

Energy Analysis

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EA 2001- 01 January 26, 2001

1997-99 PERFORMANCE BENCHMARKS FOR NATURAL GAS UTILITIES

I. INTRODUCTION

Summary data of gas utility financial profiles and performance appear in this Energy Analysis. The intent is to provide industry participants and observers with relative measures of financial returns and operational efficiencies of natural gas distributors. For this study, the American Gas Association (AGA) collected data from its member companies. The data source for these benchmarking metrics is the Uniform Statistical Report (USR), which is administered annually by AGA on behalf of its member companies. Results are presented for the years 1997 through 1999. Additional information, including company specific information, is included in an attachment to this analysis and available only to AGA member companies.

For study purposes, the gas utility industry is segmented into distinct groups: investor-owned gas-only utilities, investor-owned combination gas and electric utilities, and municipally owned gas utilities. Summary results are segmented in this sample accordingly. Comprehensive details are provided in the appendices.

II. BACKGROUND

THE NATURAL GAS DISTRIBUTION INDUSTRY. Approximately 1,100 utilities distribute natural gas to end-use consumers in the U.S. For this analysis, a total of 75 companies were studied for 1999, 76 firms were included in the 1998 sample and the 1997 sample comprised 72 firms.¹ They are located across the continental U.S., and each company has a unique combination of scale, load profile, and climatic attributes. In aggregate, the firms included in this study accounted for 31 percent of natural gas consumed in 1999 and 34 percent of natural gas consumed in both 1998 and 1997.² Given this sample size, any inferences about the sample's depiction of the entire industry are accordingly limited.

¹ This set number was determined after eliminating member companies for whom data was either incomplete or not provided at

all. Firms with zero net income are excluded from the analysis. This is not a scientific sample in that sample stratification by segment type does not reflect population stratification. See Appendix 10 for list of companies included.

Natural gas distributed for end-use consumption totaled 20.0 Tcf in 1997, 19.5 Tcf in 1998, and 21.7 Tcf in 1999. U.S. Department of Energy / Energy Information Administration, *Natural Gas Monthly*, January 2000, Table 3.

Many AGA member companies are gas-only investor-owned utilities, as are the majority of the companies in this analysis. These companies earn returns that accrue to their investors. State-level public utility commissions regulate much of their operations, finance, and capital investment activities.

Combination utilities have the franchise rights to transport and sell both gas and electric power commodities. These are also investor-owned firms with financial obligations to shareholders. Like the gas-only investor-owned firms, these companies are subject to various state and federal regulations.

Municipal utilities are publicly owned by the citizens of the jurisdictions that the utilities serve. Local governments enjoy tax-free bond-issuing capabilities, usually at interest rates lower than can be obtained by investor-owned utilities. Ultimately, such debt is usually collateralized by these utilities' abilities to secure tax revenue to back up debt commitments. What an investor-owned utility would pay out in dividends accrues instead to the municipal company's citizen-shareholders in the form of lower rates. Municipal utility regulation is performed primarily by local governments as opposed to state-level commissions.³

DESCRIPTION OF DATA SOURCES. Financial data about AGA member companies are drawn from the Uniform Statistical Report (USR). Member company staff prepare these standardized forms annually for collection by AGA, but companies may choose to withhold any or all of the requested data. Some of the USR duplicates the information found in audited end-of-year financial statements, but the USR requests additional information, such as heating degree-day profiles, miles of pipe in service, type of sales by customer class, number of customers served, and various employment profile statistics.

DATA LIMITATIONS. Since the data used for this analysis are annual figures only, a few inferential limitations should be noted. First, a single year's data for gas distribution operations are influenced by weather patterns for that year. For the U.S. as a whole, 1999 was 8.9 percent warmer than normal, 1998 was 13.7 percent warmer than normal, and 1997 was 0.7 percent warmer than normal.⁴ The deviation between actual HDDs vs. historic normals will vary by location. This in turn suggests that utility benchmarks may slightly overstate or understate overall utility financial performance or efficiency of operations when impacted by weather.

Another limitation is that the ability to perform trend analysis is somewhat limited. While three years worth of data are presented here, comparison of actual values (total revenues for example) from year to year can be distorted by changes in sample size. Also, variances in weather can affect these trends. Finally, the data set is limited to three years and this limits the ability to compare longer-term trends.

Sample size and composition must also be considered as a potential limitation. The industry segment sample sizes used in this study are not consistently proportional to their respective populations. Additionally, the sample size—measured both in number of companies, and more importantly as percentage of total gas deliveries—has declined over time. Finally, specific company participation in the data collection varies significantly from year to year. **This makes annual comparisons of absolute values, such as total number of therms sold, difficult and any resulting conclusions suspect.** However, the purpose of ratio analysis is to address this problem and facilitates annual comparisons.

Note that relatively few financial profiles were available for the municipal segment. The operations data used here considers

only gas activities. The financial profiles of gas-only and combination municipal utilities are blended together for summary purposes.

Source: A.G.A. Gas Facts, Table 10-6.

One final consideration that must be considered is the increased prevalence of transportation services to gas utilities. In 1999, transportation customers represented only five percent of total customers, yet these customers accounted for more than 44 percent of total gas delivered. Figure 1 illustrates the increased role of natural gas transportation.

Transportation Volume as Percent of Total Voulme Delivered

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FIGURE 1

NOTE: Each data point represents a company value for that year.

III. BENCHMARKING METRICS

Benchmarking metrics created for this study take several forms. Typical accounting ratios based on income statements and balance sheets serve as financial performance indicators. Financial statements are also recast in "same-size" formats, which present line items in percentage terms. Other benchmarks describe numbers of employees, meters, and volumes of gas throughput. All AGA data are summarized so that no individual company statistics are revealed. Additionally, summaries are created which divide the industry into type-of-company segments. These include gas utilities, combination gas & electric utilities, and municipally owned gas utilities.⁵ Appendix 2 is a series of charts that display the range of

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See Glossary in Appendix 1 for a definition of these categories.

observations for selected benchmarking metrics. Appendix 10 shows the list of companies that were included in this analysis.

- Utility Operating Profiles Absolute Values (Section IV-A and Appendix 3a). System profiles are summarized here by type of company. This data includes information on gas volumes delivered as well as the number of customers by class.
- Financial Statements Absolute Values (Section IV-B and Appendix 3b). Income statement and balance sheet data are summarized here by type of company. Income statement amounts are expressed in absolute dollars in Appendix 3b. Note that these items represent gas operations only.
- Financial Statements Same-Size Analysis (Appendix 3c). The financial statement data shown in absolute values are re-cast in percentage terms for a same-size analysis. Income statement line items are in percentages relative to operating revenue while balance sheet items are expressed as a percentage of total assets. This shows the disposition of a firm's revenue and composition of its asset base without respect to the size of an individual firm.
- Financial Statements Per Cost Driver (Section IV-B and Appendix 3d). Income statements are shown in several formats: per therm delivered, per customer served, per dollar value of gas plant in service, and per mile of main and service pipe in operation.
- Financial Ratios (Section IV-D and Appendix 3e). These are conventional financial analysis tools, and they compare a company's financial status to other firms or types of firms. Ratios are calculated from group totals or weighted averages (explanations are provided in the Glossary, Appendix 1).
- O&M Detail Analysis (Section IV-C and Appendix 4). These cost elements represent major gas delivery activities, starting with purchase or production and continuing sequentially through transmission, distribution, customer service, sales activities, and administrative and general (A&G) accounting. These results are also arrayed by type of company. Benchmarks for these data are created by expressing each line item on a basis of annual costs per therm delivered. See Table 3 for more detail.
- Debt Analysis Ratios (Section IV-E). Data are presented to highlight various measures of debt. These include debt as a percent of capitalization and interest coverage ratios. The data in this section necessarily include both gas and electric and electric operations.
- Wages and benefits: Ratios and Same-Size Analysis (Section IV-G and Appendix 5).

 Data about utility employment and benefits profiles are included. These measures are intended to illustrate the norms for staffing levels and expenses as they vary by type of firm. Benchmark measures include:

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Appendix 3a financial statements are in thousands of dollars.

- Total compensation as a percentage of total O&M costs
- © O&M wages per employee (employees on payroll at year's end)
- Total benefits and pensions per employee
- Ratio of total benefits to total compensation
- Annual therm throughput per employee
- Average annual customers served per employee

Profitability (Section IV-F and Appendix 6). Profitability is expressed here in terms of return on assets as well as return on common equity. Since ROA measures the returns attributable to operations (prior to finance costs), ROA in used to describe the relative economic efficiency of natural gas distribution by industry segment. This section will examine selected cost drivers-- numbers of therms sold, of customers served, dollars of gas plant utilized, and miles of pipe in service-- to evaluate each in terms of its impact on ROA. Additionally, return on equity indicates the rate of return that a firm earns on its equity base. This section will present ROE for each of the various segments, as well as decompose this measure to gain a better understanding as to what is driving changes in ROE. See Table 6 for more detail.

IV. BENCHMARK DISCUSSION

IV-A. OVERVIEW

Benchmark summaries are presented here in order of accounting process: revenues are discussed first, followed by O&M costs, operating income, debt management, capitalized income values, and profitability. Finally, wage and benefit profiles are discussed. Table 1 summarizes the scope and scale of the companies studied. It is important to emphasize that the following data are meant to illustrate the typical company studied in this sample and absolute values should not be extrapolated to the industry as whole. This is especially true of the average number of customers.

TAI	BLE 1		
UTILITY	PROFILES		
STATISTICAL SUMMAR	Y, BY INDUSTRY SEGME	NT	
DATA BASED ON S	SEGMENT AVERAGES		
	1997	1998	1999
All Companies	72 Firms	76 Firms	75 Firms
No. of gas customers	430,152	427,473	398,592
Annual therms delivered ('000)	953,790	903,947	893,764
Annual therms delivered per account	2,217	2,115	2,402
Therms delivered per \$1000 of gas plant	1,248	1,187	1,352
Density of system ²	37.7	37.7	34.5
Firm sales ³	90.2%	91.7%	88.6%
Gas utilities	50 Firms	54 Firms	56 Firms
No. of gas customers	481,922	500,348	441,459
Annual therms delivered ('000)	1,037,539	1,037,822	942,115
Annual therms delivered per account	2,153	2,074	2,380
Therms delivered per \$1000 of gas plant	1,191	1,144	1,325
Density of system ²	37.3	37.8	35.3
Firm sales ³	93.1%	92.8%	89.5%
Comb. Gas & Electric Utilities ¹	14 Firms	12 Firms	10 Firms
No. of gas customers	418,001	359,382	429,904
Annual therms delivered ('000)	1,053,852	877,402	1,204,375
Annual therms delivered per account	2,521	2,441	2,529
Therms delivered per \$1000 of gas plant	1,447	1,445	1,327
Density of system ²	39.8	38.4	35.3
Firm sales ³	82.1%	87.4%	88.9%
Municipal Utilities	8 Firms	10 Firms	9 Firms
No. of gas customers	129,376	115,655	97,072
Annual therms delivered ('000)	242,744	212,878	247,788
Annual therms delivered per account	1,876	1,841	2,395
Therms delivered per \$1000 of gas plant	1,497	1,321	1,544
Density of system ²	33.6	32.6	28.3
Firm sales ³	82.2%	84.2%	84.5%

Source: A.G.A., USR.

¹ Figures for gas operations only.

² "Density" refers to the number of customers per mile of pipe (mains and services combined) in service.

 $^{^{\}rm 3}$ $\,$ Expressed as a percentage of total annual therm volume delivered.

IV-B. REVENUE PERFORMANCE

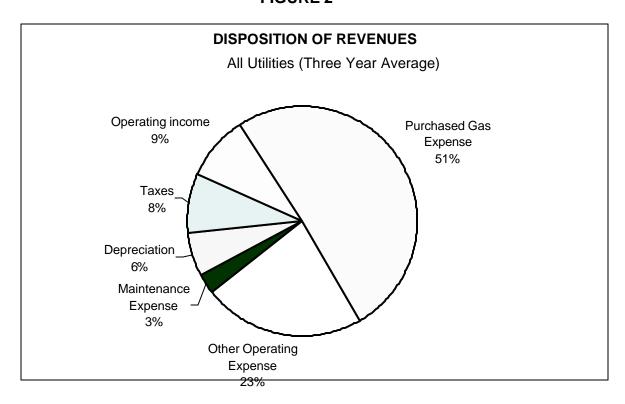
Figure 2 shows the allocation of average revenue for the three years studied. Table 2 summarizes average industry revenue performance by segment. Weather patterns impacted revenues per customer, while changing gas costs impacted both revenues per customer and per therm.

TA	BLE 2		
UTILITY REVEN	UE PERFORMANCE		
	e Values per Group Segment Averages		
	1997		1999
	19	998	
All Companies			
Operating revenue ('000)	\$454,125	\$425,659	\$366,212
Per customer	\$1,056	\$990	\$947
Per therm	\$0.4761	\$0.4548	\$0.4280
Collection period (days)	32.9	35.2	38.4
Gas utilities			
Operating revenue ('000)	\$511,862	\$507,141	\$389,243
Per customer	\$1,062	\$1,019	\$951
Per therm	\$0.4933	\$0.4670	\$0.4286
Collection period (days)	44.1	37.6	40.2
Comb. Gas & Electric Utilities ¹			
Operating revenue ('000)	\$453,268	\$348,077	\$500,044
Per customer	\$1,084	\$965	\$1,022
Per therm	\$0.4301	\$0.4032	\$0.4199
Collection period (days)	23.0	24.1	30.4
Municipal Utilities			
Operating revenue ('000)	\$94,878	\$78,756	\$74,205
Per customer	\$733	\$867	\$1,028
Per therm	\$0.3909	\$0.4508	\$0.4323
Collection period (days)	35.2	35.6	36.3

Source: A.G.A.,

¹ Figures for gas operations only.

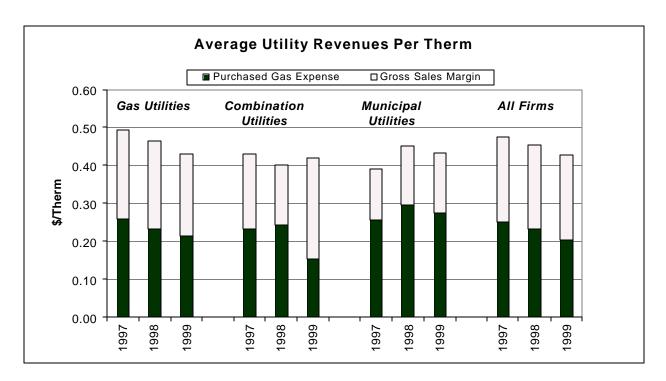
FIGURE 2



IV-C. O&M ANALYSIS

Operations and maintenance (O&M) expenses are those costs specifically attributable to current-year gas distribution activity. These are cost items that are incurred within an annual time period (as opposed to costs amortized over a period of years as is the case with finance costs and depreciation). A presentation of O&M costs on a per-therm basis will facilitate a comparison of cost efficiencies attained by the various industry segments. Table 3 shows average O&M expense detail for the years studied for the combination and gas utility segments.

FIGURE 3



Source: AGA, USR.

		TABLE 3				
	UTILITY	O&M DETAIL	ANALYSIS			
	AVERAGE	MARGIN PER T	HERM SOLD			
	GA	S UTILITI	ES	СОМ	BO UTILI	TIES ¹
	1997	1998	1999	1997	1998	1999
MARGINS PER THERM						
Gas-only revenues	\$0.4933	\$0.4670	\$0.4286	\$0.4301	\$0.4032	\$0.4199
Purchased-gas expense	0.2598	0.2412	<u>0.2153</u>	0.2324	0.2426	0.1542
Gross sales margin	0.2336	0.2258	0.2133	0.1977	0.1605	0.2657
Total production costs ² Storage & LNG	\$0.2682 0.0028	\$0.2539 0.0028	\$0.2179 0.0031	\$0.2448 0.0030	\$0.2465 0.0040	\$0.1580 0.0046
Transmission	0.0030	0.0040	0.0048	0.0024	0.0022	0.0038
Distribution	0.0296	0.0313	0.0273	0.0213	0.0170	0.0185
Customer accounts	0.0203	0.0207	0.0179	0.0150	0.0143	0.0146
Customer svc. & info.	0.0037	0.0038	0.0034	0.0033	0.0029	0.0020
Sales	0.0026	0.0044	0.0025	0.0016	0.0016	0.0015
Admin. & general	0.0420	0.0430	0.0370	0.0274	0.0384	<u>0.0269</u>
Total O&M	0.3723	0.3549	0.3169	0.3184	0.3223	0.3060
SAME-SIZE ANALYSIS						
Gas-only revenues	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Purchased-gas expense	<u>52.7%</u>	<u>49.7%</u>	<u>50.2%</u>	<u>54.0%</u>	<u>60.2%</u>	<u>36.7%</u>
Gross sales margin	47.3%	50.3%	49.8%	46.0%	39.8%	63.3%
Total production costs ² Storage & LNG	54.4% 0.6%	50.1% 0.6%	50.8% 0.7%	56.9% 0.7%	61.1% 1.0%	37.6% 1.1%
Transmission	0.6%	0.8%	1.1%	0.6%	0.5%	0.9%
Distribution	6.0%	6.3%	6.4%	5.0%	4.2%	4.4%
Customer accounts	4.1%	4.2%	4.2%	3.5%	3.6%	3.5%
Customer svc. & info.	0.7%	0.8%	0.8%	0.8%	0.7%	0.5%
Sales	0.5%	0.9%	0.6%	0.4%	0.4%	0.4%
Admin. & general	<u>8.5%</u>	<u>8.8%</u>	<u>8.6%</u>	<u>6.4%</u>	<u>9.5%</u>	<u>6.4%</u>
Total O&M	75.6%	99.1%	72.2%	74.0%	81.1%	78.9%

Source: AGA, USR.

