Consumer Prices

Following the trend in wellhead prices, end-use consumers paid lower prices for natural gas in 1998 than in 1997. Price declines ranged from 2 percent in the residential sector to 14 percent in the electric utility sector. Consumers in the New England Census Division, which comprises six States (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont), paid the highest prices in all end-use sectors. Residential customers in New England paid \$9.59 per thousand cubic feet in 1998, virtually the same as the \$9.57 price paid the previous year, with prices in the individual States ranging from \$6.54 to \$10.60 per thousand cubic feet. New England also paid the highest prices for natural gas deliveries to commercial, industrial, and electric utility consumers where prices averaged \$7.18, \$4.79, and \$2.90 per thousand cubic feet, respectively.

Industrial companies and electric utilities are large-volume customers with relatively high load factors, which enable them to take advantage of economies of scale in purchases. Additionally, they are typically in a better position to elect whether to stay with their local distribution company (LDC) or seek supplies from alternative sources. These

factors result in prices that are highly responsive to fluctuations in wellhead prices.

The prices paid for deliveries of natural gas to the residential and commercial sectors reflect the limited options in service and the high-quality services required during peak demand periods. As a result, these sectors typically pay a higher percentage of the fixed costs of long-distance transportation and local distribution compared to industrial and electric utility customers.

• The average price for natural gas at the city gate fell \$0.59 per thousand cubic feet between 1997 and 1998, from \$3.66 to \$3.07 per thousand cubic feet. City gate prices represent the total cost paid by gas distribution companies for gas received at the point where the gas is physically transferred from a pipeline company or transmission system to the LDC. This price is intended to reflect all charges for the acquisition, storage, and transportation associated with the LDC obtaining natural gas for sale to consumers.

Cautionary Note: Number of Residential Consumers

The Energy Information Administration (EIA) expects that there may be some double counting in the number of residential users reported for 1998, specifically that some residential customers were reported as both sales and transportation customers.

To collect data for the number of residential consumers, EIA currently surveys companies that deliver gas to consumers. Traditionally, residential customers have obtained the gas commodity, and all services associated with delivering it, from their local distribution company (LDC). The LDC records these customers as sales customers. Customer choice programs allow consumers to select the provider from whom they purchase gas. When customers elect to purchase gas from a provider other than the LDC, the LDC continues to deliver the gas to the household, even though it no longer sells the gas. The LDC records these customers as transportation customers. A residential customer who entered a customer choice program during 1998 would have been classified early in the year as a traditional sales customer and again later in the year as a transportation customer. This double reporting affects the number of residential consumers and the average annual residential consumption per consumer shown in the *Natural Gas Annual*.

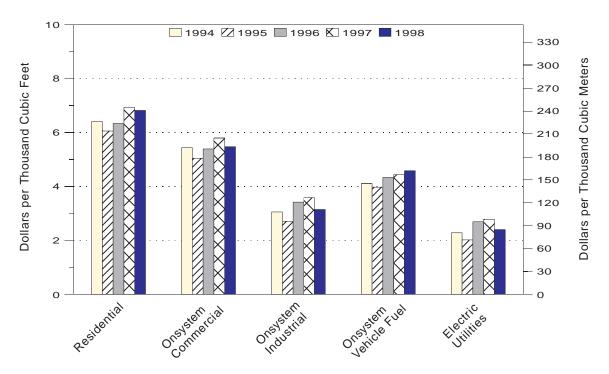
To help readers evaluate the problem of double reporting, Table A7 is provided in Appendix A, "Summary of Data Collection Operations and Report Methodology." It lists residential customers by sales and transportation, known as "deliveries for the account of others," for 1997 and 1998. Appendix A also includes the survey Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." Numbers of residential customers are reported on this form for both sales and transportation classifications.

Various customer choice programs, also known as retail unbundling programs, were implemented in many States during 1998. A description of these programs by individual State is on the EIA web site at: www.eia.doe.gov/oil_gas/natural_gas/restructure/restructure.html.

- Residential consumers continue to pay the highest price for natural gas. The average price of natural gas deliveries to the residential sector declined by 2 percent (\$0.12 per thousand cubic feet) from \$6.94 in 1997 to \$6.82 per thousand cubic feet in 1998, which was the smallest decrease of any of the consuming sectors. In recent years, only modest changes in constant dollars have been seen for residential prices (Figure 14). Most of these consumers remain captive to LDC sales service in all but a few States. The LDCs are obligated to supply gas to residences at all times, including during heating seasons when demand is high. Providing this premium service usually results in higher prices.
- The second-highest prices for natural gas deliveries were seen in the commercial sector. The average price paid by commercial consumers fell 5 percent (\$0.31

- per thousand cubic feet) from \$5.79 in 1997 to \$5.48 per thousand cubic feet in 1998. The percentage of deliveries for the account of others (i.e., for transportation-only customers) to the commercial sector has grown substantially since 1993 from 16 percent of commercial deliveries to 33 percent in 1998. In 15 States and the District of Columbia, prices in this sector were associated with less than 70 percent of deliveries in 1998.
- Deliveries for the account of others in the industrial sector represented 84 percent of all deliveries to that sector during 1998 and resulted in industrial prices, as reported by EIA, associated with only 16 percent of the volumes delivered. Prices for gas purchased by the industrial customers who continue to buy from LDC suppliers declined 13 percent from \$3.59 per thousand

Figure 13. Average Price of Natural Gas Delivered to Consumers in the United States, 1994-1998

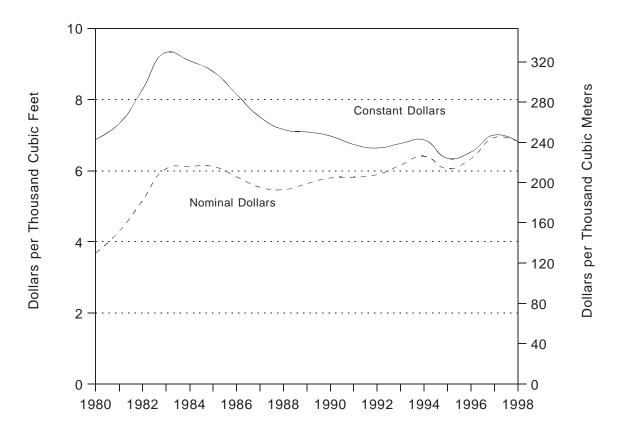


Note: Onsystem sales deliveries represent 67.0 percent of commercial deliveries, 15.5 percent of industrial deliveries, and 85.4 percent of vehicle fuel deliveries in 1998.

Sources: Energy Information Administration (EIA), Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition" and Federal Energy Regulatory Commission (FERC), Form FERC- 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

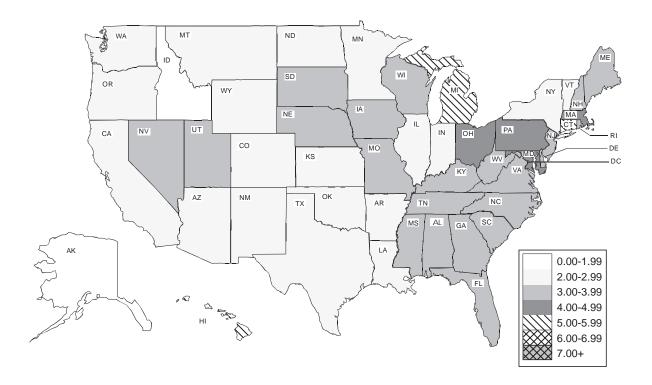
- cubic feet in 1997 to \$3.14 in 1998. This decline was influenced by the decrease in the wellhead price that occurred during the same period.
- Electric utility prices reflect natural gas consumption by all large electric utilities and do not include gas consumed by nonutility power producers. Between 1997 and 1998 the price paid by electric utilities for natural gas declined by \$0.38 per thousand cubic feet, matching the drop in the average wellhead price. The average electric utility price fell from \$2.78 per thousand cubic feet in 1997 to \$2.40.
- Most of the natural gas delivered for vehicle fuel represents deliveries to refueling stations that are used primarily by fleet vehicles. Thus, the prices are often those associated with the operation of fleet vehicles and may be based on internal transfer prices for companies primarily in the natural gas business. The average price paid for deliveries of natural gas for vehicle fuel use increased 3 percent, from \$4.44 per thousand cubic feet in 1997 to \$4.59 per thousand cubic feet in 1998, and was associated with a very small volume of deliveries.

Figure 14. Average Price of Natural Gas Delivered to Residential Consumers, 1980-1998



Sources: Nominal dollars: Energy Information Administration (EIA), Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." Constant dollars: Prices were converted to 1998 dollars using the chain-type price indexes for Gross Domestic Product (1992 = 1.0) as published by the U. S. Department of Commerce, Bureau of Economic Analysis.

