful Information

	Frequency	Percentage
No one	121	49.0
The Cincinnati Gas and Electric Company	103	41.7
Public Utilities Commission of Ohio	29	11.7
Natural gas suppliers	20	8.1
Friends, family, other customers	15	6.1
Ohio Consumers' Counsel	4	1.6
Other	4	1.6
Local government	2	0.8

In the baseline survey, Question 10 was asked so that the respondents would have to make a decision as to who provided them with the most useful information. The question has been revised in the current survey to find out simply who has provided them with any information regarding the choice program.

The choices provided have also been revised. In the baseline survey, "local government" was listed as a choice. In the follow-up survey, it was removed. "Natural gas suppliers" was changed to "marketer or supplier". Additionally, "no one" and "other" were deleted and replaced with "none of the above choices." This change was made to eliminate any open-ended responses.

From the time of the baseline study to the current study, there have been some dramatic changes in customer perceptions as to who has provided them with information about the program. In the baseline study, the highest proportion of customers indicated that "No one" had provided them with the most useful information. In the current study, the smallest proportion of customers (11.2%) indicated that none of the above choices had provided them with information about the program. In the earlier baseline study less than half of the customers (41.7%) identified CG&E as the most useful source of information. In the current study, more than three-quarters of the customers (76.1%) have identified CG&E as a source of information about the program. The Company's influence in educating customers has increased considerably from the respondents' perspectives. The perceived role in educating customers for the "Marketers or suppliers," the OCC and the PUCO have all increased from the earlier baseline study. "Marketers or suppliers" experienced the most marked increase, from 8.1% to 22.2%. The PUCO increased from 11.7% to 19.4% and the OCC increased from 1.6% to 5.7%. As compared to CG&E, all of the organizations are perceived to play small roles in the education of customers. The drop off from CG&E to the next highest frequency (Marketer or supplier) is over 50 percentage points.

CUSTOMER AWARENESS OF *APPLES TO APPLES* CHART

4. Are you aware of the PUCO's Apples to Apples price comparison chart?

- ***Yes***
- ***No***

Question 4 was asked to assist in determining the perceived role of the *Apples to Apples* comparison chart in educating customers about the program. Of the 773 aware respondents, 748 answered Question 4. Of these 748 respondents, 200 or 26.7% indicated that they are aware of the PUCO's *Apples to Apples* price comparison chart, whereas 548 or 73.3% indicated they are not aware.

Are you aware of the PUCO's *Apples to Apples* price comparison chart?

	Frequency	Percentage
Yes	200	26.7
No	548	73.3

Question 4 may be compared to Question 8 from the follow-up study.

Awareness of *Apples to Apples* Chart: Comparison to Previous Study

8. Are you aware of the PUCO's Apples to Apples natural gas marketer's price comparison chart?

- ***Yes***
- ***No***

If you answered YES, how would you improve the comparison chart and make it more useful?

Question 8 was both a closed-ended and open-ended question. The frequency represents the number of times the above choices were selected by a respondent and the percentage is calculated based on the 339 residential customers who responded. For the closed-ended part of the question, 311 or 91.7% of the respondents reported "No," that they were not aware of the PUCO's *Apples to Apples* natural gas marketer's comparison chart. Only 28 or 8.3% of the respondents were aware of the PUCO's *Apples to Apples* comparison chart.

This question was originally written in two parts, a closed-ended portion and an open-ended portion. In the current survey, it was changed to only a closed-ended question.

In the current survey, the words "natural gas marketer's" have been deleted. The open-ended portion of the question that asked the respondents to provide suggestions for improving the comparison chart has been removed.

There has been a dramatic change in the number of customers who are aware of the *Apples to Apples* chart that is prepared and distributed by the PUCO. The proportionate number of customers who are aware of the chart has tripled from the time of the earlier follow-up study from 8.3% to 26.7%. While a substantially larger number of customers are aware of the price comparison chart, there remain three-quarters of the customers who are not aware of the *Apples to Apples* chart.

CUSTOMER UNDERSTANDING OF THE CHOICE PROGRAM

5. How well do you understand the natural gas choice program?

- ***Good understanding***
- **Somewhat understand**
- ***Do not understand***

Question 5 was asked to assess the effectiveness of the customer education program.

Of the 773 aware respondents, 751 answered Question 5. Of these 751 respondents, 111 or 14.8% selected “good understanding,” 427 or 56.9% selected “somewhat understand,” and 213 or 28.4% selected “do not understand.”

How well do you understand the natural gas choice program?

	Frequency	Percentage
Good understanding	111	14.8
Somewhat understand	427	56.9
Do not understand	213	28.4

About half of the respondents report a moderate understanding of the program. When comparing those customers who indicate that they have a good understanding of the program to those who state that they do not understand the program, there are approximately twice the proportionate number who do not understand. More than one-quarter of the respondents report that they do not understand the program.

REASONS FOR NOT HAVING MADE A CHOICE OF NEW SUPPLIER

6. Have you chosen a supplier for your natural gas other than CG&E?

- ***Yes***
- ***No***

Question 6 was asked to determine the number of respondents who have chosen a supplier other than CG&E. Question 6 also will help identify some of the reasons why customers have not selected a supplier and what role education may play underlying these reasons.

Of the 773 aware respondents, 762 answered Question 6. Of these 762 respondents, 666 or 87.4% selected “no,” whereas 96 or 12.6% selected “yes,” they had chosen a supplier other than CG&E.

Have you chosen a supplier for your natural gas other than CG&E?

	Frequency	Percentage
Yes	96	12.6
No	666	87.4

If no, why not? (check all that apply.)

- ***Don't know how to compare offers***
- ***Don't think I can save money***
- ***Satisfied with current supplier***
- ***Skeptical about benefits of the program***
- ***Want more information about program***
- ***Worried about errors in changing service & billing***
- ***Worried about safety and reliability***
- ***None of the above choices***

Of the 773 aware respondents, 666 responded that they have not chosen a gas supplier other than CG&E. Of those 666 respondents, 656 provided a response as to why they have not chosen another gas supplier. Of the 656 respondents, 201 provided one response, 155 provided 2 responses, 139 provided 3 responses, 83 provided 4 responses, 52 provided 5 responses, 17 provided 6 responses, and 9 provided 7 responses.