¹ Figures for gas operations only.

² Purchased-gas expense is subsumed within total production costs.

NOTE: Figures do not sum precisely due to independent rounding.

IV-D. INCOME ANALYSIS

Operating income, by accounting definition, represents revenues net of operations expenses. Operating income does not net out capital cost-related expenses such as interest and amortization. A summary of operating income, then, allows a comparison of efficiency in gas distribution. Figure 3 shows the dispersion of individual companies' operating income pertherm. Table 4 shows average operating income results by type of firm.

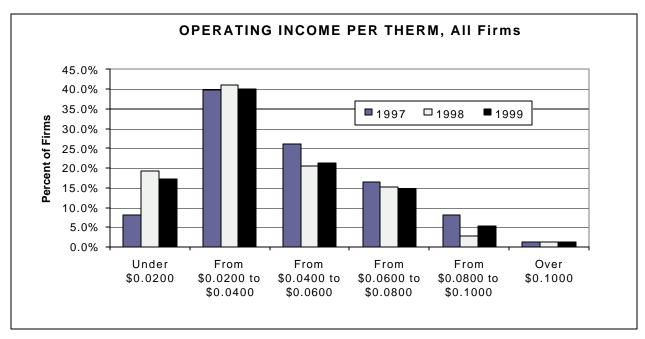


FIGURE 4

Source: AGA, USR.

		TABLE 4				
	UTILITY INCOI	ME STATEME	NT HIGHLIG	SHTS		
Avi	ERAGE VALUES F	PER GROUP, GA S UTILITIE			BO UTILI	TIES ¹
	1997	1998	1999	1997	1998	1999
Operating revenue, \$000	\$511,862	\$507,141	\$389,243	\$453,268	\$348,077	\$500,044
Total O&M, \$000	386,242	382,471	280,948	335,581	282,178	394,559
Operating income, \$000	51,100	45,122	41,771	47,596	20,232	34,560
Percent of Revenue						
Total O&M	75.5%	75.4%	72.2%	74.0%	81.1%	78.9%
Operating income	10.0%	8.9%	10.7%	10.5%	5.8%	6.9%
Per Therm						
Revenue	\$0.493	\$0.467	\$0.429	\$0.430	\$0.403	\$0.420
Total O&M	0.372	0.355	0.317	0.318	0.322	0.306
Operating income	0.049	0.041	0.045	0.045	0.027	0.037
Per Customer						
Revenue	\$1,062	\$1,019	\$951	\$1,084	\$965	\$1,022
Total O&M	801	772	701	803	773	744
Operating income	106	90	102	114	64	124
Per Dollar of Gas Plant						
Revenue	\$0.588	\$0.560	\$0.519	\$0.622	\$0.572	\$0.4650
Total O&M	0.443	0.428	0.387	0.461	0.464	0.342
Operating income	0.059	0.048	0.052	0.065	0.036	0.041
Per Mile of Pipe ²						
Revenue	\$39,614	\$38,176	\$33,869	\$43,149	\$41,681	\$35,862
Total O&M	29,892	28,768	24,778	31,946	34,065	26,039
Operating income	3,955	3,408	3,576	4,531	2,321	3,225

Source: AGA, USR.

IV-E. DEBT ANALYSIS

Debt instruments and their management are prominent items on the utilities' financial agendas. Debt has traditionally represented a large share of utility capitalization. This is due to the historically regulated environment in which utilities have operated. The presence of regulatory oversight, from an investor's perspective, suggests less risk, more stable cash flow, and generally better debt ratings and interest coverage from cash flow. Historically, this made the utility industries attractive to bond investors. As for utilities, the containment of interest and other debt-related carrying costs can have a decisive impact on the overall profitability of operations.

¹ Figures for gas operations only.

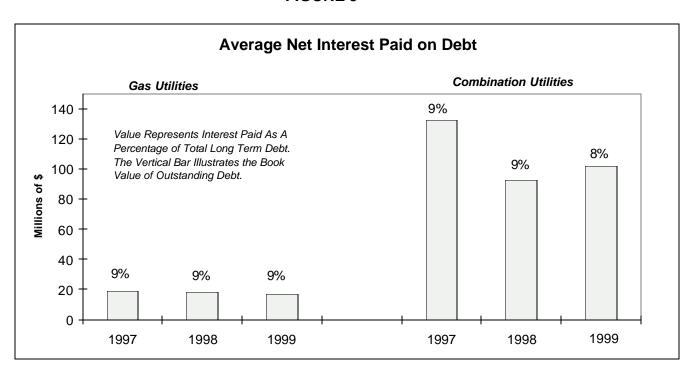
² Miles of main and services combined.

The total cost of capital for a utility reflects the cost of both debt and equity financing.⁷ Table 5 shows summary descriptors of capital costs for utilities by industry segment.

TA	ABLE 5		
UTILITY DEBT A	ND DEBT COVERA	\GE	
AVERA	GE VALUES		
	1997	1998	1999
Gas utilities			
Total LT Debt to Total Assets	27.7%	27.2%	24.2%
LT Debt to Total Capitalization	44.7%	44.7%	38.1%
EBITDA Interest Coverage	7.1x	7.5x	6.3x
Combination Utilities ¹			
Total LT Debt to Total Assets	30.3%	27.9%	29.6%
LT Debt to Total Capitalization	48.5%	49.2%	49.4%
EBITDA Interest Coverage	6.0x	6.1x	6.0x

Source: AGA, USR.

FIGURE 5



Note: Combination utility figures represent combined gas and electric operations.

¹ Figures represent combined gas and electric operations.

For combination utilities, such measures necessarily reflect combined gas and electric financials. Some municipal utilities in this study have similar combined activity financing.

Note again that the discussion of combination utility debt and capital structure cannot be limited to gas operations. Therefore, this portion of the analysis necessarily considers combined-commodity financial performance. The combination utilities feature a diversity of commodity sales and stabilized electric base-load operations attributable to base-load (i.e., not weather-driven) sales.

IV-F. PROFITABILITY ANALYSIS

For this study, profitability is expressed in terms of return on assets (ROA), which relates net income to the value of the asset base that generated that income. Stated differently, ROA measures how well a company's assets "work" to generate income from operations. As such, ROA is convenient for comparing the operating results across companies within an industry.

Figure 6 shows the dispersion of individual company ROA results. Table 6 shows profitability measures for both gas and combination utilities for the years studied.

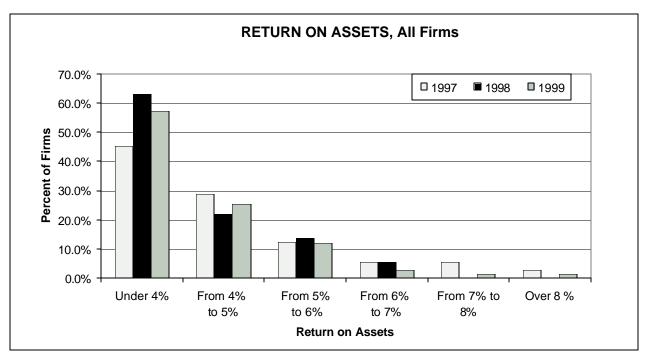


FIGURE 6

While ROA is typically measured as the ratio of net income to assets, it can also be expressed as asset turnover multiplied by profit margin. Asset turnover measures a firm's

¹ When referring to combined gas and electric operations, the balance sheet items (i.e. total end-of-year assets) refer to the total firm, which could include non-utility assets, gas transmission assets and "other" utility assets (e.g. water), while income statement items (i.e. total revenues) refer to only gas and electric utility distribution operations combined. As a result, these ratios may differ from other reports that consolidate income statement items for the total firm.

ability to generate sales from its fixed asset base. The second component of ROA is profit margin, or return on sales. This measures the operating profit per dollar of sales.

	TABLE 6												
UTILITY	PROFITABILITY INDIC	ATORS											
	AVERAGE VALUES												
Name													
Gas Utilities													
Asset Turnover	0.66x	0.65x	0.60x										
	65.5%	65.7%	60.9%										
Equity Multiplier	3.01x	3.03x	2.80x										
Profit Margin	6.6%	5.3%	6.5%										
ROA ²	4.3%	3.4%	3.5%										
ROE ²	13.0%	10.4%	9.5%										
Current Ratio	0.86	0.83	0.92										
Current Assets/Total Assets	18.6%	17.9%	18.4%										
Combination Utilities ¹													
Asset Turnover	0.40x	0.51x	0.59x										
Financial Leverage	67.4%	70.2%	63.5%										
Equity Multiplier	3.44x	3.78x	3.53x										
Profit Margin	8.6%	7.1%	6.9%										
ROA ²	3.4%	3.6%	3.6%										
ROE ²	11.8%	13.7%	11.9%										
Current Ratio	0.73	0.62	0.90										
Current Assets/Total Assets	10.1%	11.9%	14.4%										

Source: AGA, USR.

Another measure of profitability is return on common equity (ROE). This differs from ROA in that it takes into account the impact of a firm's capital structure on its profitability. The capital structure of a firm can be examined in many different ways. ROE can be expressed as ROA multiplied by the equity multiplier. The equity multiplier (shown in Table 6) measures a firm's assets relative to its common stock equity. An increase in a firm's level debt financing (an increase in liabilities) will cause a reduction in stockholders equity. This will cause the equity multiplier to rise and thereby increase total ROE. The rise in ROE compensates equity holders for the increased risk they must bear as the firm increases its level of debt.

IV-G. LABOR PRODUCTIVITY AND WAGE ANALYSIS

Current industry interest in restructuring, efficiency, and cost effectiveness often calls attention to staffing and wage profiles. Figure 7 and Table 8 summarizes wage and benefit values by industry segment.

¹ Figures represent combined gas and electric operations.

When referring to combined gas and electric operations, the balance sheet items (i.e. total end-of-year assets) refer to the total firm, which could include non-utility assets, gas transmission assets and "other" utility assets (e.g. water), while income statement items (i.e. total revenues) refer to only gas and electric utility distribution operations combined. As a result, these ratios may differ from other reports that consolidate income statement items for the total firm.

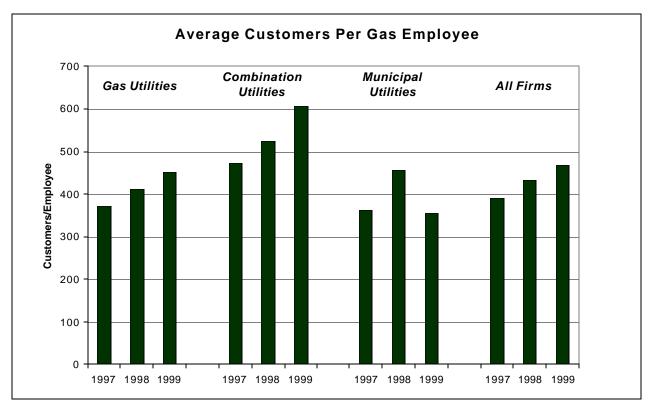


FIGURE 7

Source: AGA, USR.

	TABLE 8			
	AGES AND BEN			
AVERAGE VALUE	S PER EMPLOYEE A	AT YEAR-END		3 Year
	1997	1998	1999	Average
	.,,,,	.,,,	,,	o.ago
All Firms				
Number of employees at year-end	910	887	743	847
O&M wages	\$36,679	\$34,920	\$30,471	\$34,023
Total benefits and pensions	\$11,773	\$9,092	\$11,306	\$10,724
Total salaries, benefits, and pensions	\$52,605	\$55,464	\$61,090	\$56,386
Ratio of total benefits to total compensation	20.1%	18.4%	19.0%	19.1%
Total compensation as a percent of O&M	19.6%	20.2%	21.1%	20.3%
Therms sold per employee	920,762	963,416	1,121,319	1,001,833
Customers per employee	390	434	467	430
Gas Utilities				
Number of employees at year-end	1,032	1,015	832	960
O&M wages	\$39,847	\$39,816	\$33,397	\$37,687
Total benefits and pensions	\$11,744	\$9,479	\$11,222	\$10,815
Total salaries, benefits, and pensions	\$51,748	\$56,733	\$61,043	\$56,508
Ratio of total benefits to total compensation	21.0%	18.1%	18.4%	19.2%
Total compensation as a percent of O&M	19.8%	21.0%	21.9%	20.9%
Therms sold per employee	879,392	913,775	1,046,133	946,433
Customers per employee	371	411	452	940,433 411
Combination Utilities ¹				
Number of employees at year-end	757	688	723	722
O&M wages	\$37,077	\$25,684	\$33,192	\$31,984
Total benefits and pensions	\$12,709	\$8,385	\$13,155	\$11,416
Total salaries, benefits, and pensions	\$63,542	\$58,428	\$71,004	\$64,325
Ratio of total benefits to total compensation	16.7%	17.1%	18.5%	17.4%
Total compensation as a percent of O&M	18.5%	18.5%	19.8%	18.9%
Therms sold per employee	1,193,261	1,390,862	1,695,762	1,426,628
Customers per employee	473	526	608	536
Municipal Utilities				
Number of employees at year-end	380	249	232	287
O&M wages	\$10,404	\$9,416	\$7,661	\$9,160
Total benefits and pensions	\$9,774	\$7,454	\$8,873	\$8,700
Total salaries, benefits, and pensions	\$38,167	\$41,382	\$44,978	\$41,509
Ratio of total benefits to total compensation	21.5%	23.3%	23.8%	22.9%
Total compensation as a percent of O&M	20.7%	16.6%	16.8%	18.0%
Therms sold per employee	698,374	916,076	787,896	800,782
Customers per employee	362	456	356	391
Oustomers her embrokee	302	400	330	Jel

Source: AGA, USR.

¹ Figures for gas operations only.

APPENDIX1: GLOSSARY

NOTE: Immediately below some glossary items are references to the USR data field(s) which are the source for that item. The specific field reference is in the format (x,y) where x is the schedule and y is the line item on that schedule. In this glossary, numerals serving as a field or schedule reference are in *italics*, while numbers used for the modification of those fields/schedules appear in **bold**. For example, [(6,21) divided by (2,1 / **365**)] refers to <u>Schedule VI, 21</u> divided by the result of <u>Schedule II, line 1</u> divided by 365.

00000

admin. & gen. expense

(4,12)

The overhead cost associated with office activities. Examples of such expenses include stationary, telephone service, office cleaning, heat and power, etc.

asset turnover

(2.1/6.36)

A ratio which expresses sales revenue as a percentage of assets on-hand over corresponding accounting periods (usually one year). This ratio can be interpreted as the relative degree to which a company's assets "work" to generate sales revenue.

assets

(6,36)

The total accounting value of a company's productive resources at a point in time (as on a balance sheet).

base load gas sales

(see "percent base load sales")

book value of assets (as a percent of total assets on balance sheet)

[**100**% minus (6,6/6,5)]

The ratio of (1) the total monetary value of a firm's assets which have not yet been expended per the accounting principle of depreciation to (2) total assets.

capitalization

(6,51)

The structure of a firm's long-term financing. "Capitalization" refers to the combination of debt and equity, which (in addition to retained earnings) is the monetary equivalent of the firm's assets.

collection period (days)

[6,21) divided by (2,1/365)]

An accounting measure that indicates the efficiency of revenue collections. This measure expresses an accounts receivable total in terms of the number of days of normal revenue collections that would be accumulated to make a sum equivalent to the accounts receivable balance.

combination gas & electric company

A business entity that distributes both gas and electricity to customers within a franchise territory.

common equity

(6,42)

The total value of wealth given by investors to a company in return for ownership of shares (common stock) of that company's assets and retained earnings.

customer

An entity which enters into an account with a utility in order to receive natural gas for heating, power, feedstock, and other uses. For current purposes, an individual gas meter functionally represents each customer account. As such the terms "customer," "meter," and "account" are used interchangeably in this study.

customer accounts expense

(4,5

The expense attributable to serving a customer. For utility operations, this includes metering, billing, and fixed charges incurred by customer hook-ups.

customer service & information

(4,10)

The expense attributable to all customer assistance and information operations. Bill remediation, bill inserts, and other communication with existing customers is included in this category.

debt

6,50 + 6,54 + 6,61

The summed monetary value of a company's short- and long-term obligations to repay money that it has borrowed from lenders.

density

[20,17) divided by (26,4 + 26,7)

A ratio which describes the degree to which meters are "packed" onto a distribution system. For each observation in this study, the number of meters on a utility distribution system (numerator) is compared to the total miles of distribution and service mains (denominator).

depreciation

(2,4)

The operating expense which, as an accounting mechanism, represents the predetermined annual writedown of a durable capital asset. Depreciation, as an accounting item, impacts net income and taxes. It is not a cash expenditure, but is an annual recognition of long-lived asset costs which are spread over the years that these assets are expected to be in operation.

distribution expense

(4,8)

The operating expense which represents the cost of moving natural gas from a utility's city gate to all the meters along the franchise's system of gas mains.