Figure 15. Average City Gate Price of Natural Gas in the United States, 1998 (Dollars per Thousand Cubic Feet)



Sources: Energy Information Administration (EIA), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 23. Average City Gate Price of Natural Gas in the United States, 1994-1998 (Dollars per Thousand Cubic Feet)

Ohri-	Average Price							
State	1994	1995	1996	1997	1998			
Alabama	3.44	2.89	3.48	3.65	3.17			
Alaska		1.67	1.58	1.81	1.72			
Arizona	2.53	2.10	2.78	3.15	2.55			
Arkansas	2.54	2.32	2.76	3.23	2.94			
California	2.57	2.03	2.59	2.98	2.38			
California	2.37	2.03	2.59	2.50	2.30			
Colorado		2.65	2.70	2.92	2.40			
Connecticut		4.70	5.11	5.11	5.06			
Delaware	2.95	2.70	3.68	3.53	3.02			
Florida	2.78	2.74	3.73	3.97	3.42			
Georgia	3.54	2.96	3.77	3.98	3.51			
Hawaii	4.94	5.20	6.05	6.42	5.33			
Idaho	2.46	2.18	2.24	2.12	1.95			
Illinois	3.02	2.59	3.27	3.28	2.77			
Indiana		2.84	3.09	3.03	2.45			
lowa		2.82	3.47	4.06	3.34			
Kansas	2.86	2.36	3.05	3.47	2.96			
Kentucky	3.13	2.80	3.41	3.83	3.23			
Louisiana		2.21	3.41	3.04	2.33			
Maine		3.35	4.30	3.84	3.43			
Maryland	3.38	2.87	4.02	4.02	4.12			
•								
Massachusetts		3.53	3.98	3.85	4.01			
Michigan		2.61	2.90	2.99	2.80			
Minnesota		2.52	3.07	3.67	2.98			
Mississippi	2.83	2.53	3.27	3.39	3.00			
Missouri	3.05	2.73	3.25	3.75	3.33			
Montana	3.49	3.01	3.03	3.16	2.43			
Nebraska	2.98	2.49	3.07	4.24	3.02			
Nevada	3.18	2.73	3.10	3.39	3.02			
New Hampshire	3.49	3.39	4.20	4.10	3.75			
New Jersey		3.34	3.84	4.19	3.71			
New Mexico	2.02	1.46	1.99	2.53	2.08			
New York	3.02	2.47	3.36	4.20	2.65			
North Carolina		2.95	3.74	3.97	3.49			
North Dakota		2.58	2.94	3.38	2.81			
Ohio		3.84	4.37	5.36 5.18	4.70			
Oklahoma	2.46	2.52	2.56	3.12	2.55			
Oregon		2.42	2.42	2.58	2.73			
Pennsylvania	3.46	3.09	2.68	4.09	4.12			
Rhode Island		3.57	4.41	4.49	3.78			
South Carolina	3.67	3.25	3.90	3.81	3.39			
South Dakota	3.35	2.88	3.19	3.65	3.24			
Tennessee	2.71	2.71	4.04	3.60	3.47			
Texas		2.95	3.22	3.66	2.63			
Utah		2.88	2.25	2.79	3.22			
Vermont	3.11	2.61	2.74	2.33	2.58			
Virginia	2 44	2.92	3.89	4.14	274			
Virginia		2.92 2.18	3.89 2.44	4.14 2.62	3.74 2.34			
Washington								
West Virginia	3.26	2.85	3.36	3.17 3.67	3.17 3.29			
Wyoming	3.42	2.83 2.72	3.43 2.36	3.67 3.11				
Wyoming	2.91	2.12	∠.30	3.11	2.73			
Total	3.07	2.78	3.27	3.66	3.07			

Source: Energy Information Administration (EIA), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 24. Average Price of Natural Gas Delivered to Residential Consumers by State, 1994-1998 (Dollars per Thousand Cubic Feet)

00:	4001		4000	400-	4000
State	1994	1995	1996	1997	1998
Alabama	7.41	6.86	7.22	8.35	8.21
		3.63	3.42		3.67
Alaska				3.77	
Arizona	7.54	7.82	7.52	7.83	8.50
Arkansas	5.71	5.48	5.92	6.67	6.85
California		6.42	6.44	6.81	6.92
California	0.59	0.42	0.44	0.01	0.92
Colorado		4.80	4.39	4.81	5.22
Connecticut	10.14	10.00	10.08	10.33	10.60
D.C		8.03	9.19	9.39	8.91
Delaware		6.60	7.12	8.36	8.90
Florida	9.98	9.85	10.74	11.90	11.29
Georgia	7.32	6.18	6.69	7.41	6.78
Hawaii		17.55	19.81	21.74	19.25
Idaho		5.59	5.20	5.12	5.33
Illinois	5.50	4.66	5.28	5.95	5.47
Indiana	6.24	5.37	5.54	6.37	6.56
lowo	5.40	5.09	5.49	6.17	E 06
lowa					5.96
Kansas		4.91	5.59	6.42	6.00
Kentucky	5.46	5.05	5.54	6.37	6.03
Louisiana		6.01	6.76	7.16	6.68
Maine		7.32	7.84	8.47	8.09
Maryland		6.62	7.60	8.36	8.29
Massachusetts	8.94	9.04	8.88	9.43	9.42
Michigan		4.72	4.96	5.20	5.17
Minnesota		4.80	5.46	5.76	5.48
Mississippi	5.46	5.28	5.72	6.35	6.08
Missouri	5.43	5.16	5.97	6.61	6.57
Montana		5.15	4.86	5.05	5.25
Nebraska		4.83	4.88	5.69	5.13
Nevada		6.76	6.19	6.27	7.11
New Hampshire	7.96	7.16	7.40	8.48	8.12
New Jersey	7.11	7.27	7.16	7.93	7.33
New Mexico		5.04	4.47	5.87	5.22
New York	8.75	8.42	8.90	9.73	9.59
North Carolina	7.30	6.93	7.59	8.98	8.69
North Dakota		4.66	4.54	4.99	5.16
01.	= 00	= 40	= 00		2.42
Ohio		5.46	5.90	6.75	6.43
Oklahoma	5.50	5.56	5.64	6.23	5.93
Oregon		6.74	6.31	6.21	6.81
Pennsylvania		7.16	7.38	8.33	8.45
		8.02	8.49	9.61	9.56
Rhode Island	9.12	0.UZ	0.49	9.01	9.00
South Carolina		7.54	7.41	8.37	8.30
South Dakota	5.27	5.05	5.25	5.75	5.59
Tennessee		5.77	6.26	6.91	6.73
Texas		5.92	5.89	6.32	6.16
Utah	4.96	4.74	4.47	5.13	5.57
Vermont	6.94	6.82	6.40	6.41	6.54
Virginia		7.18	7.94	8.60	8.57
		5.89		5.64	5.84
Washington			5.65		
West Virginia		7.05	7.02	6.81	7.29
Wisconsin	6.28	5.82	6.04	6.43	6.15
Wyoming		4.83	4.26	4.58	5.19
	• • •				
Total	6.41	6.06	6.34	6.94	6.82

Table 25. Average Prices of Natural Gas to Consumers by State, 1998

(Dollars per Thousand Cubic Feet)