Of the 656 customers that provided a response as to why they have not chosen a gas supplier other than CG&E, 292 or 44.5% selected "Don't know how to compare offers," 155 or 23.6% selected "Don't think I can save money," 310 or 47.3% selected "Satisfied with current supplier," 270 or 41.2% selected "Skeptical about benefits of the program," 293 or 44.7% selected "Want more information about program," 170 or 25.9% selected "Worried about errors in changing service & billing," 174 or 26.5% selected "Worried about safety and reliability," and 21 or 3.2% selected "none of the above."

If no, why not?

	Frequency	Percentage
Don't know how to compare offers	292	44.5
Don't think I can save money	155	23.6
Satisfied with current supplier	310	47.3
Skeptical about benefits of the program	270	41.2
Want more information about program	293	44.7
Worried about errors in changing service & billing	170	25.9
Worried about safety and reliability	174	26.5
None of the above choices	21	3.2

The most frequently identified reason for not having chosen a supplier other than CG&E is that customers are satisfied with their current supplier. Almost half of the respondents have remained with CG&E, because they are satisfied with CG&E. The next highest responses explaining why customers have not chosen is that they want more information about the program (44.7%), they don't know how to compare offers (44.5%), and they are skeptical about the benefits of the program (41.2%). All three of these categories are related to customer education; the responses indicate a need for more customer education. A second tier of responses entailed the customers being worried about safety and reliability (26.5%) and about errors in changing service and billing, and not thinking that they could save money on the program (23.6%).

CUSTOMER UNDERSTANDING OF CHOICE PROGRAM: GAS DELIVERY

7. If I choose another supplier for my natural gas, CG&E will continue to deliver the gas to my home.

- ***Agree***
- ***Disagree***
- ***Don't know***

Question 7 was asked to assist in evaluating the customer education program. How the customer responds to this question offers some insight into their level of understanding of one of the most important features of the program.

Of the 773 aware respondents, 758 responded to Question 7. Of the 758 customers, 514 or 67.8% reported that they "Agree" with the statement, 15 or 2.0% "disagree" with the statement and 229 or 30.2% reported that they "don't know."

If I choose another supplier for my natural gas, CG&E will continue to deliver the gas to my home.

	Frequency	Percentage
Agree	514	67.8
Disagree	15	2.0
Don't know	229	30.2

The results of Question 7 indicated that there remains some confusion about an important feature of the choice program. While most customers understand this aspect of the program, there remain a third of the respondents who do not know whether their gas will be transported by CG&E.

CUSTOMER UNDERSTANDING OF CHOICE PROGRAM: SAFETY AND RELIABILITY

8. If I choose another supplier, CG&E will still be responsible for my service safety and reliability.

Agree
Disagree
Don't know

Question 8 was asked to assist in evaluating the customer education program. How the customer responds to this question offers some insight into their level of understanding of one of the most important features of the program.

Of the 773 aware respondents, 758 answered Question 8. Of the 758 respondents, 407 or 53.7% "Agree" with the statement, 34 or 4.5% "Disagree" with the statement and 317 or 41.8% reported that they "don't know."

If I choose another supplier, CG&E will still be responsible for my service safety and reliability.

	Frequency	Percentage
Agree	407	53.7
Disagree	34	4.5
Don't know	317	41.8

In some respects, Question 8 is a more important aspect of the program than that identified in Question 7. Safety and reliability are among the most important considerations by customers when making a decision about a supplier. The results of Question 8 indicate that there remains some confusion about this element of the choice program. While approximately half of the customers understand this aspect of the program, there remain a very large number (41.8%) of the respondents who do not know whether CG&E will remain responsible for their service safety and reliability.

CONCLUSIONS

The results of this study indicate that there has been a dramatic improvement in the customer education efforts regarding the natural gas choice program among residential customers in The Cincinnati Gas and Electric Company service territory. The study results also demonstrate that the role of The Cincinnati Gas and Electric Company in these education efforts has also greatly improved. Both of these conclusions are based on customer perceptions and the improvements are measured from the time of the baseline and follow-up studies administered in 1998. While customers have a better understanding of the program than they had one year ago, there still remains confusion about some very important features of the program, as well as in the program in general. There is certainly room for improvement in customer education on the part of the Company and the other organizations that are participating in customer education efforts. To the extent that the PUCO's *Apples to Apples* chart is an important educational approach for residential customers, there has been an increase in the number of customers who are aware of the chart. Again, there is room for improvement in this regard as only about a quarter of the customers are aware of the chart.

The proportionate number of customers aware of customer choice program has increased from 49.2% in the follow-up study to 73.1% in the current study. There remain more than 25% of the residential customers who are not aware of the choice program. Thus, for more than a quarter of the customers, there is no customer choice.

Bill inserts was the most frequently reported choice indicating the way customers learned of the program. Only 4% of the current respondents did not learn about the program from the choices listed. There also appeared to be proportionately larger numbers of people who relied on multiple ways to learn about the program, and the choices were more evenly distributed across the categories than in the earlier study.

In the baseline study, the highest proportion of customers indicated that "No one" had provided them with the most useful information. In the earlier baseline study less than half of the customers (41.7%) identified CG&E as the most useful source of information. In the current study, more than three-quarters of the customers (76.1%) have identified CG&E as a source of information about the program. The Company's influence in educating customers has increased considerably from the respondents' perspectives. As compared to CG&E, all of the organizations are perceived to play small roles in the education of customers. The drop off from CG&E to the next highest frequency (Marketer or supplier) is over 50 percentage points.

There has been a dramatic change in the number of customers who are aware of the *Apples to Apples* chart that is prepared and distributed by the PUCO. The proportionate number of customers who are aware of the chart has tripled from the time of the earlier follow-up study from 8.3% to 26.7%. While a substantially larger number of customers are aware of the price comparison chart, there remain three-quarters of the customers who are not aware of the *Apples to Apples* chart.