EBIT

2,18 + 2,8

An measure which describes, for an accounting period, the total company income net of operations expense, but not yet net of interest and tax expenses. This measure facilitates comparisons of companies' economic output after operations, capital depletion, and depreciation conventions.

EBITDA

(2,18 + 2,6 + 2,8)

An measure which describes, for an accounting period, the total company income net of operations expense, but not yet net of interest, tax, depreciation, and amortization expenses. This measure facilitates comparisons of companies' economic output from operations.

EDITDA interest coverage

[(2,18 + 2,4 + 2,6 + 2,8)] divided by (2,24)

The comparison of a company's financial returns to its interest payment obligations, for a specific accounting period. "EBITDA" is an income statement result; specifically, it means "earnings before interest, taxes, depreciation, and amortization." This ratio indicates the company's relative ability to generate the cash flow necessary to meet its interest payment obligations.

field

An element of database structure which holds the recorded values for a specific attribute of interest common to all observations. See also *Uniform Statistical Report (USR)*

gas plant

(6,2)

The undepreciated capital facilities directly related to gas distribution. See also "total plant in service."

A tranchised gas distribution company, the equity value of which is neid by shareholders in the form of stock. The earnings of such a company are distributed wholly or in part of shareholders in the form of dividends. Any earnings not distributed are retained by the company on its balance sheet.

gross sales margin

For gas only: [(2,1) minus (4,2)], both expressed on a per-therm basis

An accounting measure that describes the per-unit dollar value that remains after the acquisition cost of the unit is subtracted from the retail revenue received for that unit.

Heating Degree Days (HDD)

A measure that describes the average annual space heating requirements for a given location.

implied long-term (LT) debt cost

(2,24 divided by 6,50)

A proxy measure of the interest rate paid by utilities for long-term borrowing (obligations over one year). Data as collected on the USR did not request a breakout of shore- vs. long-term interest obligations. Therefore, a strict calculation of cost of long term debt (annual interest paid on long-term obligations divided by total long-term debt) was not possible. The implied cost relates net interest costs (interest of all types) to long-term debt. The result permits some distortion of true long-term debt costs,

income before external items and cumulative effects

(2,25)

An income statement line item describing a company's financial earnings after accounting for operations and maintenance expenses, interest, taxes, depreciation and amortization. It excludes extraordinary (and usually unplanned) expenses attributable to external and cumulative effects, such as lawsuits, externally imposed accounting changes, etc.

long-term debt

(6,50)

Financial instruments which become due on a date at least on year beyond the current accounting period. These include the mortgages and bonds, which represents a company's capital borrowings. By issuing debt, the company has an obligation to repay its lenders the amount borrowed plus regular increments of interest.

lower quartile (LQ)

A statistical measure that describes a data value that is halfway between the median and the lowest value in the data set. Technically defined as the "first quartile." See "quartile" and "median."

mean

An average value; i.e. a single calculated value which is representative of a set of values. The mean is calculated by summing a set of observation values, then dividing that total by the number of observations that were used.

median (MED)

A statistical measure describing the "middle position" for a sequence of observations, or the 50-percent position in a sequence of ordered observations (2nd quartile). See "quartile."

meter

(See "customer")

municipal utility

A type of gas distribution company which is owned by a local government entity and run on behalf of that entity's citizenry. Whereas investor-owned utilities usually pay out dividends to shareholders, the municipal utility's dividends accrue to the citizens in the form of a lower cost for energy.

net worth

The residual value of a company's assets after deducting liabilities.

these are expenses over which management has direction. These are distinct from (i.e. do not include) expenses imposed from outside of operations such as interest payments and amortization.

observation

A single event for which an activity is recorded or measured. For a measurable event the unique record for any observation is that observation's value. For example, if the variable of interest is annual therms sold," then "1,000,000" may be the value of this variable for the single observation "ABC Company."

operating income

The financial outcome of a company that represents revenues earned less the expenses attributable to operations, including depreciation, amortization, and taxes (but not expenses such as interest payments, amortization, etc.).

percent firm sales

The proportion of total annual utility therm sales sold per without anticipation of interrupted service. The complement to this proportion is the percentage of therms sold per interruptible or transportation rate schedules.

purchased gas expense

(4,3)

The utility expenditure for the gas it buys on the market from producers, transmission companies, marketers, and other sources.

quartile

A statistical tool which analyzes a set of values that are sequenced by order of magnitude. Any set of ordered values can be divided into four quartiles. The observation reached after counting off the first 25 percent of the sequenced values (counting from the lowest value), is the first quartile. The second quartile is the observation at the 50 percent position in the sequence; the third quartile is at the 75 percent position; and the fourth quartile is at the 100 percent position, which is also the highest value for the entire data set.

Return On Assets (ROA)

(2,29) divided by (6,36)

A financial ratio that expresses net income as a percentage of assets. This ratio measures how well a company uses its assets to generate operating income.

Return On Equity (ROE)

(2,29) divided by (6,42)

A financial ratio that expresses net income as a percentage of total common stock equity. This ratio measures how well investors in a firm are doing relative to other investments.

revenue

(2,1)

The receipts from sales administration, including commissions overhead, materials, etc.

sales expense margin

(4.11)

The cost of sales administration, including commissions overhead, materials, etc.

same-size financial statement

This is an alternative method of displaying income statement and balance sheet summaries. It is intended to facilitate comparisons across company types. As opposed to displaying absolute dollar values, the same-size statement presents each line item is a percentage of its aggregate total. The same-size income statement sets revenues at 100.0 and all other items are a percent of that total. The same-size balance sheet similarly sets total assets (as well as total liabilities and owners' equity) to 100.0.

(4,0)

The amount representing the utility's obligation to pay taxes, including sale, gross receipts, income, and property taxes. This total includes pass-through taxes collected by the utility on behalf of local government jurisdictions.

total benefits

(13,10)

The annual compensation accruing to utility employees in the form of pensions, health care, insurance, and other non-payroll items.

total compensation

(13,6 + 13,10)

The total annual compensation accruing to utility employees, both as payroll and non-payroll compensation as well as benefits.

total plant in service

(6,5)

The total value of utility plant as shown on the balance sheet. In the case of combination utilities, this will include gas and electric plant used for the purpose of power distribution.

transmission

(4,7)

The cost to a utility for moving natural gas purchases from its source to its city gate.

Uniform Statistical Report (USR)

The standardized reporting form used by the American Gas Association to collect financial and operating information from its individual member companies. The USR data is the source for information presented in this study.

upper quartile (UQ)

A statistical measure, which describes a data value that, is halfway between the median and the highest value in the data set. Technically defined as the "third quartile." See "Quartile" and "meridian."

value

In statistics, a "value" is the recorded measurement for an individual observation. For example, if the variable of interest is "annual therms sold," then "1,000,000" may be the value of this variable for the single observation "ABC Company."

variable

An attribute, more or less common to a set of observations, which is subject to measurement. For example, if the variable of interest is "annual therms sold," then "1,000,000" may be the value of this variable for the single observation "ABC Company."

weighted average

A statistical measure for describing the mean or "central tendency" of a set of numeric observations. Weighted averages are used in this stud to provide benchmark ratios per group or per industry segment. For these benchmark ratios and arithmetic (simple) average would be the mean value of the ratios calculated individually for each company. Instead, the weighted average ratio has a its numerator the sum of observations for that variable divided by the sum of observations for the denominator variable. For example, the density of distribution system metric for gas utilities relates the sum of all gas utility meters divided by the sum of all gas utility miles of pipe.

APPENDIX 2: CHARTS OF INDIVIDUAL COMPANY RESULTS

Explanation of factors influencing results:

REVENUE: Impacted by weather, rate design, customer growth, the economy, allowed rates of return, taxes, depreciation expense, total O&M expense, and subsidiary operations.

REVENUE PER CUSTOMER: Determined by revenue and customer base (predominately higher-consuming customer population yields larger results).

REVENUE PER THERM: Determined by revenue and customer base (predominately smaller-consuming customer base yields larger results).

THERMS DELIVERED PER CUSTOMER: Influenced by weather and customer base (predominately higher-consuming customer population yields larger results).

SYSTEM DENSITY: Higher population density (urban areas) leads to higher system densities.

GAS PLANT PER MILE OF MAIN: Higher system densities usually translate into higher values for this. Also impacted by gas plant characteristics (e.g., utility-owned storage, age of system, etc.)

PERCENT FIRM SALES: Determined by customer base. Utilities with predominantly residential and small commercial customers tend to have higher values here. Large customers switching from sales to transportation tariffs also influence results.

PURCHASED GAS COST PER THERM: Impacted by proximity to supplies (closer leads to lower transportation costs), interstate pipeline access (more competition leads to lower costs), volumes purchased (economies of scale), and purchasing strategies (spot vs. contracts, storage refill, hedging, etc.). Increasingly influenced by amount of transportation throughput by the company, since all therm throughput is considered in this value – therefore, increasing transportation volumes will lower a company's cost for this value, since the company incurs no purchased gas cost expense for transportation customers.

GROSS SALES MARGIN: Influenced by revenue, O&M, and company size (economies of scale).

TRANSMISSION AND DISTRIBUTION COST PER THERM: Determined by age of system, throughput, system density, and size of company (economies of scale).

CUSTOMER ACCOUNT EXPENSE PER THERM: Impacted by customer base (concentration of smaller customers leads to higher costs per therm), types of administrative (e.g. billing) systems, and throughput.

CUSTOMER SERVICE AND INFORMATION EXPENSE PER THERM: Influenced by types of administrative systems (e.g. database software and hardware), customer base, and throughput.

SALES EXPENSE PER THERM: Determined by level of marketing effort put forth by company and throughput.

GENERAL AND ADMINSTRATIVE EXPENSE PER THERM: Impacted by employee base/compensation, overhead expenses, and throughput.

TOTAL OPERATION AND MAINTENANCE EXPENSE PER THERM: Combination of purchased gas expense, other production costs, T&D, customer accounts, service, & information expenses, sales, and G&A. See those factors for explanation.

NET MARGIN PER THERM: Influenced by allowed rates of return, taxes, depreciation, weather, and throughput.

AVERAGE SALARIES, BENEFITS, AND PENSIONS PER EMPLOYEE: Impacted by union contracts, experience/tenure of average employee, age of employees and retirees, local economic competition for employees, proportion of upper management relative to employee base (higher for companies outsourcing significant workload), and special offers to employees (early retirement, severance packages due to downsizing, etc.).

CUSTOMERS PER EMPLOYEE: Determined by the customer base (companies with predominately small-use customers tend to have a higher value) as well as the employee base (more efficient companies as well as companies outsourcing significant workload tend to have a higher value).

THERMS DELIVERED PER EMPLOYEE: Primarily determined by the customer base (companies with predominately large-use customers tend to have a higher value).

GAS PLANT PER CUSTOMER: Influenced by the customer base (companies with predominately large-use customers tend to have a higher value).

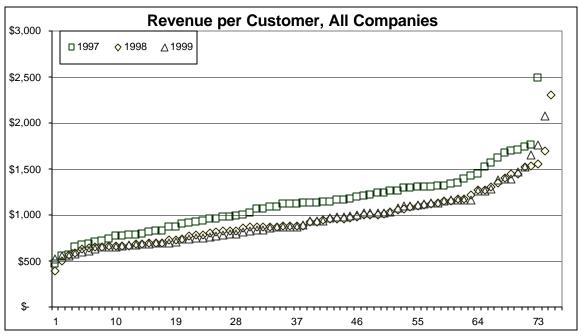
RETURN ON ASSETS: Impacted by allowed rate of return, weather, sales growth, subsidiary performance, and one-time charges (e.g. asset reevaluation, merger expense, etc.).

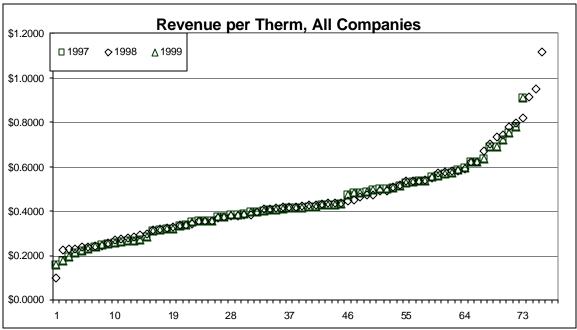
RETURN ON EQUITY: Impacted by allowed rate of return, weather, sales growth, subsidiary performance, and one-time charges (e.g. asset reevaluation, merger expense, etc.).

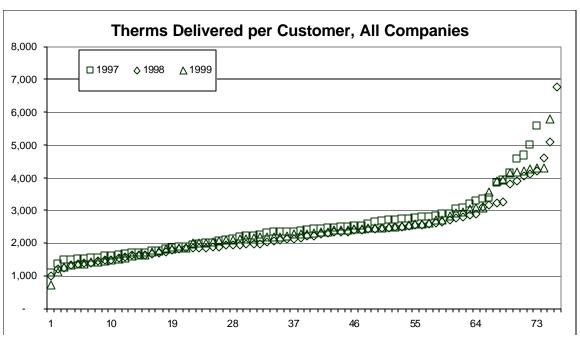
ASSET TURNOVER: Influenced by revenue and composition/age of gas plant.

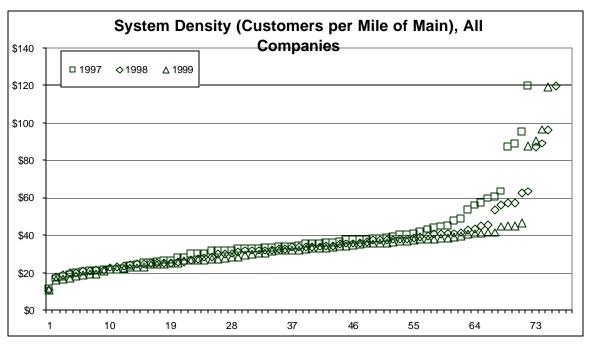
PROFIT MARGIN: Impacted by allowed rate of return, income taxes, interest expense, and weather.

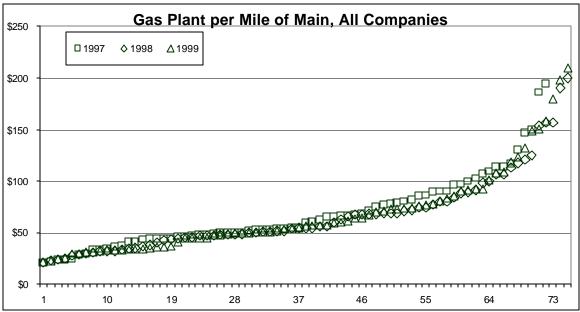
FINANCIAL LEVERAGE: Influenced by the proportion of debt and the amount of gas plant for a company.