	Commercial		Indu	ıstrial	Vehic	le Fuel	Electric Utilities
State	Average Price	Average Price Percentage of Total Volume Delivered		Percentage of Total Volume Delivered	Average Price	Percentage of Total Volume Delivered	Average Price
Alabama	6.65	80.5	3.30	23.1	1.98	100.0	2.58
Alaska	2.41	49.6	1.34	99.4	_	_	1.80
Arizona	6.00	85.0	3.26	33.4	4.46	100.0	2.42
Arkansas	5.16	90.8	3.48	9.1	5.35	100.0	2.29
California	6.37	48.7	3.77	9.5	4.23	76.5	2.79
Odilioitila	0.07	40.1	0.11	0.0	4.20	70.0	2.75
Colorado	4.34	94.3	2.61	12.1	2.09	100.0	2.98
Connecticut	6.90	68.7	4.34	55.8	5.21	100.0	2.44
D.C	7.36	52.3	_	_	2.60	100.0	_
Delaware	7.05	100.0	4.13	22.4	2.60	100.0	2.89
Florida	6.41	96.6	3.98	7.0	4.72	100.0	2.27
	0	00.0	0.00				
Georgia	6.00	83.6	3.92	25.3	4.10	100.0	3.21
Hawaii	14.15	100.0	8.64	100.0	_	_	_
Idaho	4.62	86.4	3.09	2.5	3.39	100.0	_
Illinois	5.07	47.4	3.96	9.3	2.76	100.0	2.25
Indiana	5.50	79.2	4.28	9.2	5.33	76.2	2.88
			2.42	2.2	4.00	400.0	2.2=
lowa	4.67	85.8	3.49	6.9	4.82	100.0	3.07
Kansas	4.98	69.5	3.17	9.8	5.59	100.0	2.14
Kentucky	5.43	87.4	4.00	17.8	6.75	100.0	3.40
Louisiana	5.64	94.6	2.31	9.3	4.75	66.5	2.37
Maine	7.23	100.0	5.13	87.4	_	_	_
			=			400.0	. ==
Maryland	6.65	36.6	5.26	7.0	3.09	100.0	2.75
Massachusetts	7.32	57.9	5.69	13.2	2.41	100.0	2.78
Michigan	4.90	59.7	3.91	8.2	3.51	100.0	1.24
Minnesota	4.39	97.6	2.88	39.7	2.40	98.4	2.36
Mississippi	4.74	94.8	3.22	37.6	2.79	100.0	2.31
Missouri	5.69	78.3	4.51	18.7	3.38	100.0	2.26
	5.13	77.2	4.68	1.5	4.18	22.6	2.06
Montana					4.10	22.0	
Nebraska	4.25	72.5	3.26	12.7	2.00	400.0	2.40
Nevada	6.28	70.2	4.74	5.4	3.86	100.0	2.38
New Hampshire	7.18	94.1	4.66	30.7	_	_	_
New Jersey	3.70	60.5	2.97	48.1	7.74	100.0	2.74
New Mexico	4.04	67.0	3.22	9.8	3.92	62.2	2.22
New York	6.08	53.1	4.02	5.9	6.66	100.0	2.57
North Carolina	6.63	90.6	3.96	32.1	0.00	-	2.81
North Dakota	4.37	83.8	2.82	14.6	4.01	97.5	2.01
HOME DANGIA	4.57	00.0	2.02	14.0	4.01	31.3	_
Ohio	5.83	55.0	4.39	4.3	5.90	100.0	3.24
Oklahoma	5.06	73.2	3.66	3.6	2.49	100.0	2.48
Oregon	5.25	99.0	3.75	14.3	5.92	100.0	1.56
Pennsylvania	7.43	56.8	4.15	13.0	5.02	100.0	3.26
Rhode Island	8.12	59.2	3.82	7.4	5.15	100.0	3.38
South Carolina	6.48	97.9	3.29	86.7	0.19	100.0	3.62
South Dakota	4.43	84.2	3.28	35.6	4.95	100.0	1.77
Tennessee	6.04	87.3	3.94	33.7	4.98	100.0	NA
Texas	4.44	81.0	2.35	14.1	1.77	100.0	2.30
Utah	4.34	82.5	3.00	8.6	5.42	100.0	2.11
Vormont	F 00	100.0	2.00	400.0			2.00
Vermont	5.08	100.0	2.80	100.0		100.0	2.90
Virginia	6.12	72.1	4.07	12.8	5.09	100.0	3.10
Washington	4.76	86.8	2.64	20.1	3.84	100.0	3.44
West Virginia	6.26	49.5	3.39	6.3	2.55	100.0	3.29
Wisconsin	4.71	74.0	3.78	22.0	1.13	100.0	2.67
Wyoming	4.45	90.5	3.37	2.0	6.30	100.0	8.31
Total	5.48	67.0	3.14	15.5	4.59	85.4	2.40
ı vlai	3.40	07.0	3.14	10.0	4.33	03.4	2.40

Sources: Energy Information Administration (EIA), Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Federal Energy Regulatory Commission (FERC), Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

NA = Not available.

— = Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. Beginning in 1996, consumption of natural gas for agricultural use was classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial

Figure 16. Average Price of Natural Gas Delivered to U.S. Residential Consumers, 1998 (Dollars per Thousand Cubic Feet)

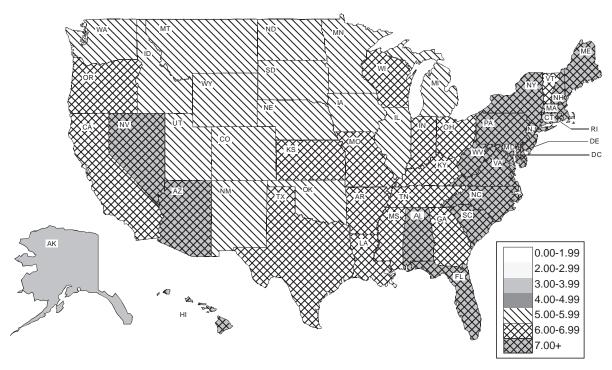
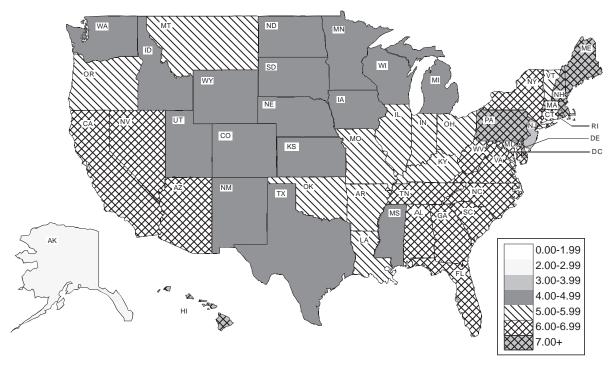


Figure 17. Average Price of Natural Gas Delivered to U.S. Onsystem Commercial Consumers, 1998 (Dollars per Thousand Cubic Feet)



Note: Commercial prices include natural gas delivered for use as vehicle fuel.

Source: Energy Information Administration (EIA), Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Figure 18. Average Price of Natural Gas Delivered to U.S. Onsystem Industrial Consumers, 1998 (Dollars per Thousand Cubic Feet)

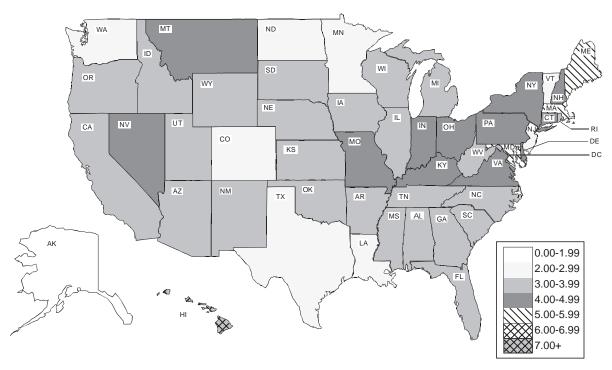
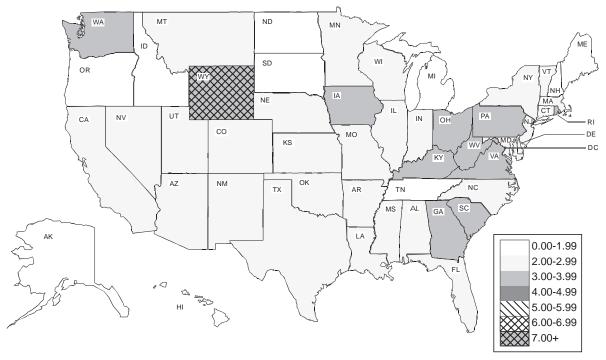


Figure 19. Average Price of Natural Gas Delivered to U.S. Electric Utilities, 1998 (Dollars per Thousand Cubic Feet)



Sources: Federal Energy Regulatory Commission (FERC), Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and Energy Information Administration (EIA), Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 26. Prices of Natural Gas Deliveries to Commercial Consumers by State, 1998 (Dollars per Thousand Cubic Feet)

		Firm	Interr	uptible	Total		
State	Average Price	Percentage of Total Volume Delivered	Average Price	Percentage of Total Volume Delivered	Total Average Price	Percentage of Total Volume Delivered	
Alabama	6.71	87.5	4.05	19.2	6.65	80.5	
Alaska	2.41	49.6			2.41	49.6	
Arizona	6.03	84.9	2.80	100.0	6.00	85.0	
Arkansas	5.25	89.4	4.65	99.9	5.16	90.8	
California	6.39	56.5	4.47	4.6	6.37	48.7	
Colorado	4.36	95.7	3.44	46.4	4.34	94.3	
Connecticut	9.12	72.8	3.59	63.3	6.90	68.7	
D.C	8.55	100.0	5.25	28.4	7.36	52.3	
Delaware	7.05	100.0	_	_	7.05	100.0	
Florida	6.46	96.9	3.91	84.6	6.41	96.6	
Georgia	6.15	99.9	3.69	23.7	6.00	83.6	
Hawaii	14.15	100.0	_	_	14.15	100.0	
Idaho	4.62	86.8	_	_	4.62	86.4	
Illinois	5.07	47.4	3.62	55.4	5.07	47.4	
Indiana	5.50	83.5	5.68	38.1	5.50	79.2	
lowe	4.75	90.2	2.51	52.2	4.67	85.8	
lowa	4.75	89.3	3.51		4.67		
Kansas	4.99	93.0	4.70	5.1	4.98	69.5	
Kentucky	5.47	93.2	4.04	27.8	5.43	87.4	
Louisiana	5.93	98.6	4.88	85.4	5.64	94.6	
Maine	7.23	100.0	_	_	7.23	100.0	
Maryland	6.83	66.3	4.79	6.8	6.65	36.6	
Massachusetts	7.65	75.5	3.59	15.7	7.32	57.9	
Michigan	4.90	59.7	3.85	100.0	4.90	59.7	
Minnesota	5.03	99.4	2.98	94.0	4.39	97.6	
Mississippi	4.88	94.7	3.24	96.9	4.74	94.8	
Missouri	5.76	78.7	3.26	66.5	5.69	78.3	
Montana	5.14	79.9	4.30	10.7	5.13	77.2	
Nebraska	4.63	69.4	2.83	87.2	4.25	72.5	
Nevada	6.28	71.8	_	_	6.28	70.2	
New Hampshire	7.18	94.1	_	_	7.18	94.1	
New Jersey	3.97	60.3	2.84	61.2	3.70	60.5	
New Mexico	4.05	67.5	3.39	36.9	4.04	67.0	
New York	6.49	65.0	4.29	29.5	6.08	53.1	
North Carolina	6.67	91.8	4.04	44.8	6.63	90.6	
North Dakota	4.56	94.1	2.69	42.8	4.37	83.8	
Ohio	5.83	56.2	5.78	0.8	5.83	55.0	
Oklahoma	5.08	73.7	4.56	60.2	5.06	73.2	
Oregon	5.25	100.0			5.25	99.0	
Pennsylvania	7.60	60.6	5.24	32.0	7.43	56.8	
Rhode Island	8.12	59.2	2.04	100.0	8.12	59.2	
South Carolina	7.33	97.3	3.53	100.0	6.48	97.9	
South Dakota	4.54	86.5	2.63	58.2	4.43	84.2	
Tennessee	6.27	89.5	3.36	67.6	6.04	87.3	
	6.27 4.44	83.8	3.49	13.4	4.44	81.0	
Texas Utah	4.44 4.49	83.8 97.4	3.49 2.58	13.4 29.4	4.44 4.34	81.0 82.5	
Vermont	5.08	100.0		_	5.08	100.0	
Virginia	6.26	85.4	5.02	33.2	6.12	72.1	
Washington	5.02	97.2	3.23	53.4	4.76	86.8	
West Virginia	6.46	87.1	6.07	34.7	6.26	49.5	
Wisconsin	4.76	73.3	3.46	93.7	4.71	74.0	
Wyoming	4.59	90.6	2.89	89.9	4.45	90.5	
Total	5.64	72.5	3.83	37.0	5.48	67.0	