About half of the respondents report a moderate understanding of the program. When comparing those customers who indicate that they have a good understanding of the program to those who state that they do not understand the program, there are approximately twice the proportionate number who do not understand. More than one-quarter of the respondents report that they do not understand the program.

The most frequently identified reason for not having chosen a supplier other than CG&E is that customers are satisfied with their current supplier. Almost half of the respondents have remained with CG&E, because they are satisfied with CG&E. The next highest responses explaining why customers have not chosen is that they want more information about the program (44.7%), they don't know how to compare offers (44.5%), and they are skeptical about the benefits of the program (41.2%). All three of these categories are related to customer education; the responses indicate a need for more customer education.

The results of Question 7 indicated that there remains some confusion about an important feature of the choice program. While most customers understand that their gas will continue to be delivered by CG&E, regardless of their supplier, there remain a third of the respondents who do not know whether CG&E will transport their gas. In some respects, Question 8 is a more important aspect of the program than that identified in Question 7. Safety and reliability are among the most important considerations by customers when making a decision about a supplier. The results of Question 8 indicate that there remains some confusion about this element of the choice program. While approximately half of the customers understand this aspect of the program, there remain a very large number (41.8%) of the respondents who do not know whether CG&E will remain responsible for their service safety and reliability.

SECTION 7
OTHER CUSTOMER CHOICE ISSUES

PERCENTAGE OF PAYMENT PLAN (PIPP) BIDDING PROCESS

Although Percentage of Income Payment Plan (PIPP) customers cannot choose a marketer individually where there is a choice program, PIPP customers have been bid out as a group in each of the three service territories. The goal is to achieve maximum savings and reduce arrearages, which reduces the PIPP rider. PIPP customers who are supplied by Cincinnati Gas and Electric (CG&E), Columbia Gas of Ohio (COH), or East Ohio Gas (EOG) experienced savings in the gas choice pilot programs ranging from 3% to 12%.

All three companies are required to select a supplier for PIPP customers through an open bid process. The Commission oversees this process by reviewing copies of the Request for Proposal (RFP) prior to release. The Commission also advises the companies that they must file a GCR-UNC case that identifies the selected supplier and requests appropriate GCR treatment for the PIPP gas supply. The Commission is thus assured that the RFP evaluation process is accessible to staff for observation.

In CG&E and COH territories all natural gas PIPP customers were bid out to the supplier offering the lowest bid. CG&E's 7,500 PIPP customers saved approximately $74,000 (November 1997 to January 1999). The supplier bid 8.5% lower than the expected gas cost. During the pilot phase (April 1997 to December 1998), COH's 33,000 PIPP customers saved approximately $13.8 million. The supplier bid 16.52% lower than the expected gas cost.

East Ohio Gas only bid out those PIPP customers who reside within the ten-county pilot area (Ashland, Belmont, Carroll, Holmes, Knox, Monroe, Stark, Tuscarawas, Washington, and Wayne) and, therefore, only part of EOG's PIPP customer population benefited from lower rates. The rate discount was three percent lower than the expected gas cost. EOG's 3,239 PIPP customers in the ten-county pilot saved approximately $51,768 (December 1997 to January 1999).

Computer problems prevented East Ohio Gas from offering the gas choice program to all of its customers in the fall of 1998. Although some East Ohio customers who are participating in the gas choice pilot program are experiencing billing problems due to new computer systems, PIPP customers are not experiencing the same problem because they are still being handled manually under the old system.

On February 12, 1999, East Ohio Gas filed an application (99-145-GA-PIP) to increase its PIPP rider rate from $0.102 per Mcf to $0.111 per Mcf. The increase was approved by the Commission on April 29, 1999. The increase will allow the company to recover an amount equal to the PIPP arrearage that will accumulate over the year it will be in effect plus the deficiency the company has accrued using the current PIPP rider rate. EOG currently has the highest PIPP rider rate among all the investor-owned utility companies.

The Ohio Consumers' Counsel (OCC) objected to East Ohio's application stating that the increase in the PIPP rider is higher than it might have been had all of East Ohio's PIPP customers been bid out as a larger group. OCC also alleges that if all PIPP customers in EOG service territory were aggregated and bid out, the PIPP rider might be eliminated in the future because of the increased savings. EOG contends that if the gas choice program was implemented in only ten counties of its service territory, extending the aggregation of PIPP customers beyond the ten-county pilot would confuse customers.

On March 22,1999, Virginia Power was selected to supply PIPP customers over the period May 1, 1999, to April 30, 2000 in the ten-county pilot area at a flat rate of $2.995 per Mcf for the expected gas cost. All PIPP customers would have saved 14.35% during the period of February 1999 through April 1999 had this rate been in effect. East Ohio maintains that the savings level for PIPP customers would not have significantly increased if the entire PIPP base had been bid out because the expected gas costs were so low.

Recommendation

After two full years of the gas choice program, staff is concerned about the treatment of PIPP customers in EOG ‘s territory. Staff can not speculate on the potential amount of savings for PIPP customers during the first two years of the gas choice program, but bidding out the 47,000 accounts may have attracted more bidders and lower bids. However, staff recommends that EOG bid out the remaining PIPP customers (47,000 as of April 1999) this summer which would allow the entire class of PIPP customers to begin saving on their heating bill this winter. The contract for the remaining PIPP customers would end concurrently with the PIPP customers in the ten-county pilot.

Staff is fully aware of the ongoing problems with EOG’s CAMP computer system; however, the PIPP accounts are not affected by this billing system. Staff recommends that the Commission encourage EOG to meet with staff to develop a plan to expand the benefits of aggregate bidding to all PIPP customers in its service territory.

GCR REFORM AND OBLIGATION TO SERVE

The June 18, 1998 Opinion and Order directed the LDCs, the staff, and other interested stakeholders to continue to explore creative ways of modifying the GCR. To facilitate further discussion, staff submitted a data request to Cincinnati Gas & Electric, Columbia of Ohio, Dayton Power & Light, and East Ohio Gas requesting comment on obligation to serve, provider of last resort, changes to the GCR mechanism, and exiting the GCR or merchant function. In response, the companies submitted a joint "white paper" discussing various options related to these issues. The staff data request is included as Attachment 7-A and the white paper is included as Attachment 7-B to this section of the Report. The joint white paper is comprehensive, demonstrating a significant effort at framing the issues and providing relational context. It identifies and discusses the following issues:

- Consistent definitions have begun to be established so there is a common basis for discussion.