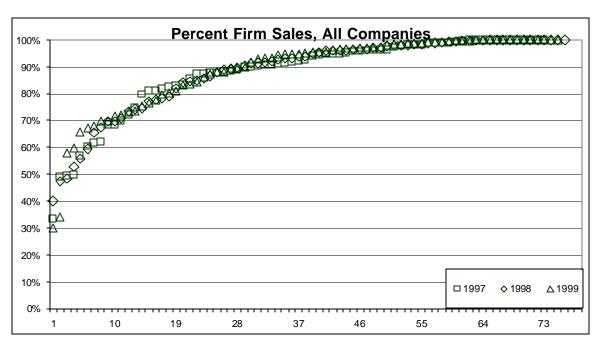


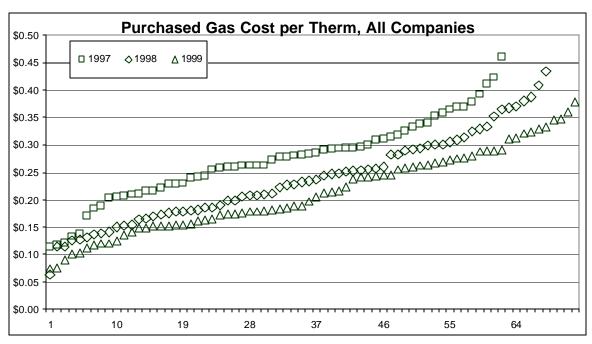


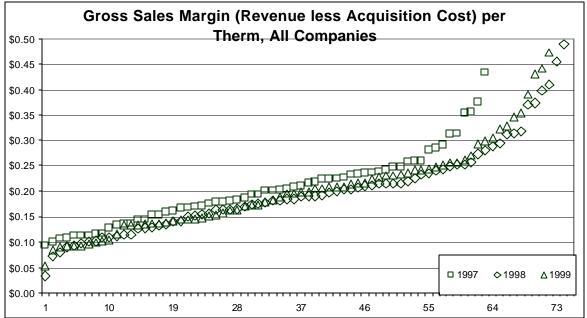


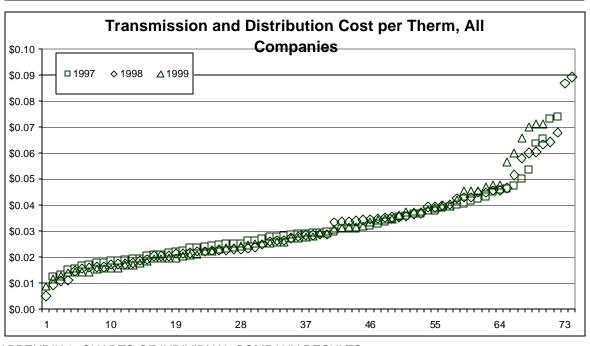


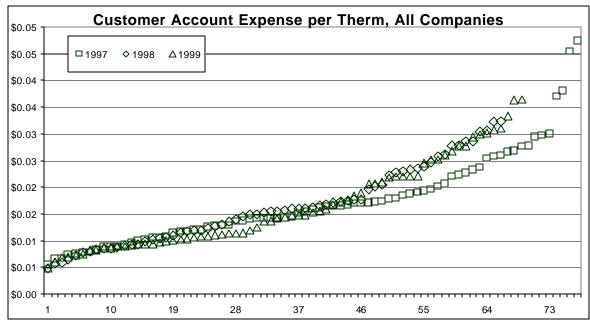


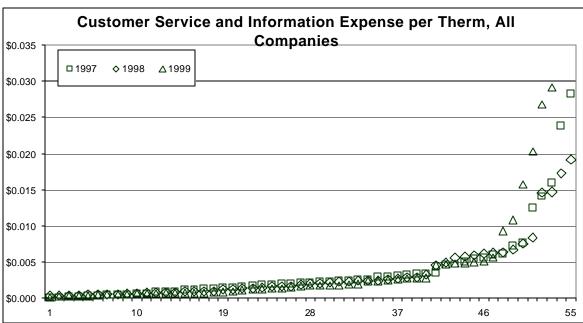




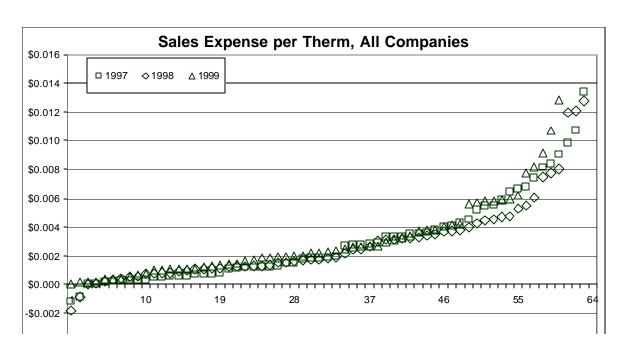


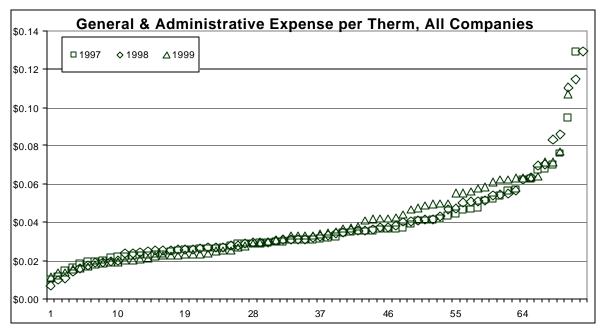




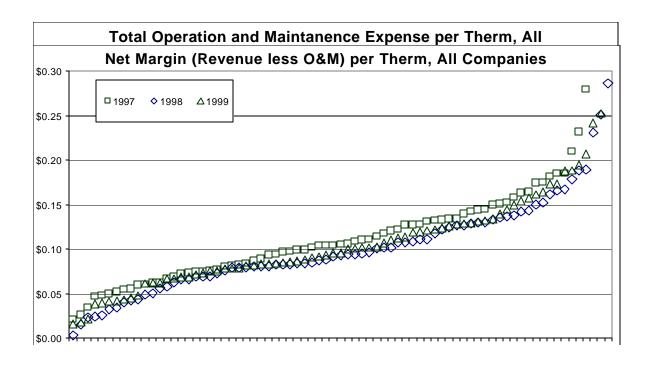


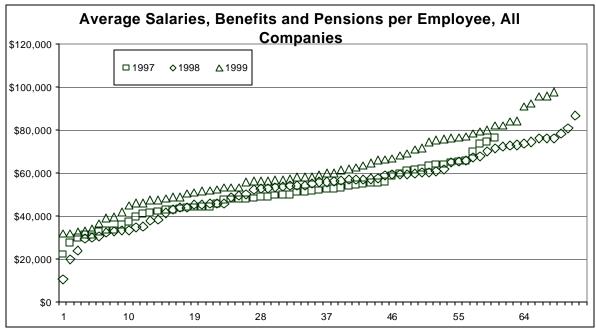
APPENDIX 2: CHARTS OF INDIVIDUAL COMPANY RESULTS





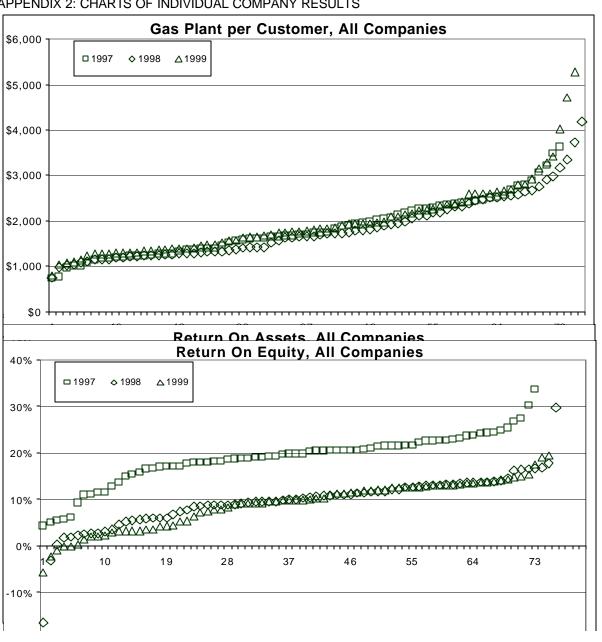
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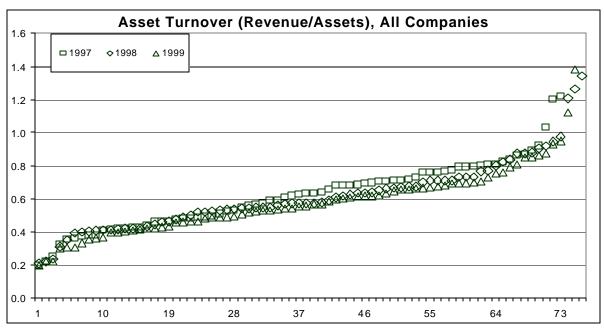


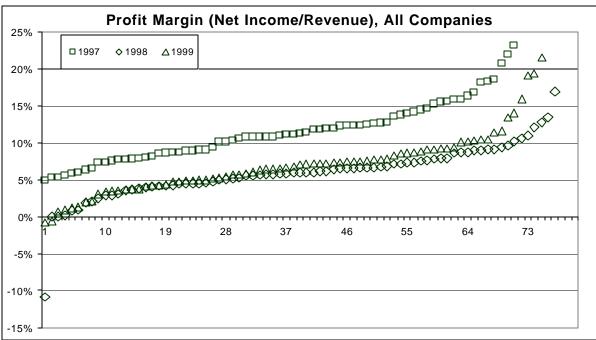


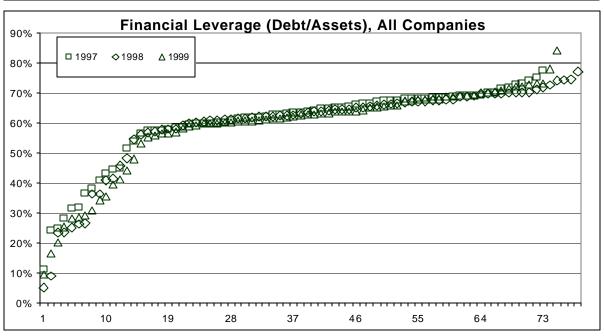
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APPENDIX 2: CHARTS OF INDIVIDUAL COMPANY RESULTS









1999 Data, 75 Utilities Reporting			Gas L				Combination				Municipal					reganies	
Stratified by Type of Company			56 f		41.10		10 fin				9 fin					firms	
	Units	LO	MED	UQ	AVG	LQ	MED	UQ	AVG	LO	MED	UQ	AVG	LQ	MED	UQ	AVG
SYSTEM PROFILE 1/	W-11-15						49.00					011 000	0.00	- 0 - 000			
Total Therms delivered	THOUS.	160,159	541,980	1,390,418	942,115	326,603	671,010	961,643	1,204,375	65,880	133,020	311,860	247,788	134,790	521,796	1,224,880	893,78
Total Sales Valume	THOUS.	73,516	312,640	915,445	542,755	213,278	330,499	555,443	513,488	65,880	115,240	311,960	196,767	74,023	311,990	762,310	497,30
Transportation Volume	THOUS.	46,970	164,438	506,342	399,360	83,458	269,215	47D,289	690,887		1,169	54,68D	51,021	37,860	141,910	475,738	396,42
Gas customers	-	58,403	225,259	649,911	441,459	122,007	277,423	455,149	429,904	31,188	70,647	146,109	97,072	55,106	201,022	580,824	398,58
Miles of main & services in use	-	2,450	8,010	19,892	13,001	3,617	7,808	11,127	12,759	1,716	3,219	4,651	3,154	2,445	6,146	15,895	11,71
Density (meters/mile of distrib. system)	-	24.7	32.2	37.8	36.3	33.0	35.5	37.7	35.3	18.7	30.7	37.1	28.3	25.3	32.4	37.8	34
THERM VOLUME BY CUSTOMER CLASS 2/																	
Residential heating	THOUS.	35.210	160.528	513,290	312.723	80.930	220.375	343,771	291,131	16.900	42.060	114,100	69,239	34.980	140.190	391.435	280.60
Residential non-heating	THOUS.	33,210	171	3,555	10.909	128	3.280	15.338	13,746		12,000	114,100	30	34,000	90	3.570	9.96
Commercial, firm	THOUS.	16,583	60,490	197,078	121,502	47,193	86,957	181,165	150,676	5.270	25,464	70,080	33,142	19,023	69,230	177,039	114.78
Commercial, interruptible	THOUS.	10,303	00,400	1,577	3.287	47,150	79	1,618	1,522	5,210	20,404	4,131	2,760	19,023	99,230	2.251	2.96
Industrial, firm	THOUS.	1,182	8.125	33,428	38.142	1,888	3.847	13.963	18,311	9.818	14.850	16,310	16,275	1.794	8,330	26,206	32.60
Industrial, interruptible	THOUS.		415	13,638	18,826		2,069	8,748	15,015		20,221	23.910	14,269		907		17.77
	THOUS.				2.257	-		120	8.967		20,221		43,697			21,116	8.12
Electric utility generation, firm	THOUS.	-	-		19.304	-	-	120	3,297	-	-	-	The party	-		-	
Electric utility generation, interup.		-				-	-	_		-	-	-	1,224	-			15,00
Non-utility generation, firm	THOUS.		,		1,467	-	-							-			1,09
Non-utility generation, interup.	THOUS.	-			1,096	-	-	-	20		-	-	631	-	-		88
NGV	THOUS.	-	-		56	-	-	-	25	-	-	-	-	-	-		4
Municipal & gublic	THOUS.				3,679	-	50	2,908	2,546			250	432		-	61	3,13
Interdepartmental	THOUS.	-	-		1	-	-	970	3,588			50	984	-			58
Other	THOUS.	-	-		1,002	-		83	1,884	-		-	1,299	-			1,15
NUMBER OF CUSTOMERS BY CUSTOMER CLA	SS																
Residential heating		51,235	202,446	583,124	374,149	105,428	355.282	818.882	472.382	29.899	59.942	127,304	86,071	40.655	182,871	576,585	362,67
Residential non-heating			1,522	10,876	27,335	1,082	10,663	55,100	43,594			-	240	-	360	11,071	26,25
Commercial, firm		4,940	18,375	47,718	32.201	13,154	36.813	73,037	49.364	583	5.601	13.270	7,537	4,856	15,603	40.863	31,53
Commercial, interuptible		1,2 10		19	610	10,101	20,013	60	62			22	372	1,000	12,003	22	50
Industrial, firm		18	229	925	1.017	21	60	872	655	27	67	92	219	20	96	870	87
Industrial, interruptible			6	54	96	2	142	228	35B		14	29	21		7	70	12
Electric utility generation, firm		-			0		-	1	2			-		- :			- '-
Electric utility generation, interus.					3	-		- 1	17			-					
Non-utility generation, firm				-	0									- 1	-		
Non-utility generation, interup.		- :	- :	- :	0			- :	1			-	. 0	- :	- :		
NGV		- :		- :	4				- 6			-	- 1	- :	- :		
Municipal 8, public		-			395	- 1	33	409	250				129	- 1	- 1	- 5	33
Interdepartmental		-			0		33	400	250				10		- :		30
Other		-	-	- :	1		- :		1	- :		- '		- :			
									-				- 1				
1/ Includes transportation only customers																	
2/ Quartile figures for each column do not sum. T For example, the firm which provides the medi							or "total operation	ng income."									

1999 Date, 75 Utilities Reporting				Gas U	dites			Combinatio	on Utilities			Municipal	Utilities			All Co	mpanies	
Stratified by Type of Company				58 fr					TTO			9.60				75	ferra	
and a state of a state of the s		Units	LQ	MED	UQ	AVG	LQ	MED	UQ	AVG	LQ	MED	UQ	AVG	LQ	MED	UQ	AVG
GAS-ONLY INCOME STATEMENT																		
Operating revenue		\$THOUS	96,602	213,180	692,743	389,243	137,178	327,616	663,391	900,044	36,176	69,185	103,757	74,205	64,337	192,439	478,234	366.2
Operating expense		\$THOUS	40,768	149,800	422,575	255,232	104,296	218.895	445,238	383,723	29,418	64,361	85,628	60,672	39,D1B	146,829	370,999	249,0
Maintenance expense		\$THOUS	1,421	5,429	13,351	25,716	3,096	9.048	13,239	10,836	708	1,220	4,677	2,605	1,298	5,382	10.490	20.9
Total OSM		\$THOUS	41,961	155,048	442,838	290,948	106,750	231,310	471,967	394,559	30,126	65,363	87.975	63,277	40,296	161,225	381.338	269,9
Depreciation		\$THOUS	4,230	14,473	34,968	25,270	7 527	20.267	28,901	26,573	1,785	3,420	5,140	3,909	3,567	12,501	31.626	22,8
Depletion		\$THOUS				638			-		-				-			4
Amentization		\$THOUS			687	908		263	2,213	3,430							672	1.13
Preg. loss charged to operations		\$THOUS			-	52			-	-	-				-			- 1
Total taxes		\$THOUS	5,200	19.260	45,391	39,665	12,432	41.112	66,245	40.923	-	2.063	5.492	2.933	4,096	15,435	42,980	35.41
Other operating income		\$THOUS				(110)				-	-			1,430	-			
Total operating income		\$THOUS	7,154	22,708	48,272	41,771	8,968	19,200	63,642	34,560	99	3,369	6,062	4,187	5,009	17,329	47,309	36,25
BALANCE SHEET																		
Gas plant		\$THOUS	127,949	549,537	965,433	825,573	255,179	70B,484	1,087,805	912,882	59,165	147,807	228,039	145,311	122,904	413,084	932,581	755,58
Common plant		\$THOUS	-	-	-	1,520	889	25,115	158,834	103,062	-	-	53,081	79,854	-	-		24,4
Other plant		\$THOUS	-	-	-	14,930			-	73,397	-	12,229	304,556	190,307	-	-		43,7
Total plant in service	1/2/	\$THOUS	162,314	549,537	965,433	842,022	919,204	1,669,810	6,351,741	3,519,214	95,944	240,249	795,620	638,927	159,948	628,674	1,313,484	1,174,61
Accumulated depreciation	1/	\$THOUS	51,848	152,528	434,219	326,966	473,476	70B,034	2,711,674	1,507,143	27,181	100,464	194,087	203,282	49,271	194,087	477,127	460,46
Construction work-in-progress	1/	\$THOUS	397	4,357	18,101	12,886	33,973	44,438	197,756	99,228	1,803	11,588	46,957	23,944	946	8,772	30,412	25,58
Net utility plant	1/	\$THOUS	110,072	341,247	584,415	527,806	599,829	1,079,497	3,965,950	2,142,186	76,744	148,557	648,490	461,634	116,927	379,601	884,005	735,18
Gas storage (not-current)	1/	\$THOUS	-	-	-	1,185	-		-	1,813	-	-		334	-			1,10
Custamer accts. receivable	1/	\$THOUS	7,311	22,300	51,054	46,779	29,682	71,292	204,026	120,204	3,291	8,486	21,013	23,287	6,958	22,900	61,385	53,75
Total current & accrued assets	1/	\$THOUS	25,738	53,543	104,422	127,917	101,029	197,890	1,039,024	502,104	23,075	20,590	183,765	110,250	27,116	73,002	185,969	175,60
Total deferred debits	1/	\$THOUS	4,002	25,371	106,550	65,999	54,710	99,203	601,084	911,233	-	1,719	2,852	3,342	3,406	25,562	106,609	171,12
Total assets	1/	\$THOUS	150,763	471,670	009,200	733,426	826,805	1,803,508	5,904,709	3,902,663	95,692	201,551	064,970	592,518	164,193	536,097	1,193,312	1,139,00
			127,949	549,537	965,433	625,573	255,179	700,434	1,007,005	912,002	69,165	147,007	220,039	145,311	122,904	413,084	932,581	755,50
Common stock	W.	\$THOUS	117	5,791	35,606	34,846	2,397	38,210	542,528	530,482	-	-		-	1	5,048	38,758	96,74
Retained earnings	1/	\$THOUS	12,967	50,684	146,192	100,261	26,989	77,259	274,568	237,513	63,779	91,849	437,417	289,176	19,310	63,779	157,950	141,23
Total common stock equity	1/	\$THOUS	59,490		298,74B	249,366	194,259	581,705	1,256,300	841,345	71,311	91,849	438,443	307,958	61,752	186,661	403,955	334,57
Total long-term (LT) debt	1/	\$THOUS	34,694	117,825	241,471	195,447	166,589	544,498	1,715,611	1,330,541	14,660	69,095	191,877	179,260	30,571	121,021	273,005	344,99
Total capitalization	1/3/	\$THOUS	94,283	319,321	527,686	449,881	354,086	1,171,844	3,390,660	2,294,967	89,374	192,876	720,629	486,818	94,169	335,461	708,042	689,57
Total non-current other liabilities	1/	\$THOUS		1	868	3,642			893	11,980	-		8,367	8,179	-		1,963	5,25
Current & accrued liabilities	1/	\$THOUS	22,363	108,182	199,278	195,682	104,201	228,292	1,230,260	637,115	5,989	9,838	48,921	31,266	20,978	82,483	194,130	212,41
Total deferred credits	1/	\$THOUS	16,233	52,288	139,332	113,511	112,696	238,168	1,225,408	962,421	1,547	2,278	10,545	9,574	11,796	48,682	147,642	200,89
Total capitalization & liabilities	1/3/	§THOUS	158,763	471,678	889,288	733,426	826,605	1,803,508	5,984,789	3,902,663	95,682	201,551	864,878	582,518	164,193	536,097	1,193,312	1,139,08
1/ Figures for combination utilities are				lectric opera	rtions. Four	Municipal util	ities are also c	ombined utilitie	99.									
2/ Reflects gas and non-gas assets, a																		
3/ Total capitalization figure in this disp	lay include		VG = Average															