^{- =} Not applicable.

Notes: Totals may not equal sum of components due to independent rounding. Beginning in 1996, consumption of natural gas for agricultural use was classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use.

Table 27. Prices of Natural Gas Deliveries to Industrial Consumers by State, 1998 (Dollars per Thousand Cubic Feet)

	ı	Firm	Interr	uptible	Total		
State	Average Price	Percentage of Total Volume Delivered	Average Price	Percentage of Total Volume Delivered	Total Average Price	Percentage of Total Volume Delivered	
Alabama	3.51	23.7	3.10	22.7	3.30	23.1	
Alaska	1.34	100.0	-		1.34	99.4	
Arizona	3.23	32.6	3.94	82.1	3.26	33.4	
Arkansas	3.46	6.6	3.50	26.2	3.48	9.1	
California	3.77	13.6	3.81	1.9	3.77	9.5	
Colorado	2.44	18.3	3.81	3.6	2.61	12.1	
Connecticut	5.42	53.6	3.41	57.9	4.34	55.8	
Delaware	4.28	19.2	3.55	65.6	4.13	22.4	
Florida	3.94	5.2	3.99	8.2	3.98	7.0	
	4.87		3.55	21.2	3.92	25.3	
Georgia	4.67	49.5	3.33	21.2	3.92	25.3	
Hawaii	10.06	100.0	8.36	100.0	8.64	100.0	
Idaho	3.09	3.9	3.11	0.3	3.09	2.5	
Illinois	4.14	8.3	2.94	29.5	3.96	9.3	
Indiana	4.65	28.9	3.58	4.0	4.28	9.2	
lowa	3.57	5.7	3.36	10.7	3.49	6.9	
Kansas	2.96	13.7	3.85	5.2	3.17	9.8	
Kentucky	4.08	15.2	3.85	25.5	4.00	17.8	
Louisiana	2.38	6.9	2.25	13.6	2.31	9.3	
Maine	5.81	84.1	3.01	100.0	5.13	87.4	
Maryland	6.25	8.1	4.19	6.1	5.26	7.0	
Massachusetts	6.83	11.8	3.05	18.3	5.69	13.2	
Michigan	3.92	8.0	3.68	78.6	3.91	8.2	
Minnesota	4.63	9.2	2.64	71.7	2.88	39.7	
Mississippi	3.23	29.7	3.20	51.4	3.22	37.6	
Missouri	4.93	15.6	3.46	37.0	4.51	18.7	
Montana	4.68	4.1	_	_	4.68	1.5	
Nebraska	3.91	8.0	2.93	18.3	3.26	12.7	
	4.74	5.4	2.93	10.5	4.74	5.4	
Nevada	4.74 6.52	23.0	2.79	46.6	4.74	30.7	
New Hampshire							
New Jersey	3.61	10.7	2.91	72.4	2.97	48.1	
New Mexico	3.22	11.0	, _		3.22	9.8	
New York	4.45	4.4	3.36	12.4	4.02	5.9	
North Carolina	4.67	40.6	3.54	28.6	3.96	32.1	
North Dakota	4.36	1.3	2.74	29.2	2.82	14.6	
Ohio	4.41	4.8	3.84	0.9	4.39	4.3	
Oklahoma	3.81	5.0	3.18	2.0	3.66	3.6	
Oregon	3.30	32.8	5.72	4.1	3.75	14.3	
Pennsylvania	4.30	14.5	3.63	9.6	4.15	13.0	
Rhode Island	4.13	6.6	2.82	12.3	3.82	7.4	
South Carolina	3.97	76.8	3.15	89.1	3.29	86.7	
South Dakota	3.35	48.1	3.11	21.8	3.28	35.6	
Tennessee	4.38	31.6	3.64	35.3	3.94	33.7	
Texas	2.28	22.6	3.76	1.5	2.35	33. <i>1</i> 14.1	
	3.71	6.6	2.54	10.7	3.00	8.6	
Utah Vermont	3.71	0.0 —	2.54 2.80	100.0	2.80	100.0	
Virginio	4.05	E 0	2.67	28.7	4.07	12.0	
Virginia	4.95	5.8 22.1	3.67			12.8	
Washington	2.60		3.06	11.2	2.64	20.1	
Nest Virginia	3.40	17.6	2.91	0.2	3.39	6.3	
Wisconsin	4.22	39.1	3.22	13.9	3.78	22.0	
Wyoming	3.42	2.6	3.32	1.6	3.37	2.0	
Total	3.14	15.8	3.15	15.0	3.14	15.5	

Notes: Totals may not equal sum of components due to independent rounding. Beginning in 1996, consumption of natural gas for agricultural use was classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use.

Table 28. Prices of Natural Gas Deliveries to Electric Utilities by State, 1998 (Dollars per Thousand Cubic Feet)

		Firm	Interruptible		
State	Average Price	Percentage of Total Volume Delivered	Average Price	Percentage of Total Volume Delivered	
labama			2.69	6.5	
laska	1.69	70.2	2.09	0.5	
			_	_	
rizona	2.45	10.2		_	
rkansas		_	8.71	1.9	
alifornia	17.65	_	2.07	17.9	
olorado	2.93	100.0	2.81	46.6	
onnecticut	_	_	7.09	3.0	
elaware	2.14	5.5	_		
lorida	3.11	0.6	1.87	5.9	
eorgia	0.87	82.8	-	-	
3					
inois	2.59	10.3	5.19	100.0	
idiana	2.80	13.8	_		
wa	3.88	8.2	3.08	100.0	
ansas	2.47	7.7	_	_	
entucky	3.22	100.0	3.69	100.0	
ouisiana	1.90	9.9	2.17	5.9	
	1.90	3.3	5.34	0.1	
aryland	2.46	18.7		27.8	
assachusetts			2.74		
lichigan	2.58	2.8	2.68	100.0	
linnesota	2.56	100.0	2.53	100.0	
lississippi	2.62	1.7	_	_	
lissouri	4.20	0.1	2.19	100.0	
lontana	1.69	100.0	=:.0	_	
ebraska	2.35	100.0	2.52	97.5	
evada	2.44	7.9	2.52	97.5	
evaua	2.44	7.9	_	_	
ew Jersey	2.35	87.0	3.04	34.7	
ew Mexico	3.33	18.1	_	_	
ew York	2.47	86.3	2.63	100.0	
orth Carolina	6.78	100.0	2.88	83.5	
orth Dakota	4.20	100.0	_	_	
lhio.	6.95	17.1	2.42	16.4	
)hio	6.95	17.1	2.12	16.4	
klahoma	- -		2.09	99.8	
ennsylvania	3.32	11.0	2.93	5.8	
outh Carolina	_	_	3.21	100.0	
outh Dakota	2.57	100.0	_	_	
exas	1.93	60.1	4.87	_	
tah	6.34	0.1	2.78	2.1	
ermont	0.54	0.1	3.01	100.0	
	_	_		100.0	
irginia			5.20	400.0	
/isconsin	3.09	14.2	2.69	100.0	
otal	1.99	28.4	2.49	23.7	

— = Not applicable.

Notes: States without direct sales are not included. Totals may not equal sum of components due to independent rounding.