- Obligation to Serve - Options are presented to ensure adequate gas supply when delivery control is dominated by the marketers or aggregators.

- Operational Issues - Determinants are presented for successful operational balancing.

- Customer Issues - Options are presented for serving (or not serving) customers that want GCR service or who simply do not choose an alternative provider.

- Provider of Last Resort - Recognized as a subset of Customer Issues, options are presented for pricing a myriad of last resort services.

- The GCR Mechanism - The report distinguishes changes to the GCR from exiting the GCR mechanism and from exiting the merchant function.

- Legal Authority - Underlying all the issues is the significant common element of legal authority to establish changes.

Conclusions

There are four conclusions that are evidenced to the staff by the report. First, significant progress has been made in defining the issues that need to be resolved in order to move closer to conclusions or end states. Second, customer satisfaction must be the continued focus, or condition to be met, as the issues are addressed. Third, there should be latitude to tailor changes and end states to an individual utility because of the diversity of circumstance and conditions that the Companies face. Finally and most importantly, it is solely the utility's discretion to propose to the Commission the service or rate modifications it believes necessary to address these issues.

Staff agrees with the conclusions presented in the white paper and in particular the issue of sufficient Commission legal authority to require changes. HB 476 was passed by the Ohio legislature in 1996 to provide a regulatory mechanism to propose and evaluate alternatives to the existing GCR process. In the staff's opinion the companies are correct in their assertion that it is the company's sole responsibility to propose modifications to the GCR through the 476 process. Because of this requirement, staff believes that a revised working approach be established with the Companies.

Recommendations

This report should be the basis for a renewed effort to further develop more specific proposals for evolution of the programs. The Flame Forum Series should be the vehicle for exchanges between the industry, staff, and interested parties. The forum should be used specifically to formulate Commission policies that would provide incentives to the choice program Companies to file HB 476 proposals. This should be done while, also, working with individual companies to satisfy unique circumstances.

PUCO STAFF DATA REQUEST

PUBLIC UTILITIES COMMISSION OF OHIO
STAFF DATA REQUEST

Company:	CG&E, COH, EOG	**Request No.**	1
Case No.:	Choice Reports	**Requested by:**	Puican/Maag
Date:	February 12, 1999	**Date Required:**	At Report Submittal Date
Subject:	Additional Information		

Attention: Al Moeller 513 287 2938
Tom Brown 614 460 6971
Jeff Murphy 216 736 6438

Staff requests that the following information be included in the "choice program" reports that are to be submitted.

Provide a description of the status of the company in addressing the issues of obligation to serve, provider of last resort, changes to the GCR mechanism, exiting the GCR mechanism, and/or exiting the merchant function.

The description and status could include:

- The process being used by the company to address the issues.

- The resources (e.g., personnel, models, etc.) being used to evaluate potential end states associated with the issues.

- The potential end states that are being evaluated.

- The preferences the company may have for potential end states, including those that may not be listed. (There may be a combination of changes/no changes to the current combination and provision of services)

- Important issues, if any, that need resolution, either by the industry and regulatory authority.

PUBLIC UTILITIES COMMISSION OF OHIO
STAFF DATA REQUEST

Company:	DP&L	**Request No.**	2
Case No.:	Choice Program	**Requested by:**	Puican/Maag
Date:	February 12, 1999	**Date Required:**	April 1, 1999
Subject:	Additional Information		

Attention: Dick Reid 937 259 7775

Staff requests the following information for review by the staff during its evaluation of the choice programs.

Provide a description of the status of the company in addressing the issues of obligation to serve, provider of last resort, changes to the GCR mechanism, exiting the GCR mechanism, and/or exiting the merchant function.

The description and status could include:

- The process being used by the company to address the issues.

- The resources (e.g., personnel, models, etc.) being used to evaluate potential end states associated with the issues.

- The potential end states that are being evaluated.

- The preferences the Company may have for potential end states, including those that may not be listed. (There may be a combination of changes/no changes to the current combination and provision of services)

- Important issues, if any, that need resolution, either by the industry and regulatory authority.

REGULATORY ISSUES RAISED BY GAS CHOICE PROGRAMS

BACKGROUND

This document is intended to respond to Staff data requests served on several Ohio LDCs on February 12, 1999. The companies were asked to "[p]rovide a description of the status of the company in addressing the issues of obligation to serve, provider of last resort, changes to the GCR mechanism, exiting the GCR mechanism, and/or exiting the merchant function." Suggested items to address in the response included the process and resources used to evaluate the issues, potential and preferred end states, and important issues needing resolution by the industry or the Commission.

OBJECTIVE

The objectives of this document are to (1) further clarify the issues raised in the data requests; (2) discuss the range of views regarding those issues; and (3) identify their implications for the industry and Commission. Because a consensus industry position is not likely to be formed on all of the issues, the document simply identifies the range of issues associated with each topic rather than state a definitive position. The companies which have contributed to this document are Cincinnati Gas & Electric, Columbia Gas of Ohio, Dayton Power & Light and East Ohio Gas. The "status" of those companies is that they are still assessing the issues raised in the data requests and identifying their respective options. Individual companies may or may not follow up with additional responses reflecting their particular view on the issues raised in the data requests.

EXECUTIVE SUMMARY

Governing any discussion of the topics raised in the data requests are the comprehensive statutory provisions of Title 49 of the Ohio Revised Code which establish the basis of natural gas companies' powers and responsibilities and the Commission's jurisdiction and authority over those companies. Among those provisions are a purchased gas adjustment clause designed to recover prudently incurred gas supply costs as well as a mechanism whereby the Commission may exempt certain activities, including the sale of gas, from regulation. Although discussion of the topics raised in the data requests is important, it is also important to recognize that Title 49 does not permit or require the Commission to modify the purchased gas cost recovery clause or order natural gas companies to stop supplying gas and exit the merchant function. Instead, current law provides that it is the LDC which originates the process of exiting the merchant function, or in the alternate seeking approval to exempt certain services from regulation, through the submission of an exemption application. While the Commission plays a vital role in reviewing such applications and in raising issues such as those posed in the data requests, the LDC must initially assess and propose service modifications.