APPENDIX 3c: GAS UTILITY SAME-SIZE FINANCIAL STATEMENTS

1999 Data, 75 Utilities Reporting

Stratified by Type of Company		Gas Utilities 56 firms	Combination Utilities 10 firms	Municipal Utilities 9 firms	All Companies 76 firms
GAS-ONLY INCOME STATEMENT -	Based on average values				
Operating revenue		100.0	100.0	100.0	100.0
Operating expense		65.6	76.7	81.8	68.0
Maintenance expense		6.6	2.2	3.5	5.7
Total O&M		72.2	78.9	85.3	73.7
Depreciation		6.5	5.3	5.1	6.2
Depletion		0.2	-	-	0.1
Amortization		0.2	0.7	-	0.3
Prop. loss charged to operations		0.0	-	-	0.0
Total taxes		10.2	8.2	4.0	9.7
Other operating income		(0.0)	-	1.9	0.0
Total operating income		10.7	6.9	5.6	9.9
BALANCE SHEET - Based on avera	age values				
Gas plant		112.6	23.4	24.5	66.3
Common plant		0.2	2.6	13.5	2.1
Other plant		2.0	1.9	32.1	3.8
Total plant in service	1/2/	114.8	90.2	107.8	103.1
Accumulated depreciation	1/	44.6	38.6	34.3	41.2
Construction work-in-progress	1/	1.7	2.5	4.0	2.2
Net utility plant	1/	72.0	54.9	77.9	64.5
Gas storage (non-current)	1/	0.2	0.0	0.1	0.1
Customer accts. receivable	1/	6.4	3.1	3.9	4.7
Total current & accrued assets	1/	17.4	12.9	18.6	15.4
Total deferred debits	1/	9.0	23.3	0.6	15.0
Total assets	1/	100.0	100.0	100.0	100.0
Common stock	1/	4.8	13.6	-	8.5
Retained earnings	1/	13.7	6.1	48.8	12.4
Total common stock equity	1/	33.9	21.6	51.9	29.4
Total long-term (LT) debt	1/	26.6	34.1	30.3	30.3
Total capitalization	1/3/	61.2	58.8	82.2	61.4
Total non-current other liabilities	1/	0.5	0.3	1.4	0.5
Current & accrued liabilities	1/	22.6	16.3	5.3	18.6
Total deferred credits	1/	15.5	22.1	1.6	17.6
Total capitalization & liabilities	1/3/	100.0	100.0	100.0	100.0

^{1/} Figures for combination utilities are necessarily based on combined gas and electric operations. Four municipal utilities are also combined gas-electric utilities.
2/ Reflects gas and non-gas assets, also includes regulatory assets.
3/ Total capitalization figure in this display includes preferred stock.

1999 Data, 75 Utilities Reporting			Gas	Utilities			Combinati	on Utilities			Municipal	Utilities			ALC:	ompanies	
Stratified by Type of Company				firms			10 6	firms			9 fin	TO			75	5 firms	
	Units	LQ	MED	UQ	AVG	LQ	MED	UQ	AVG	LQ	MED	UQ	AVG	LO	MED	UQ	AVG
GAS-ONLY INCOME STATEMENT - Per Annu	al Therms Delivere	d															
Operating revenue	§/THERM	\$ 0.335	3 \$0.4140	\$ 0.506	2 \$ 0.4296	\$ 0.2953	\$ 0.3999	\$ 0.5309	\$ 0.4199	§ 0.2720	\$ 0.4037	\$ 0.5706	§ 0.4323	\$ 0.3164	\$ 0.4097	§ 0.5233	§ 0.42
Operating expense	\$/THERM	\$ 0.232	3 \$0.3D4B	\$ 0.365	1 \$ 0.3031	\$ 0.2081	\$ 0.2699	\$ 0.3297	\$ 0.2938	\$ 0.2240	\$ 0.3447	\$ 0.4465	\$ 0.3505	\$ 0.2245	\$ 0.3075	\$ 0.3653	\$ 0.30
Maintenance expense	\$/THERM	\$ 0.006	3 \$0,0096	\$ 0.016	4 \$ 0.0138	\$ 0.0076	\$ 0.0096	\$ 0.0102	\$ 0.0119	\$ 0.0092	\$ 0.0107	\$ 0.0223	\$ 0.0144	\$ 0.0067	\$ 0.0095	\$ 0.0160	\$ 0.01
Total O&M	\$/THERM	\$ 0.249				\$ 0.2142	\$ 0.2833	\$ 0.3401	\$ 0.3060	\$ 0.2332	\$ 0.3633	\$ 0.4573	\$ 0.3648	\$ 0.2330	\$ 0.3215	\$ 0.3836	\$ 0.30
Degreciation	\$/THERM	\$ 0.019				\$ 0.0220	\$ 0.0237	\$ 0.0273	-	\$ 0.0134	\$ 0.0193	\$ 0.0010	\$ 0.0275	\$ 0.0191	\$ 0.0241	\$ 0.0328	
Depletion	\$/THERM	6	5 .	6	\$ 0.0001	6	5	6	6	6	6 .	6	6	6	6	5	\$ 0.00
Amortization	\$/THERM	4		\$ 0.000		5 -	s 0.0002	\$ 0.0021	\$ 0.0014			\$.	8		8 .	\$ 0.0007	\$ 0.00
	\$/THERM			5 0.000	\$ 0.0000	5	5 0.0002	5 0.0021	5 0.0014							5 0.000	\$ 0.00
Prop. loss charged to operations Total taxons	\$/THERM	\$ 0.025	4 \$0.0338	\$ 0.047		\$ 0.0182	\$ 0.0421	\$ 0.0727	\$ 0.0490	4	\$ 0.0087	\$ 0.0196	\$ 0.0128	\$ 0.0199	\$ 0.0322	\$ 0.0482	\$ 0.00
		\$ 0.025	4 \$11.11338	\$ 0.047		\$ 0.0102	9 0.0421	\$ 0.0727	\$ 0.0450	3 .	\$ 0.000/	\$ 0.010G	-	\$ 0.0100	\$ 0.0322	\$ U.DAD2	
Other operating income	\$/THERM	4 0.000	3 -	9 .	\$ (0.0001)	5 .	4 0.0004	9 -	5	4 0.0000	8 - 0 0000	8 0.0105	\$ 0.0023	8 -	8 -	4 0.0000	\$ 0.00
Total operating income	\$/THERM	\$ 0.027	6 \$0.0384	\$ 0.056	2 \$ 0.0447	\$ 0.0184	\$ 0.0304	\$ 0.0541	\$ 0.0371	\$ 0.0002	\$ 0.0253	\$ 0.0435	\$ 0.0272	§ 0.0244	\$ 0.0374	\$ 0.0558	\$ 0.04
	Units	LQ	MED	UQ	AVG	LQ	MED	UQ	AVG	LO	MED	UQ	AVG	LQ	MED	UQ	AVG
GAS-ONLY INCOME STATEMENT - Per Avera																	
Operating revenue	SICUSTOMER	\$ 73	5 \$ 878	\$ 1,10	7 \$ 961	\$ 790	\$ 988	\$ 1,144		\$ 672	\$ 820	\$ 1,028	\$ 853	\$ 713	\$ 878	\$ 1,109	\$ 9
Operating expense	S/CUSTOMER	\$ 52	9 \$ 624	\$ 70	1 \$ 672	\$ 559	\$ 705	\$ 740	\$ 714	\$ 506	\$ 542	\$ 824	\$ 696	\$ 530	\$ 644	\$ 784	\$ 6
Maintenance expense	SICUSTOMER	5 1			1 6 29	5 19	6 22	6 23		\$ 16	\$ 23	\$ 39	\$ 31	\$ 16	\$ 21	6 31	
Total O&M	SICUSTOMER	\$ 55		\$ 80		\$ 579	\$ 728	\$ 761	\$ 744	\$ 602	\$ 858	\$ 891	\$ 727	\$ 581	\$ 664	\$ 817	
Degreciation	S/CUSTOMER	5 4			1 \$ 6D	\$ 46	\$ 56	\$ 70		\$ 32	\$ 49	\$ 57	\$ 48	5 44	\$ 53	\$ 70	
Dealetion	SICUSTOMER	\$.	5 -	\$.	\$ D	\$.	5 -	\$ -	\$.	\$.	\$ -	\$ -	\$ -	\$ -	\$.	5 -	\$
Amortization	\$/CUSTOMER	5 .	5 -	5	2 5 2	5 .	\$ 1	\$ 5	5 4	5 .	s .	5 .	s .	5 .	5 .	\$ 2	5
Prop. loss charged to operations	S ICUSTOMER	6 .	6 .	8 .	6 D	6 .		6 .	4 .	6 .	4	6 .	4	4	6 .	5	4
Total taxes	SICUSTOMER	\$ 6	8 \$ 82	\$ 11		\$ 64	\$ 105	\$ 157	\$ 114	5 -	5 14	\$ 38	\$ 25	5 43	\$ 80	\$ 114	5
	S/CUSTOMER	4	5 5		\$ (D)	5 .	5 100	4 107	6 114	-	6 14	6 30	\$ 5	6	5 00	5	4
Other operating income Total operating income	S/CUSTOMER		6 \$ 91	\$ 12		\$ 52	\$ 73	\$ 124	\$ 91	5 .	\$ 46	\$ 107	\$ 52	\$ 54	\$ 86	\$ 123	
rata operacing income	2003TONEX	, 0	9 91	a 12	9 9 102	9 02	. /3	\$ 126		3 1	* 40	\$ 10°	* 02	3 50	* 00	9 123	\$
	Units	LQ	MED	UQ	AVG	LO	MED	UQ	AVG	LO	MED	UQ	AVG	LQ	MED	UQ	AVG
GAS ONLY INCOME STATEMENT - Per Dolla	r of Gas Plant																
Operating revenue	per \$GAS PLANT	\$ 0.438	9 \$0.4981	\$ 0.612	6 \$ 0.5185	\$ 0.4092	\$ 0.4630	\$ 0.5066	\$ 0.4650	§ 0.4439	\$ 0.5222	\$ 0.5620	\$ 0.4947	\$ 0.4352	\$ 0.4978	\$ 0.5714	\$ 0.50
Operating expense	per \$GAS PLANT	\$ 0.282				\$ 0.2778	\$ 0.3156	\$ 0.3912	\$ 0.3293	§ 0.3171	\$ 0.4247	\$ 0.5037	\$ 0.4094	\$ 0.2837	\$ 0.3523	\$ 0.4434	
Maintenance expense	per \$GAS PLANT	\$ 0.008				\$ 0.0093	\$ 0.0127	\$ 0.0160	\$ 0.0128	\$ 0.0081	\$ 0.0189		\$ 0.0173	\$ 0.0083	\$ 0.0114	\$ 0.0185	
Total O&M	per \$GAS PLANT	\$ 0.295		\$ 0.464		\$ 0.2990	6 0.3313	\$ 0.4001	\$ 0.3424	\$ 0.3428	\$ 0.4436	6 D.5243	\$ 0.4267	\$ 0.3021	\$ 0.3650	\$ 0.4619	
Degreciation	per \$GAS PLANT	\$ 0.027				\$ 0.0267	\$ 0.0307	\$ 0.0024	\$ 0.0303	\$ 0.0248	\$ 0.0269		\$ 0.0269	\$ 0.0263	\$ 0.0312	\$ 0.0353	\$ 0.00
Degletion	per \$GAS PLANT	4 0.027	40.000	6 0.030	\$ 0.0001	6 0.0201	6 0.0307	4 0.0024		4 0.0240	6 0.0205	6 0.0290	6 0.0200	6	6 0.0312	6 0.0000	\$ 0.00
Amortization	per \$GAS PLANT			\$ 0.000		5 .	\$ 0.0004	\$ 0.0017	\$ 0.0017	5 .		\$.	8 .			\$ 0.0009	
411011000000000000000000000000000000000		2 .	8 .	5 0.000		8 .	5 0.0004	\$ 0.0017	\$ 0.0011			8 .			3 .	\$ 0.0009	1.4
Prop. loss charged to operations	per \$GAS PLANT	\$ 0.033	7 \$0.0451	8 0.000	\$ 0.0000	\$ 0.0316	\$ 0.0569	\$ 0.0603	\$ 0.0511	5 .	\$ 0.0090	\$ 0.0294	\$ 0.0147	\$ 0.0303	\$ 0.0431	\$ 0.0569	\$ 0.00
Total taxons	per \$GAS PLANT	\$ 0.033	\$11.0451	\$ 0.057		\$ 0.0316	s u.usey	# 0.0803	a 0.0511	3 .	\$ 0.0000	p 0.0254	-	5 0.0303	\$ 0.0431	a 11 12569	\$ 0.04
Other operating income	per \$GAS PLANT	4 0.000	3 -	5 .	\$ (0.0001)	5 .		5	5 -	5 .	5 .		\$ 0.0042	5 -	5 .	9	\$ 0.00
Total operating income	per \$GAS PLANT	\$ 0.039	3 \$ 0.D495	\$ 0.059	8 \$ 0.0518	\$ 0.0317	\$ 0.0353	\$ 0.0511	\$ 0.0412	\$ 0.0008	\$ 0.0375	\$ D.D41D	\$ 0.0264	\$ 0.0345	\$ 0.0431	\$ 0.0561	\$ 0.04
	Units	LQ	MED	UQ	AVG	LO	MED	UQ	AVG	LO	MED	UQ	AVG	LQ	MEO	UQ	AVB
GAS-ONLY INCOME STATEMENT - Per Mile										4 01.000		A D. TOT			4 40 700		
Operating revenue	per mile of pipe	\$ 20,74				\$ 25,354	\$ 27,709	\$ 44,310	4	\$ 21,082	\$ 25,037	\$ 31,593	\$ 23,867	\$ 20,907	\$ 25,727	\$ 38,375	
Operating expense	per mile of pipe	\$ 14,00				\$ 10,042	\$ 20,209	\$ 27,334	\$ 24,956	\$ 17,367	\$ 20,940	 Box powers 	\$ 19,590	\$ 14,982	\$ 19,010	\$ 27,002	
Maintenance expense	per mile of pipe	\$ 45		\$ 94		\$ 649	§ 790	\$ 853		\$ 506	\$ 711	\$ 983	\$ 869	\$ 477	\$ 640	\$ 957	\$ 1,1
Total O&M	per mile of pipe	\$ 15,30				\$ 18,708	\$ 20,802	\$ 28,197	\$ 26,039	\$ 18,078	\$ 21,871	\$ 24,894	\$ 20,459	\$ 15,485	\$ 20,617	\$ 29,223	
Depreciation	per mile of pipo	\$ 1,23	8 8 1,656	\$ 2,46	5 \$ 2,117	\$ 1,587	\$ 2,033	\$ 2,459	\$ 2,323	\$ 1,D4D	\$ 1,081	\$ 1,511	\$ 1,295	\$ 1,235	\$ 1,635	\$ 2,384	\$ 2,0
Depletion	per mile of pipe	\$ -	\$ -	\$ -	\$ 15	5 -	5 -	\$ -	\$ -	5 -	5 -	\$ -	\$ -	5 -	\$ -	5 -	\$
Amortization	per mile of pipe	\$.	5 -	\$ 6	1 \$ 67	S .	\$ 23	\$ 180	\$ 130	\$.	5 -	5 -	\$.	\$.	\$.	\$ 49	5
Prop. loss charged to operations	per mile of pipe	5 -	5 -	\$ -	\$ 2	5 -	5 -	5 -	\$ -	5 -	8 -	\$ -	\$ -	5 -	\$ -	5 -	\$
Total taxes	per mile of pipe	\$ 1,40	1 \$ 2,480	\$ 3,99	2 \$ 3,313	\$ 1,706	\$ 3,602	\$ 5,976	\$ 4,195	\$ -	\$ 432	\$ 1,181	\$ 836	\$ 1,273	\$ 2,237	\$ 4,063	\$ 3.7
Other operating income	per mile of pipe	5	5 -	5	\$ (16)	5 .	5 .	5 -	5 .	5 .	5 .	5	\$ 208	5 .	8 .	5 -	8
Total operating income	per mile of pipe	\$ 1,75	1 \$ 2,840	\$ 4,40		\$ 1,878	\$ 2,286	\$ 4,540	\$ 3,225	\$ 27	\$ 1,176	\$ 1,963	\$ 1,287	\$ 1,693	\$ 2,407	\$ 4,420	\$ 32
. one operating income	per male or pipe	g 1,70	- + z pau	4 4/40	3,370	2 1,010	- 2,200	4 4540	4 3,663		2 1,170	1,003	4 1,801	a 1,000	2 2,901	- 11/14/0	