Table 29. Leading Suppliers of Natural Gas Sold to Residential Customers in the United States, 1998

(Volumes in Thousand Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

`	·	· · · · · · · · · · · · · · · · · · ·			
Company	State	Volume	Prices		
Southorn Colifornia C C-	<u> </u>	200 700 000	7.04		
Southern California Gas Co	CA	269,739,909	7.31		
Pacific Gas and Elec Co	CA	224,402,286	6.32		
Northern Illinois Gas Co	IL	196,608,329	4.63		
Consumers Pwr Co	MI	153,128,350	4.92		
Columbia Gas Dist Co	OH,KY,PA,MD	138,064,908	7.21		
Pub Svc Elec and Gas Co	NJ	126,142,540	6.61		
Michigan Consol Gas Co	MI	125,456,377	5.35		
	OH		6.21		
East Ohio Gas Co		117,574,196			
Peoples Gas Lt and Coke Co	IL .	89,685,006	6.81		
Atlanta Gas Lt Co	GA	89,103,601	6.69		
Lone Star Gas Co	TX	84,559,915	5.95		
Brooklyn Union Gas Co	NY	83,736,459	10.42		
Pub Svc Co. of Colorado	CO	82,238,582	5.15		
Natl Fuel Gas Distr	PA.NY	67.029.947	8.47		
Washington Gas Lt Co	DC,VA,MD	64,809,256	8.07		
Washington Gas Lt Go	DC, VA,IND	04,009,230	0.07		
Entex Div of Noram Energy Corp	LA,MS,TX	63,914,568	7.15		
Peoples Nat Gas Co	NE,SD,IA,CO,MN,PA	60,116,532	6.45		
Minnegasco	MN	58,543,822	5.36		
Mountain Fuel Sply Co	WY.ID.UT	58.355.459	5.58		
Southwest Gas Corp	NV,CA,AZ	57,476,121	8.33		
Northern Indiana Pub Svc Co	IN	F7 400 700	6.00		
		57,466,720	6.08		
Oklahoma Nat Gas Co	OK	52,933,712	5.84		
Laclede Gas Co	MO	50,967,194	6.58		
Kansas Gas Svs Co	KS,OK	50,111,227	6.08		
MidAmerican Energy Co	NE,IA,SD,IL	49,086,853	5.67		
Niagara Mohawk Pwr Corp	NY	46,202,353	8.27		
Con Edison Co. of New York Inc	NY	43,580,936	12.02		
Arkla A Noram Energy Co	OK,AR,LA,TX	43,100,716	7.05		
	WA				
Puget Sound Energy		42,267,659	5.99		
Indiana Gas Co. Inc	IN	41,628,000	7.21		
Wisconsin Gas Co	WI	40,855,287	6.29		
Philadelphia Gas Wks	PA	40,440,825	7.99		
Boston Gas Co	MA	37.920.382	9.51		
Southern Union Co	MO	37.298.276	6.58		
Northern States Pwr Co	ND,WI,MI,MN	37,117,847	5.85		
THORITION CLARGE TWI CO		07,117,017	0.00		
Long Island Ltg Co	NY	36,543,600	10.47		
San Diego Gas and Elec Co	CA	35,028,288	7.38		
Baltimore Gas and Elec Co	MD	32,067,282	8.71		
New Jersey Nat Gas Co	NJ	32,042,636	9.02		
PNM Gas Services	NM	30,863,740	5.16		
FINIVI Gas Services	INIVI	30,863,740	3.10		
Illinois Pwr Co	IL	30,553,586	6.00		
Northwest Nat Gas Co	OR,WA	30,168,741	6.77		
Cincinnati Gas and Elec Co	OH [°]	29,806,875	6.60		
Peco Energy Co	PA	29,560,776	8.47		
Wisconsin Elec Pwr Co	Wi	28,579,409	6.18		
Piedmont Nat Gas Co	SC NC	20 474 206	9.24		
	SC,NC	28,474,396	8.31		
Alabama Gas Corp	AL	28,215,082	8.04		
Rochester Gas and Elec Co	NY	24,333,900	8.41		
Dayton Pwr and Lt Co	OH	23,935,222	5.60		
NÚI Corp	NJ,NY,PA,FL,NC,MD	22,461,648	8.74		

Notes: Natural gas companies with the 50 largest amounts of on-system sales to residential consumers were selected from the respondents to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." Prices are calculated from the company total reported volumes of on-system sales to residential consumers and the total reported associated revenue. When more than one State of operation is in-

dicated, the price has been calculated from the sum of the volumes and revenues reported by the company for all of the States shown.

Source: Energy Information Administration (EIA), Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 30. Leading Suppliers of Natural Gas Sold to Commercial Consumers in the United States, 1998