Many of the terms used in the data requests need further definition in order to provide a meaningful basis for discussion. Once defined, it becomes clear that the issues are in many ways related to one another. For example, provider of last resort can be viewed as simply one component of an LDC's obligation to serve. However, one central issue emerges in many areas - how to maintain reliability in an environment in which the LDC controls less and less of the supplies being delivered to its system. A company's views on how that reliability can best be maintained plays a key role in shaping its views on the data request issues. Another critical determinant is the commodity service role that the LDC sees for itself in the future and how quickly it expects to achieve that role. In most cases, that end state role is driven by the company's view of the marketplace as well as its corporate strategy.

Notwithstanding differences of opinion in those key areas, there is one important area in which a consensus has emerged. While many state legislatures and commissions are seeking to mandate specific actions to be taken by specific dates, it is clear that one size does not fit all - at least at the present time. Ohio LDCs each face a somewhat different environment and have different expectations for the future which may lead them to take different steps to meet customer needs. The companies applaud the Commission for its willingness to test different solutions. The companies encourage the Commission to continue providing that flexibility, flexibility which current law provides, as it seeks to bring the benefits of a more competitive commodity market to an expanded group of customers. All of these issues will most appropriately be considered in the context of an application for Commission approval of an LDC's plan to exit the merchant function or to modify its GCR structure.

OBLIGATION TO SERVE

In its broadest sense, an LDC's obligation to serve covers both commodity and distribution service. The latter category encompasses many areas including that of mainline extensions. Because the data requests were issued in the context of commodity unbundling programs, the matters addressed herein refer to commodity service only. In that sense, obligation to serve can be viewed as having several components in the following categories:

Reliability

- Providing peak day reliability for the LDC's own commodity service customers.
- Facilitating peak day reliability for third party suppliers' human needs customers.

Operations

- Maintaining system integrity through the provision of operational balancing.
- Properly reacting to an interruption of gas supplies at the city gate.

Customers

- Maintaining service to customers that do not choose an alternate supplier.
- Maintaining service to customers that third party suppliers do not wish to serve.

Reliability

Reliability is in many ways the most crucial and yet most elusive issue raised in the data requests. It is crucial because:

- Much of an LDC's capacity and supply planning revolves around meeting the anticipated design day requirements of its sales customers.
- The Commission's Gas Transportation Program Guidelines and many companies' tariffs still mandate adequate back-up service of some form for human needs transportation customers.
- LDCs cannot operate their gas systems effectively without an assurance that the system will receive sufficient supplies at the city gate to meet transportation as well as sales customer requirements.

The elusive nature of reliability lies in the fact that, in an environment dominated by customer choice, an LDC has less and less direct control over the supplies delivered to its city gate. A fundamental question facing the Commission and an LDC in that situation is how to best ensure that those supplies are available during critical supply periods. Among the alternative answers to that question are the following:

1. The LDC should continue contracting for upstream pipeline capacity needed to serve peak period human needs transportation customer requirements and release or assign that capacity to the third party suppliers serving them.
2. The LDC should require third party suppliers to demonstrate that they hold sufficiently reliable, comparable primary firm upstream pipeline capacity to meet their human needs customers' peak period requirements.
3. The LDC should require some lesser demonstration that third party suppliers serving human needs customers have an acceptable capacity portfolio to meet some level of anticipated peak period requirements.
4. The LDC should allow a third party supplier serving human needs customers to make whatever arrangements the supplier deems appropriate and put in place appropriate provisions (i.e., an OFO noncompliance charge that provides adequate incentive) to motivate suppliers to maintain city gate deliveries even during critical supply periods. This alternative can also include an option whereby the LDC secures and maintains sufficient no-notice service of some form to provide a reserve margin against third party supplier nonperformance during peak periods.

A key determinant of an LDC's preference among those alternatives is its views of (1) city gate liquidity during critical supply periods; (2) the ability and/or willingness of an upstream pipeline to render service in the absence of a contractual obligation to do so; and (3) the perceived operational and financial risks of each option. To the degree that there are concerns in any of those areas, an LDC will gravitate toward the first two alternatives or a version of the last alternative which includes some type of reserve margin. In the absence of those concerns, leaving third party suppliers to their own devices and relying on OFO noncompliance charges and city gate liquidity would appear to be an appropriate course of action. Needless to say, a wide range of opinions on the subject has been expressed by LDCs, suppliers, commissions, consumer advocates and other choice program stakeholders, including the FERC. Likewise, in the Ohio gas industry, there is as yet no consensus on the issue among the LDCs represented in this response.

Operations

There are several important distinctions between the reliability and operational components of an LDC's obligation to serve. First of all, the reliability component focuses primarily on the availability of city gate supplies during peak or critical supply periods. The operational balancing component, by contrast, is needed to support gas system operations every day of the year. Secondly, maintaining reliability requires looking forward and taking steps today to ensure sufficient peak day reliability in the future. Under program structures where the reliability obligation passes substantially to third party suppliers, those steps do not require an LDC to directly hold or even control the assets needed to provide that reliability. Conversely, maintaining system integrity through operational balancing does require an LDC to directly hold or control assets that can be dispatched in real time under the direct control of the LDC as system operator. It is worth noting that both of those issues can be further complicated by the unique challenges posed by load pockets and high growth areas.