APPENDIX 3e: GAS UTILITY FINANCIAL	PONTEUS	1																					-						
1999 Data, 75 Utilities Reporting			Ш.			s IOU			ш				on IOUs						Municip		XCs .		4					sanies	
Stratified by Type of Company						firm						ID fire								ms							75 fm		
		Units	-	LQ	MED	+	UQ	AVG	-	LQ	MED	+	UQ	_	AVG	_	LO	-	#ED	_	UQ	AVG	Н	LO	_	MED	+	UQ	AVG
Therms delivered (avg.) per acct.		-		1,815	2,243	1	2,999	2,380		2,092	2,36		2,939		2,529		1,648		2,421		2,546	2,396	ĸ	1,840		2,277	7	2,601	2,40
Therms per \$1,000 of gas plant		-		906	1,286	3	1,595	1,325		1,097	1,22	28	1,891		1,327		788		1,368		1,990	1,544		900	/	1,281	1	1,651	1,36
Value of gas plant per customer		-	\$	1,380	\$ 1,704	5	2,335	\$ 1,977	5	1,485	\$ 175	SD 1	2,642	\$	2,201	\$	1,294	\$	1,897	\$	2,092	\$ 1,777	5	1,386	\$	1,802	\$	2,341	\$ 1,98
%Sales firm (not interruptible)		-		85.5%	95.03	6	99.3%	89.5%		83.8%	95.8	1%	97.1%		88.9%		71.6%		79.B%		98.6%	82.5%	N	81.99		95.D1	16	99.2%	88.6
Collection period (days)	1/	-		21.9	34.6	i	53.1	40.2		27.4	32	3	37.2		30.4		27.6		33.2		43.9	36.3	Ė	25.8	F	34.3	3	49.2	38
Gas OSM expense as pct. of revenue		-		69.6%	74.03		80.2%			73.0%	74.3		78.3%		75.4%		80.1%		84.3%		89.6%	85.5%	r	70.19		74.91		80.9%	75.6
Gas operating income as pct. of revenue		-		7.3%	10.39	6	12.5%	10.5%		7.0%	8.6	1%	9.5%		8.8%		0.1%		7.1%		9.2%	5.7%	N	6.99	4	9.59	%.	12.2%	9.7
Gas operating revenue per customer		-	5	735	\$ 878	5	1,107	\$ 951	5	790	\$ 96	100	1,144	\$	1,022	\$	672	\$	820	\$	1,028	\$ 853	5	713	\$	870	1 5	1,109	\$ 94
Gas O&M expense per customor		-	- 5	556	\$ 664	- 8	808	\$ 701	8	579	\$ 72	28 1	761	8	744	8	602	8	698	8	891	\$ 727	- 6	561	- 8	664	4 8	817	\$ 71
Gas operating income per customer		-	- 6	66	\$ 91	5	129	\$ 102	5	52	\$ 7	3 1	124	5	91	8	1	5	46	8	107	\$ 52	5	54	5	86	8	123	
Gas revenue per dollar of gas plant		-	\$	0.435	\$ 0.490	5	0.607	\$ 0.512	5	0.416	\$ 0.47	76 1		\$	0.612	\$	0.444	\$	0.522	\$	0.562	\$ 0.495	5	0.436	\$	0.490	1 5	0.584	\$ 0.50
Gas O&M expense per dollar of gas plant		-	- 5	0.289	\$ 0.361	- 5	0.453	\$ 0.382	- 5	0.295	\$ 0.34	\$B \$	D.414	5	0.438	8	0.343	5	0.444	5	0.524	\$ 0.427	5	0.296	5	0.366	5 8	0.464	\$ 0.40
Gas operating income per § of gas plant		-	- 6	0.038	\$ 0.D45	5	0.060	\$ 0.051	5	0.032	\$ 0.00	35 (0.051	6	0.041	8	0.001	5	0.037	8	0.041	\$ 0.026	5	0.034	- 6	0.048	8	0.056	\$ 0.04
Gas revenue per mile of pipe	2/	-	\$	20,746	\$26,700	5	40,368	\$ 33,069	5	25,354	\$ 27.70	00 1	44,310	\$	35,862	\$	21,082	\$	25,037	\$	31,593	\$ 23,867	5	20,907	\$	25,727	5	38,375	\$ 32,00
Gas O&M expense per mile of pipe	2/	-	- 5	15,309	\$20,296	- 5	29,358	\$ 24,778	- 5	18,708	\$ 20,80	02 4	28,197	5	26,039	5	18,078	5	21,871	5	24,894	\$ 20,459	5	15,486	- 5	20,617	7 5	29,223	\$ 24,40
Gas operating income per mile of pipe	2/	-	- 6	1,751	\$ 2,840	5	4,492	8 3,576	5	1,878	\$ 2,25	96 1	4,540	6	3,225	8	27	6	1,176	8	1,963	\$ 1,287	5	1,693	8	2,407	8	4,420	\$ 3,25
Long-term debt - total assets ratio	1/	-		19.7%			30.9%			23.9%	28.9		31.1%		29.6%		12.5%		24.9%		44.1%	26.2%		19.81		27.35		31.2%	25.1
Long-term debt - total capitalization ratio	1/3/	-		34.8%			47.8%			44,1%	47.0	1%	61.8%		49.4%		13.5%		27.6%		53.8%	30.8%		34.69		42.11	%	49.1%	38.6
Not interest - long-term debt ratio	1/	-		7.9%	9.03	6	10.3%			7.9%	8.1		8.9%		8.6%		5.2%		5.4%		5.6%	5.5%		7.39	á .	8.61	N.	10.1%	8.7
EBITDA interest coverage	1/	-		4.71	6.1	1	7.6x	6.3s		4.8x	6.	2x	7.5s		6.0x		3.21		4.7×		7.1x	6.0x		4.6	4	6.1	×	7.5x	
Return on assets		-		2.5%	3.61	6	4.8%	3.5%	-	3.5%	3.9	1%	4.5%		3.6%		1.4%		2.4%		5.3%	2.9%	-	2.35	4	3.55	%	4.8%	3.6
Key: LQ = Lower Quartile, MED = Median 1/ Figures for combination utilities are nec						eratio	ns. Four	municipal u	dite	s are also	combined g	22-el	ectric utilities												Ė		Ė		
2/ Miles of distribution pipes and services																													
3/ Total capitalization figure in this display NOTE: Some ratios are not always norm				anama miki		and the	n audilmaka	n distraction	. Bu a	for observ			- Minus										F		F		F		

APPENDIX 4: GAS UTILITY O&M Detail

Based on Segment Averages

	G	as Utilites		Com	bination Uti	lites	Munio	cipal Utilitie	S	All	Companie	s
MARGINS PER THERM	1997	1998	1999	1997	1998	1999	1997	1998	1999	1997	1998	1999
Gas-only revenues	\$0.4933	\$0.4670	\$0.4286	\$0.4301	\$0.4032	\$0.4199	\$0.3909	\$0.4508	\$0.4323	\$0.4761	\$0.4548	\$0.4280
Purchased-gas expense	0.2598	0.2319	0.2153	0.2324	0.2426	0.1542	0.2559	0.2958	0.2744	0.2515	0.2336	0.2046
Gross sales margin	0.2336	0.2351	0.2133	0.1977	0.1605	0.2657	0.1349	0.1550	0.1579	0.2247	0.2211	0.2233
Total production costs ¹	\$0.2682	\$0.2339	\$0.2179	\$0.2448	\$0.2465	\$0.1580	\$0.2566	\$0.2970	\$0.2750	\$0.2631	\$0.2374	\$0.2074
Storage & LNG	0.0028	0.0027	0.0031	0.0030	0.0040	0.0046	0.0020	0.0025	0.0071	0.0029	0.0030	0.0035
Transmission	0.0030	0.0038	0.0048	0.0024	0.0022	0.0038	0.0000	0.0000	0.0004	0.0028	0.0035	0.0045
Distribution	0.0296	0.0294	0.0273	0.0213	0.0170	0.0185	0.0298	0.0392	0.0363	0.0276	0.0277	0.0258
Customer accounts	0.0203	0.0194	0.0179	0.0150	0.0143	0.0146	0.0112	0.0159	0.0144	0.0187	0.0187	0.0171
Customer svc. & info.	0.0037	0.0035	0.0034	0.0033	0.0029	0.0020	0.0019	0.0033	0.0068	0.0035	0.0035	0.0026
Sales	0.0026	0.0041	0.0025	0.0016	0.0016	0.0015	0.0007	0.0009	0.0011	0.0023	0.0036	0.0022
Admin. & general	0.0420	0.0411	0.0370	0.0274	0.0384	0.0269	0.0230	0.0334	0.0275	0.0377	0.0405	0.0347
Total O&M	0.3723	0.3549	0.3169	0.3184	0.3223	0.3060	0.3251	0.3785	0.3648	0.3587	0.3529	0.3214
PERCENT OF REVENUE												
Gas-only revenues	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Purchased-gas expense	<u>52.7%</u>	<u>49.7%</u>	<u>50.2%</u>	<u>54.0%</u>	<u>60.2%</u>	<u>36.7%</u>	<u>65.5%</u>	<u>65.6%</u>	<u>63.5%</u>	<u>52.8%</u>	<u>51.4%</u>	<u>47.8%</u>
Gross sales margin	47.3%	50.3%	49.8%	46.0%	39.8%	63.3%	34.5%	34.4%	36.5%	47.2%	48.6%	52.2%
4												
Total production costs ¹	54.4%	50.1%	50.8%	56.9%	61.1%	37.6%	65.7%	65.9%	63.6%	55.3%	52.2%	48.5%
Storage & LNG	0.6%	0.6%	0.7%	0.7%	1.0%	1.1%	0.5%	0.6%	1.6%	0.6%	0.7%	0.8%
Transmission	0.6%	0.8%	1.1%	0.6%	0.5%	0.9%	0.0%	0.0%	0.1%	0.6%	0.8%	1.0%
Distribution	6.0%	6.3%	6.4%	5.0%	4.2%	4.4%	7.6%	8.7%	8.4%	5.8%	6.1%	6.0%
Customer accounts	4.1%	4.2%	4.2%	3.5%	3.6%	3.5%	2.9%	3.5%	3.3%	3.9%	4.1%	4.0%
Customer svc. & info.	0.7%	0.8%	0.8%	0.8%	0.7%	0.5%	0.5%	0.7%	1.6%	0.7%	0.8%	0.6%
Sales	0.5%	0.9%	0.6%	0.4%	0.4%	0.4%	0.2%	0.2%	0.2%	0.5%	0.8%	0.5%
Admin. & general	<u>8.5%</u>	8.8%	<u>8.6%</u>	<u>6.4%</u>	<u>9.5%</u>	<u>6.4%</u>	<u>5.9%</u>	<u>7.4%</u>	<u>6.4%</u>	<u>7.9%</u>	<u>8.9%</u>	<u>8.1%</u>
Total O&M	75.6%	99.1%	72.2%	74.0%	81.1%	78.9%	74.0%	87.0%	85.3%	75.3%	74.1%	73.7%

^{1/} Purchased cost expense is subsumed within total production costs. NOTE: Figures may not add precisely due to independent rounding

APPENDIX 5: WAGES & BENEFITS

1999 Data, 75 Utilities Reporting		Gas	Utilities			Combinati	on Utilities	;		Municipa	I Utilities			All Co	mpanies	
Stratified by Type of Company		5	6 firms			10 f	irms			9 fi	rms			75	firms	
	LQ	MED	UQ	AVG.	LQ	MED	UQ	AVG.	LQ	MED	UQ	AVG.	LQ	MED	UQ	AVG.
Average number of employees	157	546	1,274	828	250	563	916	735	132	171	281	233	162	521	1,036	742
Number of Employees at year-end	159	532	1,277	832	245	533	910	723	135	173	281	232	162	510	1,049	743
O&M wages ('000)	\$6,708	\$25,136	\$46,582	\$33,397	\$11,695	\$29,024	\$37,983	\$33,192	\$1,468	\$4,767	\$10,056	\$7,661	\$6,078	\$20,470	\$43,520	\$30,471
Construction wages ('000)	\$880	\$4,043	\$9,750	\$7,141	\$2,004	\$4,977	\$16,202	\$9,675	\$295	\$1,048	\$2,423	\$1,671	\$1,067	\$3,638	\$10,003	\$7,155
Total pensions ('000)	\$2,234	\$5,987	\$13,200	\$8,912	\$2,287	\$6,952	\$10,132	\$9,339	\$1,033	\$1,267	\$4,186	\$2,816	\$2,064	\$5,766	\$11,124	\$8,392
Total compensation as a percent of O&M	16.4%	21.7%	26.7%	21.9%	18.0%	19.5%	20.8%	19.8%	13.5%	15.2%	20.0%	16.8%	16.2%	20.4%	25.4%	21.1%
O&M wages per year-end employee	\$32,550	\$37,930	\$46,626	\$40,565	\$39,646	\$41,186	\$46,916	\$43,478	\$20,747	\$33,961	\$40,351	\$30,585	\$32,580	\$39,433	\$45,820	\$39,975
Tot. benefits & pension per 1/	\$7,057	\$10,246	\$14,896	\$11,222	\$9,785	\$13,025	\$14,733	\$13,155	\$6,840	\$9,174	\$11,339	\$8,873	\$7,131	\$11,067	\$14,733	\$11,306
Total salary, benefits, and pension	\$50,227	\$57,724	\$71,818	\$61,043	\$64,579	\$73,510	\$79,123	\$71,004	\$32,220	\$44,315	\$56,010	\$44,978	\$50,227	\$58,245	\$74,751	\$61,090
Ratio: avg. benefits to avg. compensation	13.6%	18.0%	22.2%	18.4%	15.9%	19.7%	22.3%	18.5%	18.8%	21.6%	27.1%	23.8%	15.4%	17.9%	22.0%	19.0%
Terms sold per year-end employee	714,043	896,901	1,178,519	1,046,133	959,791	1,142,537	1,917,700	1,695,762	695,458	768,902	912,059	787,896	733,776	908,898	1,217,427	1,121,319
Customers per year-end employee	313	400	577	452	442	513	743	608	330	406	409	356	321	411	577	467

^{1/} year-end employees

NOTE: Some ratios are not always normally distributed. Therefore, average ratio values may be subject to distortion by a few observations that are outliers.