(Volumes in Thousand Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Company Pub Svc Elec and Gas Co	State Volume 71,383,367 71,235,302 61,551,245 58,085,509 50,024,506 50,024,506	Price 2.72 5.13
Con Edison Co. of New York Inc. NY Southern California Gas Co. CA Pacific Gas and Elec Co. CA Minnegasco. MN Entex Div of Noram Energy Corp. LA,MS,TX Columbia Gas Dist Co. OH,KY,PA,N Consumers Pwr Co. MI Michigan Consol Gas Co. MI Pub Svc Co. of Colorado. CO Lone Star Gas Co. TX Atlanta Gas Lt Co. GA Southwest Gas Corp. NV,CA,AZ IL Brooklyn Union Gas Co. Brooklyn Union Gas Co. NY East Ohio Gas Co. OH Mountain Fuel Sply Co. WY,ID,UT MidAmerican Energy Co. NE,IA,SD,IL Washington Gas Lt Co. DC,VA,MD Arkla A Noram Energy Co. OK,AR,LA,T Oklahoma Nat Gas Co. OK Puget Sound Energy. WA Northern States Pwr Co. ND,WI,MI,MI Long Island Ltg Co. NY Peoples Nat Gas Co. NE,SD,IA,Co Northwest Nat Gas Co. MA <	71,235,302 61,551,245 58,085,509	5.13
Con Edison Co. of New York Inc. Southern California Gas Co. A Pacific Gas and Elec Co. Minnegasco	71,235,302 61,551,245 58,085,509	5.13
Con Edison Co. of New York Inc. NY Southern California Gas Co. CA Pacific Gas and Elec Co. CA Minnegasco. MN Entex Div of Noram Energy Corp. LA,MS,TX Columbia Gas Dist Co. OH,KY,PA,N Consumers Pwr Co. MI Michigan Consol Gas Co. MI Pub Svc Co. of Colorado. CO Lone Star Gas Co. TX Atlanta Gas Lt Co. GA Southwest Gas Corp. NV,CA,AZ Incompact Incomp	71,235,302 61,551,245 58,085,509	5.13
Southern California Gas Co	61,551,245 58,085,509	
Pacific Gas and Elec Co	58,085,509	6.05
Minnegasco		
Entex Div of Noram Energy Corp. Columbia Gas Dist Co. Consumers Pwr Co. MI Michigan Consol Gas Co. Pub Svc Co. of Colorado. CO Lone Star Gas Co. Atlanta Gas Lt Co. Southwest Gas Corp. Northern Illinois Gas Co. Hountain Fuel Sply Co. Washington Gas Lt Co. Oklahoma Nat Gas Co. Oklahoma Nat Gas Co. Oklahoma Nat Gas Co. Oklahoma Nat Gas Co. Ny Corplets Nat Gas Co. Ny Nepoples Nat Gas Co. Northern Indiana Pub Svc Co. Northwest Nat Gas Co.	50,024,506	6.62
Columbia Gas Dist Co		4.20
Columbia Gas Dist Co	48,623,174	5.19
Consumers Pwr Co MI Michigan Consol Gas Co MI Pub Svc Co. of Colorado CO Lone Star Gas Co TX Atlanta Gas Lt Co GA Southwest Gas Corp NV,CA,AZ Northern Illinois Gas Co IL Brooklyn Union Gas Co NY East Ohio Gas Co OH Mountain Fuel Sply Co WY,ID,UT MidAmerican Energy Co NE,IA,SD,IL Washington Gas Lt Co DC,VA,MD Arkla A Noram Energy Co OK,AR,LA,T Oklahoma Nat Gas Co OK Puget Sound Energy WA Northern States Pwr Co ND,WI,MI,MI Long Island Ltg Co NY Peoples Nat Gas Co NE,SD,IA,Co Northwest Nat Gas Co OR,WA Northern Indiana Pub Svc Co IN Boston Gas Co MA Peoples Gas Sys Inc FL Laclede Gas Co MO Wisconsin Gas Co WI Wisconsin Gas Co MO Wisconsin Gas Co KS,OK		
Michigan Consol Gas Co. MI Pub Svc Co. of Colorado. CO Lone Star Gas Co. TX Atlanta Gas Lt Co. GA Southwest Gas Corp. NV,CA,AZ Ilc. Brooklyn Union Gas Co. Brooklyn Union Gas Co. NY East Ohio Gas Co. OH Mountain Fuel Sply Co. WY,ID,UT MidAmerican Energy Co. NE,IA,SD,IL Washington Gas Lt Co. DC,VA,MD Arkla A Noram Energy Co. OK,AR,LA,T Oklahoma Nat Gas Co. OK Puget Sound Energy. WA Northern States Pwr Co. ND,WI,MI,MI Long Island Ltg Co. NY Peoples Nat Gas Co. NE,SD,IA,CO Northwest Nat Gas Co. OR,WA Northern Indiana Pub Svc Co. IN Boston Gas Co. MA Peoples Gas Sys Inc. FL Laclede Gas Co. MO Wisconsin Gas Co. WI Wisconsin Gas Co. WI Wisconsin Gas Co. KS,OK Piedmont Nat Gas Co. <td< td=""><td></td><td>6.54</td></td<>		6.54
Pub Švc Co. of Colorado. CO Lone Star Gas Co. TX Atlanta Gas Lt Co. GA Southwest Gas Corp. NV, CA, AZ Northern Illinois Gas Co. IL Brooklyn Union Gas Co. NY East Ohio Gas Co. OH Mountain Fuel Sply Co. WY, ID, UT MidAmerican Energy Co. NE, IA, SD, IL Washington Gas Lt Co. DC, VA, MD Arkla A Noram Energy Co. OK, AR, LA, T. Oklahoma Nat Gas Co. OK Puget Sound Energy. WA Northern States Pwr Co. ND, WI, MI, MI Long Island Ltg Co. NY Peoples Nat Gas Co. NE, SD, IA, Co Northwest Nat Gas Co. OR, WA Northern Indiana Pub Svc Co. IN Boston Gas Co. MA Peoples Gas Sys Inc. FL Laclede Gas Co. MO Wisconsin Gas Co. WI Wisconsin Elec Pwr Co. WI Kansas Gas Svs Co. KS, OK Piedmont Nat Gas Co. PA Indiana Gas	41,007,629	4.50
Lone Star Gas Co	40,961,969	5.29
Atlanta Gas Lt Co. Southwest Gas Corp	40,196,867	4.35
Atlanta Gas Lt Co. Southwest Gas Corp	27 000 405	4.00
Southwest Gas Corp NV,CA,AZ Northern Illinois Gas Co IL Brooklyn Union Gas Co NY East Ohio Gas Co OH Mountain Fuel Sply Co WY,ID,UT MidAmerican Energy Co NE,IA,SD,IL Washington Gas Lt Co DC,VA,MD Arkla A Noram Energy Co OK,AR,LA,T Oklahoma Nat Gas Co OK Puget Sound Energy WA Northern States Pwr Co ND,WI,MI,MI Long Island Ltg Co NY Peoples Nat Gas Co NE,SD,IA,Co Northwest Nat Gas Co OR,WA Northern Indiana Pub Svc Co IN Boston Gas Co MA Peoples Gas Sys Inc FL Laclede Gas Co MO Wisconsin Gas Co WI Wisconsin Gas Co WI Wisconsin Elec Pwr Co WI Kansas Gas Svs Co KS,OK Piedmont Nat Gas Co SC,NC Southern Union Co MO Niagara Mohawk Pwr Corp NY Peoples Gas Lt and Coke Co IL	37,966,425	4.96
Northern Illinois Gas Co IL Brooklyn Union Gas Co NY East Ohio Gas Co OH Mountain Fuel Sply Co WY,ID,UT MidAmerican Energy Co NE,IA,SD,IL Washington Gas Lt Co DC,VA,MD Arkla A Noram Energy Co OK,AR,LA,T Oklahoma Nat Gas Co OK Puget Sound Energy WA Northern States Pwr Co ND,WI,MI,MI Long Island Ltg Co NY Peoples Nat Gas Co OR,WA Northwest Nat Gas Co OR,WA Northern Indiana Pub Svc Co IN Boston Gas Co MA Peoples Gas Sys Inc FL Laclede Gas Co MO Wisconsin Gas Co WI Wisconsin Elec Pwr Co WI Kansas Gas Svs Co KS,OK Piedmont Nat Gas Co SC,NC Southern Union Co MO Niagara Mohawk Pwr Corp NY Peco Energy Co PA Indiana Gas Co. Inc IN Peoples Gas Lt and Coke Co IL <t< td=""><td>36,897,621</td><td>5.97</td></t<>	36,897,621	5.97
Brooklyn Union Gas Co. NY East Ohio Gas Co. OH Mountain Fuel Sply Co. WY,ID,UT MidAmerican Energy Co. NE,IA,SD,IL Washington Gas Lt Co. DC,VA,MD Arkla A Noram Energy Co. OK,AR,LA,T Oklahoma Nat Gas Co. OK Puget Sound Energy. WA Northern States Pwr Co. ND,WI,MI,MI Long Island Ltg Co. NY Peoples Nat Gas Co. OR,WA Northwest Nat Gas Co. OR,WA Northern Indiana Pub Svc Co. IN Boston Gas Co. MA Peoples Gas Sys Inc. FL Laclede Gas Co. MO Wisconsin Gas Co. WI Wisconsin Elec Pwr Co. WI Kansas Gas Svs Co. KS,OK Piedmont Nat Gas Co. SC,NC Southern Union Co. MO Niagara Mohawk Pwr Corp. NY Peco Energy Co. PA Indiana Gas Co. Inc. IN Peoples Gas Lt and Coke Co. IL Nat Fuel Gas and Wtr. TN	32,871,498	6.40
East Ohio Gas Co	32,768,579	4.71
East Ohio Gas Co	30,772,503	6.33
Mountain Fuel Sply Co WY,ID,UT MidAmerican Energy Co NE,IA,SD,IL Washington Gas Lt Co DC,VA,MD Arkla A Noram Energy Co OK,AR,LA,T Oklahoma Nat Gas Co OK Puget Sound Energy WA Northern States Pwr Co ND,WI,MI,MI Long Island Ltg Co NY Peoples Nat Gas Co OR,WA Northwest Nat Gas Co OR,WA Northern Indiana Pub Svc Co IN Boston Gas Co MA Peoples Gas Sys Inc FL Laclede Gas Co WI Wisconsin Gas Co WI Wisconsin Elec Pwr Co WI Kansas Gas Svs Co KS,OK Piedmont Nat Gas Co SC,NC Southern Union Co MO Niagara Mohawk Pwr Corp NY Peoc Energy Co PA Indiana Gas Co. Inc IN Peoples Gas Lt and Coke Co IL Natl Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN <tr< td=""><td>30,1.2,000</td><td>0.00</td></tr<>	30,1.2,000	0.00
Mountain Fuel Sply Co WY,ID,UT MidAmerican Energy Co NE,IA,SD,IL Washington Gas Lt Co DC,VA,MD Arkla A Noram Energy Co OK,AR,LA,T Oklahoma Nat Gas Co OK Puget Sound Energy WA Northern States Pwr Co ND,WI,MI,MI Long Island Ltg Co NY Peoples Nat Gas Co OR,WA Northwest Nat Gas Co OR,WA Northern Indiana Pub Svc Co IN Boston Gas Co MA Peoples Gas Sys Inc FL Laclede Gas Co WI Wisconsin Gas Co WI Wisconsin Elec Pwr Co WI Kansas Gas Svs Co KS,OK Piedmont Nat Gas Co SC,NC Southern Union Co MO Niagara Mohawk Pwr Corp NY Peoc Energy Co PA Indiana Gas Co. Inc IN Peoples Gas Lt and Coke Co IL Natl Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN <tr< td=""><td>29,257,389</td><td>5.69</td></tr<>	29,257,389	5.69
MidAmerican Energy Co NE,IA,SD,IL Washington Gas Lt Co DC,VA,MD Arkla A Noram Energy Co OK,AR,LA,T Oklahoma Nat Gas Co OK Puget Sound Energy WA Northern States Pwr Co ND,WI,MI,MI Long Island Ltg Co NY Peoples Nat Gas Co OR,WA Northwest Nat Gas Co OR,WA Northern Indiana Pub Svc Co IN Boston Gas Co MA Peoples Gas Sys Inc FL Laclede Gas Co MO Wisconsin Gas Co WI Wisconsin Elec Pwr Co WI Kansas Gas Svs Co KS,OK Piedmont Nat Gas Co SC,NC Southern Union Co MO Niagara Mohawk Pwr Corp NY Peco Energy Co PA Indiana Gas Co. Inc IN Peoples Gas Lt and Coke Co IL Natl Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN Illiniois Pwr Co IL <	26,514,255	4.33