In an environment in which the LDC exerts ever decreasing control over city gate deliveries, operational balancing takes on a much more significant role. Operational balancing enables an LDC to accommodate differences between end users' actual daily consumption and supplies delivered to the system on their behalf on any given day. The assets providing that capability range from no-notice pipeline services to on-system storage to propane systems under certain conditions. In some cases, that capability can also be used to address some of the reliability issues discussed above. For example, the firm winter season withdrawal rights of contract storage typically exceed injection rights. Therefore, if operational balancing capacity is geared to cover the same level of over-deliveries as under-deliveries, there will be some amount of incremental storage deliverability available to support peak day reliability. Major determinants of the amount and type of operational balancing capacity needed are:

- The extent to which LDCs hold third party suppliers accountable for day-to-day variations in estimated usage.
- The LDC's ability to accurately project consumption. That ability is affected both by modeling error and customer composition as well as weather forecasting accuracy.
- The cost, capability and flexibility of the asset(s) used to provide the balancing.
- The operational sensitivity of a gas system to daily imbalances on its system. That sensitivity can be increased if, for example, the LDC has a number of isolated load pockets on its system that are fed by a single or highly limited source of supply.

Because each LDC faces a unique situation in each of these areas, the Commission is urged to permit each LDC to work through these issues individually rather than take a "cookie cutter" approach.

In yet another link to the peak period reliability issue, maintaining operational integrity must also accommodate supplier nonperformance at the city gate. This may be accommodated by a reserve margin held to provide peak period reliability, on-system storage, the incremental contract storage withdrawal capability discussed above or operational balancing capacity that is held above and beyond the level needed for routine day-to-day operations. Regardless of how that accommodation is achieved, an LDC's obligation to serve in an unbundled environment will ultimately entail reexamining its curtailment plans to ensure that the higher risks imposed by less control over city gate supplies is properly addressed.

Customers

Under any merchant function exit strategy, an LDC still must address the obligation to serve those customers wanting to remain an LDC commodity customer as well as those customers that are unattractive to third party suppliers. The range of options facing the LDC is fairly straightforward: refuse to serve those customers and make alternate arrangements for their commodity service or continue to meet their commodity needs with some form of LDC commodity service. Within that spectrum, there are a variety of specific arrangements that could be put in place. Among the options that have been discussed are the following:

- Continue providing service under the conditions presently in place, i.e., render GCR service to customers wishing to remain commodity customers as well as those not desired by alternate suppliers.
- Continue providing such service under a House Bill 476 commodity service exemption.
- Use a modified Percentage Income Payment ("PIP") plan to recover the cost associated with low-income customer arrearages, whether they be incurred with the LDC or a third party supplier.
- Develop a broader universal service funding approach as a replacement for the existing PIP plan to address third party supplier as well as LDC arrearages.
- Bid out the supply needed to serve those customers, but continue to be the party performing the billing under the LDC name.
- Require participating suppliers to take a pro rata share of low-income customers up front as the "price of admission" into the choice program supplier marketplace.
- Implement a mechanism under which all customers who have not yet selected an alternate supplier are assigned either to participating choice suppliers on some basis or to a default provider which could either be the LDC itself or another party.

Each of the above options address the two primary aspects of this issue - the LDC role as a commodity provider and the arrearage funding mechanism - in different ways. Unlike reliability and operational balancing which focus on gas system operations, these aspects of obligation to serve focus on the marketplace. An LDC must first make a strategic decision on how to approach that marketplace before it can determine which options best fit that strategy. As with the other issues previously addressed, no consensus gas industry opinion has emerged. Experience has shown that the majority of residential customers prefer to remain sales customers for a considerable length of time even after an entire LDC system is open to choice. Thus, the number of customers affected by an LDC's decision in this area is substantial. As a result, the companies again urge the Commission to remain flexible in responding to individual LDC's proposals to address those customers' needs and evaluating those proposals on their respective merits.

PROVIDER OF LAST RESORT

As noted previously, acting as the provider of last resort can be viewed as a subset of an LDC's obligation to serve. This document reflects that view and, hence, the main discussion of the issue can be found above. As the provider of last resort, an LDC can perform roles as varied as bringing on incremental intra-day supplies when a third party supplier fails to deliver the supplies needed to meet its customers' demand to serving an entire class of customers on an ongoing basis. An important issue which underlies all of those roles, however, is what to charge for the service. Among the many factors to consider when determining an appropriate price are:

- Type of service rendered
- Assets used to render the service
- Demand vs. commodity pricing
- Market-based vs. cost-based rates
- Party to be billed

Type Of Service Rendered

The type of service is the most important determinant of its price. In one sense, the GCR represents the price for a very broad provider of last resort service. GCR service is essentially a full requirements service with a substantial premium paid for reliability. That service is much different from that rendered when a third party supplier fails to comply with an Operational Flow Order ("OFO"). In the latter example, an LDC is placed in the position of serving a load that may only occur on its system once every few years and only for a day or two at a time. Given the sharp difference between the two services, it should come as no surprise that their pricing mechanisms bear little resemblance to one another.

Assets Used To Render The Service

Regardless of its nature, an LDC must utilize assets of some type in order to serve as the provider of last resort. Those assets may take the form of primary or secondary FT, contract or on-system storage, no-notice service, city gate peaking service and even propane. Each of those assets have a cost which the LDC must consider as it determines the price for the service to be rendered. It is worth noting that even the cost of the asset can be questioned. For example, should an OFO charge recover only one month's worth of demand charges or should it recover multiple months' worth to recognize the way in which pipeline demand charges are billed to LDCs?

Demand vs. Commodity Pricing

Directly linked to the preceding two factors is the appropriate rate design to use in pricing the service. Important considerations in determining that rate design are: (1) the rate design of the underlying assets used to render the service and (2) how frequently the service is rendered. If the underlying asset is priced with an SFV type design, and the LDC's customers or suppliers use the service in an unpredictable or infrequent manner, it may be appropriate to bill for provider of last resort service using a demand charge. Conversely, if the asset is billed to the LDC on a commodity basis, and customer or supplier usage is reasonably predictable or frequent, commodity pricing may be more appropriate. Because those two factors can vary widely across services, customers and LDCs, a single pricing approach is not suitable for all applications.