Key: LQ = Lower Quartile, MED = Median, UQ = Upper Quartile, AVG = Average

APPENDIX 6: Gas Utility Financial Performance

Based on Segment Medians	Ga	s Utilitie	S	Combi	nation U	tilities	Munic	cipal Ut	ilities	All	Compani	es
	1997	1998	1999	1997	1998	1999	1997	1998	1999	1997	1998	1999
Asset Turnover	0.69X	0.63X	0.60X	0.44X	0.55X	0.54X	0.45X	0.40X	0.39X	0.62X	0.57X	0.55X
Financial Leverage	64.0%	64.1%	63.1%	66.5%	67.1%	66.8%	38.8%	31.5%	41.2%	63.4%	64.0%	62.6%
Debt/Equity Ratio	80.4%	77.6%	75.1%	89.7%	95.5%	94.0%	50.0%	28.7%	64.3%	81.9%	77.8%	79.4%
Equity Multiplier	2.89	2.86	2.75	3.39	3.38	3.49	1.64	1.68	1.70	2.88	2.86	2.77
Profit Margin	6.3%	5.7%	6.2%	8.2%	7.3%	7.3%	11.2%	9.6%	10.1%	6.7%	6.0%	6.8%
ROA	4.1%	3.6%	3.6%	3.9%	3.8%	3.9%	5.4%	3.5%	2.4%	4.1%	3.6%	3.5%
ROE	12.1%	10.0%	10.0%	11.1%	12.2%	13.0%	9.9%	5.9%	4.1%	11.4%	10.1%	9.9%
Current Ratio	0.88	0.79	0.84	0.93	0.65	0.80	2.33	3.10	3.69	0.90	0.81	0.88
Current Assets/Total Assets	18.3%	16.8%	17.3%	11.3%	12.6%	12.4%	21.1%	21.5%	16.3%	17.5%	16.6%	16.5%

Based on Segment Averages	Ga	s Utilitie	S	Combi	nation Ut	tilities	Munio	ipal Ut	ilities	All	Compani	es
	1997	1998	1999	1997	1998	1999	1997	1998	1999	1997	1998	1999
Asset Turnover	0.66X	0.65X	0.60X	0.40X	0.51X	0.59X	0.30X	0.31X	0.44X	0.47X	0.55X	0.58X
Financial Leverage	65.5%	65.7%	60.9%	67.4%	70.2%	63.5%	49.9%	42.1%	38.2%	65.5%	65.3%	60.9%
Debt/Equity Ratio	83.6%	82.6%	80.1%	104.4%	105.6%	97.7%	94.4%	75.8%	81.1%	96.4%	90.3%	82.4%
Equity Multiplier	3.01	3.03	2.80	3.44	3.78	3.53	2.22	2.24	2.00	3.17	3.20	2.78
Profit Margin	6.6%	5.3%	6.5%	8.6%	7.1%	6.9%	12.3%	10.7%	10.6%	7.7%	6.4%	7.0%
ROA	4.3%	3.4%	3.5%	3.4%	3.6%	3.6%	3.7%	3.3%	2.9%	3.6%	3.5%	3.5%
ROE	13.0%	10.4%	9.5%	11.8%	13.7%	11.9%	8.2%	7.4%	4.1%	11.5%	11.2%	9.1%
Current Ratio	0.86	0.83	0.92	0.73	0.62	0.90	2.09	2.56	3.45	0.82	0.78	1.22
Current Assets/Total Assets	18.6%	17.9%	18.4%	10.1%	11.9%	14.4%	10.3%	12.1%	22.8%	12.8%	14.6%	18.4%

APPENDIX 7a: GAS UTILITY INCOME STATEMENTS - Per Cost Driver

Based o	n Segment A	Average
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Bassa on Cogmon / Worago				Gas Utilities				Cc	nmh	ination Util	ities				Muni	cipal Utiliti	es			AII C	ompanies	:	
	Units	1997		1998		1999		1997	J	1998		999	1	997		1998	1999		1997	0	1998		1999
GAS-ONLY INCOME STATEME							_															_	
Operating revenue	\$/THERM	\$0.49		\$0.4670	\$ (0.4286		\$0.4301		\$0.4032	\$ 0	.4199	\$0	0.3909		\$0.4508	\$ 0.4323		\$0.4761	\$	0.4548	\$	0.4280
Operating expense	\$/THERM	\$0.30		\$0.3429		0.3031		\$0.3105		\$0.3144).2938		0.3122			\$ 0.3505		\$0.3475		0.3406		0.3077
Maintenance expense	\$/THERM	\$0.0		\$0.0120		0.0138		\$0.0079		\$0.0079		0.0119		0.0129			\$ 0.0144		\$0.0113		0.0123	\$	0.0136
Total O&M	\$/THERM	\$0.3		\$0.3549		0.3169		\$0.3184		\$0.3223).3060		0.3251			\$ 0.3648		\$0.3587		0.3529	\$	0.3214
Depreciation	\$/THERM	\$0.0		\$0.0286				\$0.0217		\$0.0227		0.0269		0.0184			\$ 0.0275		\$0.0271		0.0274	\$	0.0271
Depletion	\$/THERM	\$0.0		\$0.0001		0.0001		\$0.0000		\$0.0003	\$	-		0.0000			\$ -		\$0.0011		0.0001	\$	0.0001
Amortization	\$/THERM	\$0.00		\$0.0001		0.0001		\$0.0000		\$0.0008		0.0014		0.0000			\$ -		\$0.0008		0.0007	\$	0.0001
Prop. loss charged to operations	\$/THERM		-	0.0016				\$0.0021		\$0.0000	\$			0.0000			\$ -		\$0.0001		0.0007	\$	0.0000
Total taxes	\$/THERM	\$0.0				0.0000		\$0.0004		\$0.0304		.0490		0.0000			\$ 0.0128		\$0.0001		0.0014	\$	0.0000
Other operating income	\$/THERM	(\$0.0				0.0001)		\$0.0423		\$0.0304	\$	-		0.0074			\$ 0.0023		\$0.0446		0.0049		0.0002
Total operating income	\$/THERM	\$0.0	,	\$0.0405				\$0.0452				0.0371		0.0400		•	\$ 0.0023		\$0.0002	*	0.0002		0.0002
NOTE: "\$0.0000" indicates a val	·	•					vithir		fico		φU	1.0371	ФС).0400		φυ.υ332	φ 0.0272		φυ.υ 4 6 i	Φ	0.0373	Φ	0.0410
NOTE. \$0.0000 Indicates a val	iue wilich, on a per-th	ieiiii basi	s, is to	o small to be	e exp	nesseu v	vitriii	ı iour signii	licai	ni aigits.													
	Units	1997	,	1998	1	1999		1997		1998	19	999	1	997		1998	1999		1997		1998		1999
GAS-ONLY INCOME STATEME							_			.000		-				.000	.000				.000	—	.000
Operating revenue	\$/CUSTOMER			\$ 1,019	\$	951	\$	1,084	\$	965	\$	1,022	\$	733	\$	867	\$ 853	\$	1,056	Ф	990	\$	947
Operating revenue Operating expense	\$/CUSTOMER		775		\$	672	\$		\$		\$	714	\$	586	\$		\$ 696	\$	770	- 1	742	\$	680
Maintenance expense	\$/CUSTOMER	\$		\$ 25	\$	29	\$	20	\$	19	\$	29	\$	24	\$		\$ 31	\$	25		26	\$	29
Total O&M	\$/CUSTOMER		301	•	\$	701	\$	803	\$	773	\$	744	\$	610	\$		\$ 727	\$	795	\$	768	\$	709
Depreciation	\$/CUSTOMER	\$		\$ 62	\$	60	\$	55	\$	55	\$	66	\$	34	\$		\$ 48	\$	60	\$	59	\$	59
Depletion	\$/CUSTOMER	\$		\$ 02	\$	0	\$	-	\$	1	\$	-	\$	-	\$	-	\$ -	\$	2	\$	0	\$	0
Amortization	\$/CUSTOMER	\$ \$		\$ 2	\$	2	\$	- 5	\$	2	\$	4	\$	-	\$	-	\$ -	φ \$	2	\$	1	\$	2
Prop. loss charged to operations	\$/CUSTOMER	\$ \$. ,	\$ 2	\$	0	\$ \$	1	\$		\$	- 4	\$	-	\$	3	\$ -	\$	0	\$	3	\$	0
Total taxes	\$/CUSTOMER	*	101	-	\$	86	\$	107	\$	71	\$	114	\$	14	\$		\$ 25	\$	99	\$	77	\$	83
Other operating income	\$/CUSTOMER	\$	(0)	•	\$	(0)	\$	-	\$	0	\$	114	\$	17	\$		\$ 5	\$	1	\$	1	\$	0
Total operating income	\$/CUSTOMER		106		\$	102	φ \$	- 114	\$	64	\$	- 91	\$ \$	75	\$		\$ 52	\$	107	\$	82	\$	94
Total operating income	\$/CUSTOWER	φ	100	φ 90	Φ	102	φ	114	φ	04	φ	91	Φ	75	Φ	36	φ 52	Φ	107	Φ	02	φ	94
	Units	1997	,	1998	1	1999		1997		1998	10	999	1	997		1998	1999		1997		1998		1999
GAS-ONLY INCOME STATEME				1990		1333	_	1331		1330	- 1,	333		331		1330	1333	_	1331		1330		1333
Operating revenue	per \$GAS PLANT	\$0.5	277	\$0.5599	\$ (0.5185		\$0.6223		\$0.5724	\$ 0	.4650	\$0	0.5850		\$0.5493	\$ 0.4947		\$0.5944	\$	0.5605	\$	0.5089
Operating expense	per \$GAS PLANT	\$0.4			*	0.3721		\$0.4493		\$0.4527).3293).4673			\$ 0.4094		\$0.4338	*	0.4241		0.3714
Maintenance expense	per \$GAS PLANT	\$0.0		\$0.0145		0.0149		\$0.4433		\$0.0108		0.0128		0.0193			\$ 0.0173		\$0.4330		0.0150	\$	0.0149
Total O&M	per \$GAS PLANT	\$0.0 \$0.4				0.0149		\$0.4607		\$0.4635).3424		0.4866			\$ 0.0173		\$0.4478		0.4390	\$	0.3864
Depreciation	per \$GAS PLANT	\$0.4				0.3870		\$0.4607		\$0.4633		0.0303		0.4600		•	\$ 0.4267		\$0.4478		0.4390	\$	0.3864
· · · · · · · · · · · · · · · · · · ·	•											1.0303					\$ 0.0209				0.0323		
Depletion Amortization	per \$GAS PLANT per \$GAS PLANT	\$0.00 \$0.00		\$0.0001 \$0.0008		0.0001		\$0.0000 \$0.0030		\$0.0004 \$0.0011	\$ 0	.0017		0.0000		40.000	\$ - \$ -		\$0.0014 \$0.0010		0.0002	\$ \$	0.0001 0.0010
	per \$GAS PLANT	\$0.0				0.0001		\$0.0030		\$0.0001	\$	-		0.0000					\$0.0010		0.0007		0.0000
Prop. loss charged to operations	•																Ψ						
Total taxes	per \$GAS PLANT	\$0.0				0.0466		\$0.0612		\$0.0399).0511		0.0110			\$ 0.0147		\$0.0559		0.0429	\$	0.0434
Other operating income	per \$GAS PLANT	(\$0.0	,	\$0.0002				\$0.0000		\$0.0001	\$	-		0.0136			\$ 0.0042		\$0.0003		0.0006		0.0004
Total operating income	per \$GAS PLANT	\$0.0		\$0.0482				\$0.0653		\$0.0355		0.0412	\$(0.0598		\$0.0338	\$ 0.0264		\$0.0600	\$	0.0443	\$	0.0472
NOTE: "\$0.0000" indicates a val	iue which, on a per \$0	as plant	dasis,	is too small	to be	e express	sea v	vitnin four s	sign	niticant digi	IS.												

			Gas Utilities		Com	bination Util	ities	3	Mu	unicipal Utilit	ies		Al	I Companies	;	
	Units	1997	1998	1999	1997	1998		1999	1997	1998		1999	1997	1998		1999
GAS-ONLY INCOME STATEMEN	T - Per Mile of Distr	ibution Pipe 8	k Svcs.													
Operating revenue	per mile of pipe	\$39,614	\$38,176	\$ 33,869	\$43,149	\$41,681	\$	35,862	\$24,649	\$24,392	\$	23,867	\$39,801	\$36,915	\$	32,895
Operating expense	per mile of pipe	\$28,908	\$27,746	\$ 23,608	\$31,153	\$33,280	\$	24,956	\$19,689	\$19,742	\$	19,590	\$29,045	\$27,566	\$	23,283
Maintenance expense	per mile of pipe	\$983	\$1,022	\$ 1,170	\$793	\$785	\$	1,052	\$815	\$1,062	\$	869	\$943	\$990	\$	1,118
Total O&M	per mile of pipe	\$29,892	\$28,768	\$ 24,778	\$31,946	\$34,065	\$	26,039	\$20,504	\$20,804	\$	20,459	\$29,988	\$28,556	\$	24,406
Depreciation	per mile of pipe	\$2,335	\$2,301	\$ 2,117	\$2,175	\$2,186	\$	2,323	\$1,159	\$1,386	\$	1,285	\$2,266	\$2,162	\$	2,044
Depletion	per mile of pipe	\$121	\$14	\$ 15	\$0	\$20	\$	-	\$0	\$0	\$	-	\$94	\$13	\$	11
Amortization	per mile of pipe	\$34	\$59	\$ 67	\$211	\$83	\$	130	\$0	\$0	\$	-	\$66	\$55	\$	67
Prop. loss charged to operations	per mile of pipe	\$0	\$124	\$ 2	\$44	\$0	\$	-	\$0	\$97	\$	-	\$8	\$101	\$	2
Total taxes	per mile of pipe	\$3,773	\$3,501	\$ 3,313	\$4,242	\$3,006	\$	4,195	\$466	\$599	\$	836	\$3,746	\$3,041	\$	3,134
Other operating income	per mile of pipe	(\$1)	\$4	\$ (16)	\$0	\$13	\$	-	\$571	\$134	\$	208	\$20	\$22	\$	13
Total operating income	per mile of pipe	\$3,955	\$3,408	\$ 3,576	\$4,531	\$2,321	\$	3,225	\$2,520	\$1,507	\$	1,287	\$4,018	\$2,986	\$	3,255

APPENDIX 7b: GAS UTILITY FINANCIAL RATIOS

Based on Segment Average Stratified by Type of Company

Stratified by Type of Company	Units	1997	1998	1999	1997	1998	1999	1997	1998	1999	1997	1998	1999
Therms delivered (avg.) per acct.		2,153	2,074	2,380	2,521	2,441	2,529	1,876	1,841	2,395	2,217	2,115	2,402
Therms per \$1,000 of gas plant		1,191	1,144	1,325	1,447	1,445	1,327	1,497	1,321	1,544	1,248	1,187	1,351
Value of gas plant per customer		1,807	1,812	1,977	1,743	1,689	2,201	1,254	1,394	1,777	1,776	1,781	1,983
%Sales firm (not interruptible)		93%	93%	90%	82%	87%	89%	82%	84%	83%	90%	92%	89%
Collection period (davs) 1/		44.1	37.6	40.2	23.0	24.1	30.4	35.2	35.6	36.3	32.9	35.2	38.4
Gas O&M expense as pct. of revenu		75%	75%	74%	74%	81%	75%	83%	83%	86%	75%	76%	76%
Gas operating income as pct. of reve		10%	9%	10%	11%	6%	9%	10%	8%	6%	10%	8%	10%
Gas operating revenue per custome		\$ 775.1 \$	739.8	\$ 950.7	\$ 782.9	\$ 768.8	\$ 1,022.4	\$ 585.8 \$	539.2	\$ 852.9	\$ 770.4 \$	736.5	947.5
Gas O&M expense per customer		\$ 801.5 \$	764.4	\$ 700.6	\$ 802.8	\$ 785.2	\$ 744.3	\$ 610.0 \$	567.7	\$ 726.9	\$ 795.4 \$	760.2	709.1
Gas operating income per customer		\$ 106.0 \$	90.2	\$ 101.5	\$ 113.9	\$ 56.3	\$ 91.0	\$ 75.0 \$	52.5	\$ 52.5	\$ 106.6 \$	84.3 \$	94.2
Gas revenue per dollar of gas plant		\$ 0.5877 \$	0.5592	\$ 0.5117	\$ 0.6223	\$ 0.5733	\$ 0.6121	\$ 0.5850 \$	0.4886	\$ 0.4947	\$ 0.5944 \$	0.5590 \$	0.5230
Gas O&M expense per dollar of gas		\$ 0.4434 \$	0.4218	\$ 0.3818	\$ 0.4607	\$ 0.4648	\$ 0.4877	\$ 0.4866 \$	0.4074	\$ 0.4267	\$ 0.4478 \$	0.4268 \$	0.4013
Gas operating income per \$ of gas r		\$ 0.0587 \$	0.0498	\$ 0.0514	\$ 0.0653	\$ 0.0333	\$ 0.0412	\$ 0.0598 \$	0.0376	\$ 0.0264	\$ 0.0600 \$	0.0474 \$	0.0470
Gas revenue per mile of pipe 2/		\$ 29,892 \$	28,925	\$ 33,869	\$ 31,946	\$ 30,170	\$ 35,862	\$ 20,504 \$	18,517	\$ 23,867	\$ 29,988 \$	28,659 \$	32,895
Gas O&M expense per mile of 2/		\$ 39,547 \$	34,124	\$ 24,778	\$ 45,310	\$ 21,632	\$ 26,039	\$ 25,200 \$	17,111	\$ 20,459	\$ 40,178 \$	31,797 \$	24,406
Gas operating income per mile 2/		\$ 3,723 \$	3,685	\$ 3,576	\$ 3,184	\$ 3,216	\$ 3,225	\$ 3,251 \$	3,084	\$ 1,287	\$ 3,587 \$	3,595 \$	3,255
Long-term debt - total assets ra 1/		27.7%	27.2%	24.2%	30.3%	27.9%	29.6%	42.6%	33.9%	26.2%	30.4%	28.2%	25.1%
Long-term debt - total capitaliz 1/3/		44.7%	44.7%	38.1%	48.5%	49.2%	49.4%	48.6%	38.9%	30.8%	47.3%	45.7%	38.6%
Net interest - long-term debt ra 1/		8.6%	8.7%	9.2%	8.6%	9.3%	8.6%	6.3%	7.7%	5.5%	8.4%	8.9%	8.7%
EBITDA interest coverage 1/		7.1x	7.5x	6.3x	6.0x	6.1x	6.0x	3.7x	3.8x	6.0x	6.1x	6.4x	6.2x
Return on assets		4.3%	3.4%	3.5%	3.4%	3.6%	3.6%	3.7%	3.3%	2.9%	3.6%	3.5%	3.5%

^{1/} Figures for combination utilities are necessarily based on combined gas and electric operations.