Washington Gas Lt Co. DC, VA,MD Arkla A Noram Energy Co. OK,AR,LA,T Oklahoma Nat Gas Co. OK Puget Sound Energy. WA Northern States Pwr Co. ND,WI,MI,MI Long Island Ltg Co. NY Peoples Nat Gas Co. NE,SD,IA,Co Northwest Nat Gas Co. OR,WA Northern Indiana Pub Svc Co. IN Boston Gas Co. MA Peoples Gas Sys Inc. FL Laclede Gas Co. MO Wisconsin Gas Co. WI Wisconsin Elec Pwr Co. WI Kansas Gas Svs Co. KS,OK Piedmont Nat Gas Co. SC,NC Southern Union Co. MO Niagara Mohawk Pwr Corp. NY Peco Energy Co. PA Indiana Gas Co. Inc. IN Peoples Gas Lt and Coke Co. IL Natl Fuel Gas Distr. PA,NY PNM Gas Services. NM Memphis Lt Gas and Wtr. TN Illiniois Pwr Co. IL Connecticut Nat Gas Corp. CT	26,485,810	4.37
Arkla A Ñoram Energy Co OK,AR,LA,T Oklahoma Nat Gas Co OK Puget Sound Energy WA Northern States Pwr Co ND,WI,MI,MI Long Island Ltg Co NY Peoples Nat Gas Co NE,SD,IA,CO Northwest Nat Gas Co OR,WA Northern Indiana Pub Svc Co IN Boston Gas Co MA Peoples Gas Sys Inc FL Laclede Gas Co WI Wisconsin Gas Co WI Wisconsin Elec Pwr Co WI Kansas Gas Svs Co KS,OK Piedmont Nat Gas Co SC,NC Southern Union Co MO Niagara Mohawk Pwr Corp NY Peco Energy Co PA Indiana Gas Co. Inc IN Peoples Gas Lt and Coke Co IL Natl Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN Illinois Pwr Co IL Connecticut Nat Gas Corp CT	26,480,163	6.53
Oklahoma Nat Gas Co		
Puget Sound Energy WA Northern States Pwr Co ND,WI,MI,MI Long Island Ltg Co NY Peoples Nat Gas Co NE,SD,IA,CO Northwest Nat Gas Co OR,WA Northern Indiana Pub Svc Co IN Boston Gas Co MA Peoples Gas Sys Inc FL Laclede Gas Co MO Wisconsin Gas Co WI Wisconsin Elec Pwr Co WI Kansas Gas Svs Co KS,OK Piedmont Nat Gas Co SC,NC Southern Union Co MO Niagara Mohawk Pwr Corp NY Peco Energy Co PA Indiana Gas Co. Inc IN Peoples Gas Lt and Coke Co IL Natl Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN Illinois Pwr Co IL Connecticut Nat Gas Corp CT	26,104,931	5.40
Puget Sound Energy WA Northern States Pwr Co ND,WI,MI,MI Long Island Ltg Co NY Peoples Nat Gas Co NE,SD,IA,CO Northwest Nat Gas Co OR,WA Northern Indiana Pub Svc Co IN Boston Gas Co MA Peoples Gas Sys Inc FL Laclede Gas Co MO Wisconsin Gas Co WI Wisconsin Elec Pwr Co WI Kansas Gas Svs Co KS,OK Piedmont Nat Gas Co SC,NC Southern Union Co MO Niagara Mohawk Pwr Corp NY Peco Energy Co PA Indiana Gas Co. Inc IN Peoples Gas Lt and Coke Co IL Natl Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN Illinois Pwr Co IL Connecticut Nat Gas Corp CT	24,153,094	5.01
Northern States Pwr Co ND,WI,MI,MI Long Island Ltg Co NY Peoples Nat Gas Co NE,SD,IA,CO Northwest Nat Gas Co OR,WA Northern Indiana Pub Svc Co IN Boston Gas Co MA Peoples Gas Sys Inc FL Laclede Gas Co MO Wisconsin Gas Co WI Wisconsin Elec Pwr Co WI Kansas Gas Svs Co KS,OK Piedmont Nat Gas Co SC,NC Southern Union Co MO Niagara Mohawk Pwr Corp NY Peco Energy Co PA Indiana Gas Co. Inc IN Nepoles Gas Lt and Coke Co IL Natl Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN Illinois Pwr Co IL Connecticut Nat Gas Corp CT	23,948,247	4.75
Long Island Ltg Co. NY Peoples Nat Gas Co. NE,SD,IA,CO Northwest Nat Gas Co. OR,WA Northern Indiana Pub Svc Co. IN Boston Gas Co. MA Peoples Gas Sys Inc. FL Laclede Gas Co. MO Wisconsin Gas Co. WI Wisconsin Elec Pwr Co. WI Kansas Gas Svs Co. KS,OK Piedmont Nat Gas Co. SC,NC Southern Union Co. MO Niagara Mohawk Pwr Corp. NY Peco Energy Co. PA Indiana Gas Co. Inc. IN Peoples Gas Lt and Coke Co. IL Natl Fuel Gas Distr. PA,NY PNM Gas Services. NM Memphis Lt Gas and Wtr. TN Illiniois Pwr Co. IL Connecticut Nat Gas Corp. CT		
Peoples Nat Gas Co. NE,SD,IA,CG Northwest Nat Gas Co. OR,WA Northern Indiana Pub Svc Co. IN Boston Gas Co. MA Peoples Gas Sys Inc. FL Laclede Gas Co. MO Wisconsin Gas Co. WI Wisconsin Elec Pwr Co. WI Kansas Gas Svs Co. KS,OK Piedmont Nat Gas Co. SC,NC Southern Union Co. MO Niagara Mohawk Pwr Corp. NY Peco Energy Co. PA Indiana Gas Co. Inc. IN Peoples Gas Lt and Coke Co. IL Natl Fuel Gas Distr. PA,NY PNM Gas Services. NM Memphis Lt Gas and Wtr. TN Illiniois Pwr Co. IL Connecticut Nat Gas Corp. CT		4.93
Northwest Nat Gas Co	22,501,305	6.73
Northern Indiana Pub Svc Co IN Boston Gas Co MA Peoples Gas Sys Inc FL Laclede Gas Co MO Wisconsin Gas Co WI Wisconsin Elec Pwr Co WI Kansas Gas Svs Co KS,OK Piedmont Nat Gas Co SC,NC Southern Union Co MO Niagara Mohawk Pwr Corp NY Peco Energy Co PA Indiana Gas Co. Inc IN Peoples Gas Lt and Coke Co IL Natl Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN Illiniois Pwr Co IL Connecticut Nat Gas Corp CT	,MN,PA 22,224,251	5.11
Northern Indiana Pub Svc Co IN Boston Gas Co MA Peoples Gas Sys Inc FL Laclede Gas Co MO Wisconsin Gas Co WI Wisconsin Elec Pwr Co WI Kansas Gas Svs Co KS,OK Piedmont Nat Gas Co SC,NC Southern Union Co MO Niagara Mohawk Pwr Corp NY Peco Energy Co PA Indiana Gas Co. Inc IN Peoples Gas Lt and Coke Co IL Natl Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN Illiniois Pwr Co IL Connecticut Nat Gas Corp CT	22,221,124	5.31
Boston Gas Co		
Peoples Gas Sys Inc. FL Laclede Gas Co. MO Wisconsin Gas Co. WI Wisconsin Elec Pwr Co. WI Kansas Gas Svs Co. KS,OK Piedmont Nat Gas Co. SC,NC Southern Union Co. MO Niagara Mohawk Pwr Corp. NY Peoc Energy Co. PA Indiana Gas Co. Inc. IN Peoples Gas Lt and Coke Co. IL Natl Fuel Gas Distr. PA,NY PNM Gas Services. NM Memphis Lt Gas and Wtr. TN Illinois Pwr Co. IL Connecticut Nat Gas Corp. CT	22,017,717	5.14
Laciede Gas Co	20,786,944	7.16
Wisconsin Gas Co. WI Wisconsin Elec Pwr Co. WI Kansas Gas Svs Co. KS,OK Piedmont Nat Gas Co. SC,NC Southern Union Co. MO Niagara Mohawk Pwr Corp. NY Peco Energy Co. PA Indiana Gas Co. Inc. IN Peoples Gas Lt and Coke Co. IL Natl Fuel Gas Distr. PA,NY PNM Gas Services. NM Memphis Lt Gas and Wtr. TN Illiniois Pwr Co. IL Connecticut Nat Gas Corp. CT	20,056,107	6.54
Wisconsin Elec Pwr Co. WI Kansas Gas Svs Co. KS,OK Piedmont Nat Gas Co. SC,NC Southern Union Co. MO Niagara Mohawk Pwr Corp. NY Peco Energy Co. PA Indiana Gas Co. Inc. IN Peoples Gas Lt and Coke Co. IL Natl Fuel Gas Distr. PA,NY PNM Gas Services. NM Memphis Lt Gas and Wtr. TN Illinois Pwr Co. IL Connecticut Nat Gas Corp. CT	18,894,977	5.29
Wisconsin Elec Pwr Co. WI Kansas Gas Svs Co. KS,OK Piedmont Nat Gas Co. SC,NC Southern Union Co. MO Niagara Mohawk Pwr Corp. NY Peco Energy Co. PA Indiana Gas Co. Inc. IN Peoples Gas Lt and Coke Co. IL Natl Fuel Gas Distr. PA,NY PNM Gas Services. NM Memphis Lt Gas and Wtr. TN Illinios Pwr Co. IL Connecticut Nat Gas Corp. CT	47,000,040	5.00
Kansas Gas Svs Co KS,OK Piedmont Nat Gas Co SC,NC Southern Union Co MO Niagara Mohawk Pwr Corp NY Peco Energy Co PA Indiana Gas Co. Inc IN Peoples Gas Lt and Coke Co IL Natl Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN Illinois Pwr Co IL Connecticut Nat Gas Corp CT	17,992,246	5.00
Piedmont Nat Gas Co SC,NC Southern Union Co MO Niagara Mohawk Pwr Corp NY Peco Energy Co PA Indiana Gas Co. Inc IN Peoples Gas Lt and Coke Co IL Natl Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN Illinois Pwr Co IL Connecticut Nat Gas Corp CT	17,987,411	4.25
Southern Union Co. MO Niagara Mohawk Pwr Corp. NY Peco Energy Co. PA Indiana Gas Co. Inc. IN Peoples Gas Lt and Coke Co. IL Natl Fuel Gas Distr. PA,NY PNM Gas Services. NM Memphis Lt Gas and Wtr. TN Illinois Pwr Co. IL Connecticut Nat Gas Corp. CT	17,669,648	5.47
Niagara Mohawk Pwr Corp NY Peco Energy Co PA Indiana Gas Co. Inc. IN Peoples Gas Lt and Coke Co IL Natl Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN Illinois Pwr Co IL Connecticut Nat Gas Corp CT	17,621,162	6.79
Peco Energy Co PA Indiana Gas Co. Inc. IN Peoples Gas Lt and Coke Co IL Natl Fuel Gas Distr. PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr. TN Illinois Pwr Co. IL Connecticut Nat Gas Corp. CT	16,841,231	6.24
Peco Energy Co PA Indiana Gas Co. Inc. IN Peoples Gas Lt and Coke Co IL Natl Fuel Gas Distr. PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr. TN Illinois Pwr Co. IL Connecticut Nat Gas Corp. CT	40.047.65	2.22
Indiana Gas Co. Inc	16,645,334	6.63
Peoples Gas Lt and Coke Co	16,578,276	7.40
Nati Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN Illinois Pwr Co IL Connecticut Nat Gas Corp CT	15,412,876	6.18
Nati Fuel Gas Distr PA,NY PNM Gas Services NM Memphis Lt Gas and Wtr TN Illinois Pwr Co IL Connecticut Nat Gas Corp CT	14.474.847	5.86
Memphis Lt Gas and Wtr TN Illinois Pwr Co IL Connecticut Nat Gas Corp CT	14,406,115	7.48
Memphis Lt Gas and Wtr TN Illinois Pwr Co IL Connecticut Nat Gas Corp CT		
Illinois Pwr CoIL Connecticut Nat Gas Corp	13,758,753	3.94
Connecticut Nat Gas Corp CT	13,407,825	4.54
	13,142,951	4.91
	13,124,888	5.64
i iliaacipila das viks FA	13,032,681	7.57
·		
West Texas Gas Inc OK,NM,TX	12,267,750	3.13
Cincinnati Gas and Elec Co OH	12,160,581	6.51
Commonwealth Gas Co MA	11,902,567	6.80
San Diego Gas and Elec Co CA	11,822,812	6.47
Montana Dakota Util		4.52
		1.02