Market-Based vs. Cost-Based Rates

While many provider of last resort roles should be priced on the basis of costs, there may be others which call for a more market-based approach. Once an LDC formally ceases to perform certain provider of last resort activities, it may be appropriate to allow the LDC to charge a market clearing price, e.g., the highest incremental city gate price paid by the LDC, on those occasions when it is asked to provide such services. An exemption application to provide deregulated commodity service pursuant to the Commission's rules implementing House Bill 476 is one such example. Others may include providing a service to resolve daily or monthly supplier imbalances using market-based pricing rather than a rigid, formula-based cash out mechanism.

Party To Be Billed

Although it may appear to be an insignificant topic, stakeholders in the customer choice process must also resolve what parties, i.e., end users or suppliers, should be charged for what services. At issue here are (1) the extent to which a particular party causes a cost to be incurred and (2) the extent to which a particular party benefits from the service. Certain charges, such as operational balancing, are directly associated with distribution service and properly charged to end users. Other charges, such as those related to imbalance resolution, are directly associated with supplier performance and properly charged to suppliers. Still other charges may be required to compensate the LDC for costs that are caused by, or provide a benefit to, both end users and suppliers such as those associated with the maintenance of a reserve margin. Yet another view would hold the supplier responsible for all such costs, regardless of causation or benefit.

GCR MECHANISM

Several of the data requests are directly or indirectly related to the GCR mechanism. Those directly related to the GCR seek comments on making changes to the mechanism as well as exiting the mechanism. A final inquiry indirectly related to the GCR requests comment on exiting the merchant function in its entirety. Due to the potential for confusion, it may be helpful to first establish a working definition of the terms:

Making Changes to the GCR Mechanism

Changing the way in which the LDC's regulated commodity service is priced while retaining some form of true-up mechanism to reconcile estimated vs. actual costs.

Exiting the GCR Mechanism
Changing the way in which the LDC's commodity service is priced, on a regulated or deregulated basis, and abandoning the UPGA's traditional true-up mechanisms.

Exiting the Merchant Function
Ceasing to offer regulated commodity service, possibly while retaining the option to provide such service on a deregulated basis.

Because each of these actions represent merely another step away from the status quo, this section will address them in order.

Making Changes to the GCR Mechanism

In February 1998, the Commission hosted a roundtable discussion of various issues, including potential changes to the GCR mechanism. Parties at the meeting expressed concern that the GCR is often used as the reference price for third party suppliers even though it is not a good indicator of prevailing market prices. Similar concerns were voiced by Chairman Glazer in a separate opinion in Case Nos. 97-118-GA-FOR and 97-218-GA-GCR in which he stated that "the workings of the GCR are having a repressive effect on the market," leading to a "Catch-22" that may not allow competition to flourish and enable LDCs to readily exit the merchant function. It is wrong, however, to suggest that the GCR mechanism is broken merely because it results in a low price which competitors find difficult to profitably match. Such a conclusion may instead imply that many of the benefits of gas industry restructuring have already been passed on to the customers receiving that low price. Similarly, it is not correct to assume that all margins are achieved on commodity cost alone. Margins may also be achieved on demand costs, which are determined differently for each LDC.

In its position paper developed after the February 1998 discussion, the OGA pointed out that regulated commodity service pricing will not reflect market prices as long as (1) over/under recoveries are collected in the pricing mechanism and (2) traditional GCR capacity portfolios that rely on long-term contracts remain and are utilized differently from those of third party suppliers. Ohio LDCs' customer choice programs address the first issue by including an unrecovered gas cost charge in distribution rates for the first year after a customer leaves GCR service. The second issue, that of the differing capacity portfolios, is harder to address because those portfolios may reflect differing reliability and ultimately a different service level. For example, a supplier may be able to provide a lower price only by relying on a less costly and less reliable portfolio of secondary release capacity. A final area of concern lies in the rate design and how the expected gas cost rate or its replacement is calculated and billed. A change to the GCR mechanism must address all three areas - over/under recoveries, capacity portfolio and rate design - in some fashion in order to deal with the fundamental reasons for its failure to track prevailing market prices.

As discussed in the following options, the way in which LDCs will address those issues largely depends on the role that the GCR is expected to play:

- If the GCR is expected to remain nothing more than a cost recovery mechanism, LDCs will see little need for a fundamental change to the mechanism, especially in the area of over/under recoveries. Thus, while the LDC may offer a one-year fixed GCR rate, it will likely do so in a way that affords price stability without sacrificing a subsequent reconciliation between estimated and actual book cost.
- At the other end of the spectrum, if the GCR is expected to be a market-responsive benchmark for suppliers, LDCs may be led to significantly expand their own price offerings. They could offer multiple GCRs - some changing monthly, others fixed for much longer periods of time - to provide customers with a variety of price options that are more comparable to those of third party suppliers.
- In between those two extremes are numerous options such as gas cost incentive mechanisms, demand/commodity rate structures for GCR service and non-bypassable charges designed to cover transition costs. Those options will exhibit more or less market responsiveness depending on the intended role for the GCR mechanism or its replacement.

In the latter two cases, the LDC must decide how to allocate the cost and risk of over/under recoveries and capacity portfolio differences. It is worth noting that such an allocation could affect participating and nonparticipating customers as well as suppliers and even shareholders. As a result, changes in other services may need to accompany GCR changes in order to achieve the intended effect. Given the wide range of options, the companies recommend that the Commission permit individual LDCs to submit those GCR modifications they believe are needed to meet customer needs, promote the development of competitive markets and encourage the introduction of new products and services, and then evaluate them on a company-by-company basis.

Exiting the GCR Mechanism

Exiting the GCR mechanism refers to an LDC implementing a new commodity pricing approach which abandons the traditional cost recovery feature of the GCR. As implied above, a major issue facing the Commission is deciding what role it expects the replacement pricing mechanism to play. Without fully understanding that expectation up front, LDCs will be hard pressed to develop alternatives which can meet it. As always, there are a range of alternatives including:

Gas Cost Incentive Mechanisms

The difference between actual and benchmark cost is shared in some fashion between the LDC and its customers based on some indicator of performance.

Hedge-Based Prices

The LDC offers a specific term price which reflects the risk management costs associated with managing price and volume risks. If those costs become excessive, the mechanism could include a risk sharing mechanism which would support a more competitive price.