NOTE: Some ratios are not always normally distributed. Therefore, average ratio values may be subject to distortion by a few observations that are outliers.

^{2/} Miles of distribution pipes and services combined.

^{3/} Total capitalization figure in this display includes preferred stock.

APPENDIX 8: GAS UTILITY WAGE AND BENEFITS

Based on Segment Average

G	as Utilitie	s		Com	bin	ation U	tiliti	ies		Muni	cipal Uti	itie	S	Al	II Co	mpar	nies	3
1997	1998	1999		1997		1998		1999		1997	1998		1999	1997	1	998		1999
1,009	965	82	8	823		637		735		388	267		233	913		845		742
1,032	1,015	83	2	757		688		723		380	249		232	910		887		743
39,847	\$ 39,816	\$ 33,39	7	\$ 37,077	\$	25,684	\$	33,192	\$	10,404	\$ 9,416	\$	7,661	\$ 36,679	\$ 3	4,920	\$	30,471
7,256	\$ 7,192	\$ 7,14	1	\$ 11,874	\$	7,155	\$	9,675	\$	3,419	\$ 2,297	\$	1,671	\$ 7,935	\$	6,894	\$	7,155
11,959	\$ 9,699	\$ 8,91	2	\$ 12,732	\$	6,459	\$	9,339	\$	4,191	\$ 3,409	\$	2,816	\$ 11,495	\$	8,712	\$	8,392
19.8%	21.0%	21.9	%	18.5%	,	18.5%		19.8%		20.7%	16.69	6	16.8%	19.6%		20.2%		21.1%
36,123	\$ 37,079	\$ 40,56	5	\$ 40,898	\$	37,938	\$	43,478	\$	29,084	\$ 29,018	\$	30,585	\$ 36,423	\$ 3	6,399	\$	39,975
11,744	\$ 9,479	\$ 11,22	2	\$ 12,709	\$	8,385	\$	13,155	\$	9,774	\$ 7,454	\$	8,873	\$ 11,773	\$	9,092	\$	11,306
51,748	\$ 56,733	\$ 61,04	3	\$ 63,542	\$	58,428	\$	71,004	\$	38,167	\$ 41,382	\$	44,978	\$ 52,605	\$ 5	5,464	\$	61,090
21.0%	18.1%	18.4	%	16.7%	,	17.1%		18.5%		21.5%	23.3%	6	23.8%	20.1%		18.4%		19.0%
79,392	913,775	1,046,13	3	1,193,261	1,3	390,862	1	,695,762		698,374	916,076		787,896	920,762	96	3,416	1,	,121,319
371	411	45	2	473		526		608		362	456		356	390		434		467
3 1 5	997 1,009 1,032 39,847 7,256 11,959 19.8% 36,123 1,744 51,748 21.0%	997 1998 1,009 965 1,032 1,015 39,847 \$ 39,816 7,256 \$ 7,192 1,959 \$ 9,699 19.8% 21.0% 36,123 \$ 37,079 1,744 \$ 9,479 51,748 \$ 56,733 21.0% 18.1% 29,392 913,775	1,009 965 82 1,032 1,015 83 39,847 \$ 39,816 \$ 33,39 7,256 \$ 7,192 \$ 7,14 11,959 \$ 9,699 \$ 8,91 19.8% 21.0% 21.9 36,123 \$ 37,079 \$ 40,56 11,744 \$ 9,479 \$ 11,22 51,748 \$ 56,733 \$ 61,04 21.0% 18.1% 18.4 29,392 913,775 1,046,13	997 1998 1999 1,009 965 828 1,032 1,015 832 39,847 \$ 39,816 \$ 33,397 7,256 \$ 7,192 \$ 7,141 1,959 \$ 9,699 \$ 8,912 19.8% 21.0% 21.9% 36,123 \$ 37,079 \$ 40,565 1,744 \$ 9,479 \$ 11,222 31,748 \$ 56,733 \$ 61,043 21.0% 18.1% 18.4% 19,392 913,775 1,046,133	997 1998 1999 1997 1,009 965 828 823 1,032 1,015 832 757 39,847 \$ 39,816 \$ 33,397 \$ 37,077 7,256 \$ 7,192 \$ 7,141 \$ 11,874 11,959 \$ 9,699 \$ 8,912 \$ 12,732 19.8% 21.0% 21.9% 18.5% 36,123 \$ 37,079 \$ 40,565 \$ 40,898 17,744 \$ 9,479 \$ 11,222 \$ 12,709 31,748 \$ 56,733 \$ 61,043 \$ 63,542 21.0% 18.1% 18.4% 16.7% 29,392 913,775 1,046,133 1,193,261	997 1998 1999 1997 1,009 965 828 823 1,032 1,015 832 757 39,847 \$ 39,816 \$ 33,397 \$ 37,077 \$ 7,256 \$ 7,192 \$ 7,141 \$ 11,874 \$ 19,959 \$ 9,699 \$ 8,912 \$ 12,732 \$ 19.8% 21.0% 21.9% 18.5% 36,123 \$ 37,079 \$ 40,565 \$ 40,898 \$ 17,744 \$ 9,479 \$ 11,222 \$ 12,709 \$ 31,748 \$ 56,733 \$ 61,043 \$ 63,542 \$ 21.0% 18.1% 18.4% 16.7% 29,392 913,775 1,046,133 1,193,261 1,3	997 1998 1999 1997 1998 1,009 965 828 823 637 1,032 1,015 832 757 688 39,847 \$ 39,816 \$ 33,397 \$ 37,077 \$ 25,684 7,256 \$ 7,192 \$ 7,141 \$ 11,874 \$ 7,155 19,959 \$ 9,699 \$ 8,912 \$ 12,732 \$ 6,459 19.8% 21.0% 21.9% 18.5% 18.5% 36,123 \$ 37,079 \$ 40,565 \$ 40,898 \$ 37,938 17,744 \$ 9,479 \$ 11,222 \$ 12,709 \$ 8,385 31,748 \$ 56,733 \$ 61,043 \$ 63,542 \$ 58,428 21.0% 18.1% 18.4% 16.7% 17.1% 19,392 913,775 1,046,133 1,193,261 1,390,862	997 1998 1999 1997 1998 1,009 965 828 823 637 1,032 1,015 832 757 688 39,847 \$ 39,816 \$ 33,397 \$ 37,077 \$ 25,684 \$ 7,256 \$ 7,192 \$ 7,141 \$ 11,874 \$ 7,155 \$ 19,59 \$ 9,699 \$ 8,912 \$ 12,732 \$ 6,459 \$ 19.8% 21.0% 21.9% 18.5% 18.5% 36,123 \$ 37,079 \$ 40,565 \$ 40,898 \$ 37,938 \$ 31,744 \$ 9,479 \$ 11,222 \$ 12,709 \$ 8,385 \$ 31,748 \$ 56,733 \$ 61,043 \$ 63,542 \$ 58,428 \$ 21.0% 18.1% 18.4% 16.7% 17.1%	997 1998 1999 1997 1998 1999 1,009 965 828 823 637 735 1,032 1,015 832 757 688 723 19,847 \$ 39,816 \$ 33,397 \$ 37,077 \$ 25,684 \$ 33,192 7,256 \$ 7,192 \$ 7,141 \$ 11,874 \$ 7,155 \$ 9,675 1,959 \$ 9,699 \$ 8,912 \$ 12,732 \$ 6,459 \$ 9,339 19.8% 21.0% 21.9% 18.5% 18.5% 19.8% 36,123 \$ 37,079 \$ 40,565 \$ 40,898 \$ 37,938 \$ 43,478 17,744 \$ 9,479 \$ 11,222 \$ 12,709 \$ 8,385 \$ 13,155 31,748 \$ 56,733 \$ 61,043 \$ 63,542 \$ 58,428 71,004 21.0% 18.1% 18.4% 16.7% 17.1% 18.5% 29,392 913,775 1,046,133 1,193,261 1,390,862 1,695,762	997 1998 1999 1997 1998 1999 1,009 965 828 823 637 735 1,032 1,015 832 757 688 723 39,847 \$ 39,816 \$ 33,397 \$ 37,077 \$ 25,684 \$ 33,192 \$ 7,256 \$ 7,192 \$ 7,141 \$ 11,874 \$ 7,155 \$ 9,675 \$ 1,959 \$ 9,699 \$ 8,912 \$ 12,732 \$ 6,459 \$ 9,339 \$ 19.8% 21.0% 21.9% 18.5% 18.5% 19.8% 19.4 \$ 9,479 \$ 11,222 \$ 12,709 \$ 8,385 \$ 13,155 \$ 10,744 \$ 9,479 \$ 11,222 \$ 12,709 \$ 8,385 \$ 13,155 \$ 21.0% 18.1% 18.4% 16.7% 17.1% 18.5% 21.0% 18.1% 16.7% 17.1% 18.5%	997 1998 1999 1997 1998 1999 1997 1,009 965 828 823 637 735 388 1,032 1,015 832 757 688 723 380 39,847 \$ 39,816 \$ 33,397 \$ 37,077 \$ 25,684 \$ 33,192 \$ 10,404 7,256 \$ 7,192 \$ 7,141 \$ 11,874 \$ 7,155 \$ 9,675 \$ 3,419 19,59 \$ 9,699 \$ 8,912 \$ 12,732 \$ 6,459 \$ 9,339 \$ 4,191 19.8% 21.0% 21.9% 18.5% 18.5% 19.8% 20.7% 36,123 \$ 37,079 \$ 40,565 \$ 40,898 \$ 37,938 \$ 43,478 \$ 29,084 17,744 \$ 9,479 \$ 11,222 \$ 12,709 \$ 8,385 \$ 13,155 \$ 9,774 31,748 \$ 56,733 \$ 61,043 \$ 63,542 \$ 58,428 \$ 71,004 \$ 38,167 21.0% 18.1% 18.4% 16.7% 17.1% 18.5% 21.5% <	997 1998 1999 1997 1998 1999 1997 1998 1,009 965 828 823 637 735 388 267 1,032 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^{1/} year-end employees

APPENDIX 10: COMPANIES STUDIED

Consolidations are limited to LDC business units.

Years Reported

Consolidations are limited to LDC business units. GAS IOUs		Repor 1998		GAS IOUS (cont.)	Years	Report	
Alabama Gas Corporation	1997	1996 X	X X	GAS IOUs (cont.) Southern Union Gas Company	X	1996 X	X
•	V	X	X	· · ·	X	X	X
Arkansas Oklahoma Gas Corp Arkansas Western Gas Company	X X	X	X	Southwest Gas Corporation	^	^	X
Arkla, Inc.	X	X	X	Southwestern Virginia Gas Co. Valley Resources Inc	Χ	Х	^
•	^	^	X	•	^	^	Χ
Atmos Energy Corporation Bay State Gas Company	Х	Х	^	Vermont Gas Systems, Inc. Virginia Natural Gas, Inc.	Х	Х	X
Berkshire Gas Company	X	X	Х	Washington Gas Light Company	X	X	X
Boston Gas Company	X	X	X	Yankee Gas Services Company	X	X	X
Brooklyn Union Gas Company	X	X	X	Talikee Gas Services Company	^	^	^
Cascade Natural Gas Corp	^	X	^				
Chesapeake Utilities Corp	Х	X	Х				
Citizens Gas & Coke Utility	^	^	X	COMBINATION IOUs	1997	1998	1999
Citizens Gas Fuel Company	Х	Χ	X	Baltimore Gas & Electric Co.	X	1000	1000
Colonial Gas Company	X	X	X	Central Hudson Gas & Electric Corp.	X		
Columbia Energy Group	X	X	X	Cheyenne Light Fuel & Power	^	Χ	
Connecticut Energy Corporation	X	X	X	CINERGY	Х	X	Χ
Corning Natural Gas Corp	X	X	X	Citizens Utilities Co	^	^	X
East Ohio Gas Company	^	X	X	Enova Corporation	Х		^
Entex, A Div. Of Noram Energy Corp.	Χ	X	X	Florida Public Utilities Company	X	Χ	Χ
Essex County Gas Company	X	X	X	Great Plains Natural Gas co.	^	X	^
Fall River Gas Company	X	X	X	Louisville Gas & Electric Co.		X	
Hope Gas, Inc.	X	X	X	Madison Gas & Electric Company	Х	X	Χ
Illinois Gas Company	X	X	X	Montana Power Company (consolidated)	^	^	^
Indiana Gas Company, Inc.	X	X	X	New York State Electric & Gas Corporation	Х		
Intermountain Gas Company	^	X	X	Nisource, Inc.	X	Χ	Χ
Laclede Gas Company	Χ	X	X	PECO Energy Company (consolidated)	X	X	X
MDU Resources Group, Inc. (Montana Dakota Utili		^	^	PG Energy Inc.	X	X	^
Michigan Gas Utilities			Χ	Public Service Enterprise Group Inc. (PSEG)	X	^	
Minnegasco		Χ	X	Rochester Gas & Electric Corp	X	Х	Χ
Mississippi Valley Gas Company	Χ	X	X	San Diego Gas & Electric Co.	^	X	^
Missouri Public Service	^	^	X	Sigcorp, Inc.		X	Χ
Mobile Gas Service Corporation	Χ	Χ	X	Southern Indiana Gas & Elec Co	Х	^	^
Mountain Fuel Supply Company	X	,,	,,	TXU Gas & Electric	,,		Χ
Mountaineer Gas co.	^	Χ	Χ	UGI Utilities, Inc.	X	Х	X
National Fuel Gas Company (consolidated)	Χ	X	X	Western Resources, Inc.	X	^	^
National Gas & Oil Corporation	X	,,	,,	Wooden Roodalood, mo.	,,		
New Jersey Natural Gas Company	X	Χ	Χ				
Nicor Gas And Sub Companies	X	X	X				
North Carolina Nat Gas Corp	X	X	X				
North Shore Gas Company	X	X	X				
Northern Indiana Fuel And Light	X	X	X				
Northwest Natural Gas Company	X	X	X	MUNICIPAL IOUs	1997	1998	1999
Ohio Gas Company	Χ	X	Χ	City Of Richmond, Dept. Of Pub Util			X
Ohio Valley Gas Corporation	X	X	X	Colorado Springs Utilities	Χ	Χ	X
Ohio Valley Gas Inc.	Χ	Х	X	Fort Pierce Utilities Auth.			Χ
Peoples Gas Light & Coke Company	Χ	X	Χ	Knoxville Utilities Board	Χ	Χ	Χ
Peoples Gas System, Inc.	X	X	X	Memphis Light, Gas & Water Div	X	X	X
Peoples Natural Gas Company	Χ	Χ	X	Metropolitan Util Dist-Omaha	X	Χ	Χ
Peoples Natural Gas Company (Omaha)	•	- •	X	Middle Tenn Nat Gas Util Dist	X	X	X
Piedmont Natural Gas Company	Χ	Χ	X	Owatonna Public Utilities	X	X	X
Providence Energy Corporation	X	X	X	Richmond Dept. of Pub. Util., City of	,	X	X
Public Service Company Of Colorado		X	•	San Antonio Public Service Board, City Of	Х	X	
Public Service Company Of N.C.	Χ	X		Southeast Alabama Gas Dist	X	X	Χ
Questar Gas Company	X	X	Х	Councast Alabama Cas Dist	^	^	^
Semco Energy (S.E. Michigan)	X	X	X				
South Jersey Gas Company	X	X	X				
Southern California Gas Co.	X	X	^				
Journal Cambrila Gas CO.	^	^					