Commission Pre-Approval

The Commission would pre-approve a particular pricing approach, if not the pricing level itself. The approach could specify the basis on which the price would be calculated while providing for prospective reviews to be performed periodically.

Segmented Commodity Service

The Commission would permit the LDC to make multiple commodity service offerings, some of which may eliminate the traditional reconciliation of actual to estimated costs. This could be one step short of a House Bill 476 exemption application requiring a lesser showing of competition to facilitate a quicker transition to a competitive market and thereby avoid the "Catch-22" problem mentioned earlier.

Partial Exemption Application

The Commission would evaluate a House Bill 476 exemption application in which the LDC seeks approval to offer deregulated commodity service to a portion of its market with the full demonstration of sufficient market competition and other aspects such as an appropriate code of conduct.

Complete Exemption Application

The Commission would evaluate a House Bill 476 exemption application in which the LDC seeks approval to offer deregulated commodity service throughout its entire service territory pursuant to that provision of the Bill requiring the company to offer distribution services on a "fully open, equal and unbundled basis."

Each of the above options require movement away from the traditional backward looking GCR management performance audits. Given the fundamental and significant changes in the nature of the LDC's obligation to serve and its merchant function responsibility, such audits would be inconsistent with most of the options and would need to be significantly changed or abandoned in their entirety. In any event, the options would contemplate the LDC remaining in the commodity service business in some fashion with a partial or total elimination of the true up function played by the current GCR. Once again, the pace at which an individual LDC heads down any given path will largely depend on its perception of customer needs and the end state that its corporate strategy is driving toward.

Exiting the Merchant Function

The next step beyond fundamentally changing the approach to regulated commodity service pricing would be an exit from the regulated commodity service function in its entirety. Whether that would necessarily extend to a complete abandonment of all commodity service as the FERC orchestrated in Order 636 is another question. In one sense, the question is one of degree. The options identified above may gradually lead to a cessation of regulated commodity service, but still preserve the LDC's option to provide deregulated commodity service under the provisions of House Bill 476. For some LDCs, the nature of the merchant function for larger commercial and industrial accounts began to change well before the advent of customer choice, even though some of those customers have chosen to continue purchasing LDC commodity service. Under customer choice, that evolutionary process has taken a new direction given the possibility that substantial numbers of the LDCs' small commercial and residential customers may leave system supply service.

Companies across the country are coping with that possibility in various ways. Many are turning back pipeline capacity at the first contractual opportunity. Such turnbacks may be structured to track the decreasing system supply obligation or, in some cases, to run ahead of that decrease. In the latter case, the LDC may procure replacement service with lower costs, shorter term and possibly with a different nature, e.g., a peaking or seasonal service rather than an annual one. In the absence of that replacement service, the LDC may rely on city gate liquidity to provide the desired level of reliability as discussed earlier. Some companies have outsourced their system supply responsibility to a third party, a step which is but one removed from exiting the merchant function and having another default supplier provide that role in lieu of the LDC. Some state commissions, such as Massachusetts, have discussed the prospect of moving to a non-LDC default provider as a precursor to retail unbundling to more quickly move the market to a competitive state. Others, such as Georgia, have identified a threshold at which customers are assigned to third party suppliers once a particular level of migration has occurred. Needless to say, there are any number of choices that LDCs face as they struggle with the pace at which the end state should be reached, not to mention the end state itself.

As with many other issues in this arena, compelling arguments have been made on both sides. Some claim that, with the LDC still in the merchant function, competition will never flourish. Others argue that, in order to provide customers with all available options, the LDC must remain one of those options. These same issues will be played out in the electric restructuring process as well, which raises yet another point. Although there are significant differences between the rendition of energy service by electric and natural gas companies, there may be some elements where consistency is appropriate. The Commission is urged to carefully weigh those differences and, in responding to individual company's applications to modify service offerings, only pursue that consistency which makes sense, rather than force fitting one industry's structure on another regardless of whether it would be appropriate.

Among the more common approaches to the merchant function exit issue taken by different states are (1) the establishment of a date certain by which LDCs must exit that business; (2) the determination of a migration threshold at which time LDCs should either exit the business or file specific plans to do so; and (3) establishment of a mechanism under which customers would still have the option to purchase LDC commodity service at unregulated market-based rates. Within Ohio, the provisions of Title 49 do not authorize the Commission to compel an LDC to follow any of the preceding paths. Given their different pipeline contract termination dates and the ability to move at different paces under existing law, the companies are more likely to consider the latter approaches as they develop their plans for the future. The marketplace itself should determine the pace and extent to which LDCs should exit that business. Once again, however, the question of whether an exit precludes LDC participation on a deregulated basis is an issue that current law leaves to the individual LDC and the Commission's authority to review its exemption application. Until such an application is filed, the appropriate forum in which to review an LDC's plans for transitioning to a new merchant function role - assuming that it has such plans - is the current GCR management performance audit and Long Term Forecast Report proceedings. In such reviews, the Commission should not presume a particular strategy or end state, but rather assess the LDC's plans for arriving at the end state that it has set for itself.

CONCLUSION

The various obligation to serve issues raised by Staff highlight the challenges inherent in making a transition to a more competitive commodity market. The questions are complex and the answers difficult. Issues range from operational to commercial to strategic. Companies face different environments and have different end states in mind as they work through the process. Fundamental decisions regarding the direction of the marketplace lie in different parties' hands. However, one party is central to the discussion regardless of the issue - the customer. As with any service, customers desire reliability, low price, competitive alternatives and ease of transacting business. Unless the transition map leads to that result, customers will become disenchanted and dissatisfied with the process. As a result, all stakeholders should focus on meeting those needs throughout the process as well as at the end state. In order to accomplish that objective, LDCs need the flexibility to assess, identify and meet customer needs using unique strategies that they believe will be most likely to achieve that result. The Commission is urged to continue supporting that flexibility and assess each company's approach on its own merits. Although considerable progress has been made, much remains to be done. To set in motion specific actions to be taken by specific dates would be premature and unlikely to lead to long-term customer satisfaction.