Notes: Natural gas companies with the 50 largest amounts of on-system sales to commercial consumers were selected from the respondents to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." Prices are calculated from the company total reported volumes of on-system sales to commercial consumers and the total reported associated revenue. When more than one State of operation is indicated, the price has been calculated from the sum of the volumes and revenues re-

ported by the company for all of the States shown. Beginning in 1996, consumption of natural gas for agricultural use was classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use.

Table 31. Leading Suppliers of Natural Gas Sold and Transported in the United States, 1998 (Thousand Cubic Feet)

(Thoddana Gabie i G	/	I					
Company	Residential	Commercial	Industrial	Vehicle Fuel	Electric Utilities	Total	
Southern California Gas Co	271.780.410	110.726.162	278.809.422	1.818.869	138.826.184	801.961.047	
Pacific Gas and Elec Co	225,881,609	152,010,740	174,660,660	530,262	125,268,956	678,352,227	
Midcon Texas P L Operator Inc	0	0	552,267,806	0	109,741,739	662,009,545	
Lone Star Gas Co	84.559.915	39,926,208	265,224,831	0	172,286,535	561.997.489	
Northern Illinois Gas Co	205,099,056	82,609,756	133,712,245	2,251	48,524,867	469,948,175	
Northern minors das co	203,099,030	02,009,730	133,712,243	2,231	40,324,007	409,940,173	
Columbia Gas Dist Co	151,708,989	89,151,761	177,068,077	18,365	833,281	418,780,473	
Pub Svc Elec and Gas Co	126,142,540	110,995,082	142,801,508	0	16,407,898	396,347,028	
Michigan Consol Gas Co	126,989,815	84,283,544	75,979,978	0	20,204,131	307,457,468	
Florida Gas Trans Co	0	0	23,551,572	0	274,677,391	298,228,963	
Tejas Gas P L	0	0	184,585,025	0	112,852,639	297,437,664	
Consumers Pwr Co	155,357,644	60,547,180	76.605.998	15.603	4,258,141	296,784,566	
Bridgeline Gas Dist Co	0	00,547,100	221,053,031	13,003	55.443.410	276,496,441	
East Ohio Gas Co	123,101,020	53,604,362	96,057,067	417,414	1,106,398	274,286,261	
Northern Indiana Dub Cua Ca							
Northern Indiana Pub Svc Co	57,645,720	27,402,706	177,555,082	44,048	2,876,695	265,524,251	
Atlanta Gas Lt Co	89,177,488	45,975,588	101,948,487	0	21,568,995	258,670,558	
Houston P L Co	0	0	156,041,891	0	98,818,636	254,860,527	
Oklahoma Nat Gas Co	52,933,712	32,555,476	168,526,863	109,493	432,565	254,558,109	
Con Edison Co. of New York Inc	51,875,742	101.546.943	2.178.076	40.709	96.102.618	251,744,088	
Koch Gateway P L Co	0	1,214,262	147,752,648	0	82,631,527	231,598,437	
Texas Util Fuel Co	Õ	0	0	0	201,094,697	201,094,697	
10,000 0111 1 001 00	Ü	· ·	Ŭ	Ü	201,001,001	201,001,007	
Peoples Nat Gas Co	69,712,402	39,706,376	90,083,740	0	463,174	199,965,692	
Channel Industries Gas Co	0	17,540	143,454,323	0	55,722,942	199,194,805	
Peoples Gas Lt and Coke Co	112,436,197	46.897.470	33.357.953	55,335	1.609.394	194.356.349	
Pub Svc Co. of Colorado	82,238,582	40,196,867	63,637,476	0	7,186,112	193,259,037	
Niagara Mohawk Pwr Corp	46,332,575	50,790,641	91,680,217	16,677	331,533	189,151,643	
	, ,	, ,			,		
Tejas Ship Channel LLC	0	0	181,613,418	0	0	181,613,418	
Southwest Gas Corp	57,476,121	43,630,618	27,825,373	190,186	51,115,455	180,237,753	
Noram Gas Trans Co	0	0	119,741,300	0	53,520,272	173,261,572	
PG&E Texas P L LP	335	3,244,282	53,075,827	0	115,973,451	172,293,895	
Entex Div of Noram Energy Corp	63,914,568	53,794,744	49,464,741	0	0	167,174,053	
Long Island Ltg Co	36,643,806	57,272,454	0	252,980	56,573,189	150,742,429	
Brooklyn Union Gas Co	89,677,823	60,251,177	0	137,494	00,575,105	150,066,494	
Natl Fuel Gas Distr	69,786,836	31,427,132	44,177,079	0	0	145,391,047	
Louisiana Intrastate Gas	03,700,030	0	132.763.830	0	10.414.629	143,178,459	
Mountain Fuel Sply Co	58,355,459	31,973,979	45,750,525	145,236	5,651,241	143,176,439	
Wouldain Fuel Sply Co	36,333,439	31,973,979	45,750,525	143,230	5,051,241	141,070,440	
MidAmerican Energy Co	49,086,853	32,437,106	51,065,548	1,489	8,123,534	140,714,530	
Washington Gas Lt Co	70,751,308	59,454,905	0	49,381	4,754,926	135,010,520	
Cascade Nat Gas Corp	10,582,230	10,006,791	112,657,284	0	1,758,770	135,005,075	
San Diego Gas and Elec Co	35,207,241	13,219,369	26,425,975	335,752	57,204,467	132,392,804	
Minnegasco	58,543,822	51,194,260	19,754,546	26,414	1,207,181	130,726,223	
Karn Divar Coa Trans Co	0	OF 44F	101 700 050	0	4 445 550	105 040 000	
Kern River Gas Trans Co	0	35,115	124,792,250	0	1,115,558	125,942,923	
Northwest Nat Gas Co	30,168,741	22,221,124	55,877,104	38,111	15,985,265	124,290,345	
Kansas Gas Svs Co	50,111,227	27,756,170	29,201,090	0	9,846,158	116,914,645	
Dow P L Co	3,526	529,138	115,845,353	0	0	116,378,017	
Wisconsin Gas Co	40,990,662	19,063,784	54,506,789	18,687	12,561	114,592,483	
Alabama Gas Corp	28,215,082	14,366,378	54,504,452	0	12,572,686	109,658,598	
Boston Gas Co	37,920,382	52,100,852	13,395,328	5,654	5,622,562	109,044,778	
Arkla A Noram Energy Co	43,100,716	29,702,627	34,373,636	0,001	0,022,002	107,176,979	
Piedmont Nat Gas Co	28,474,396	20,939,201	45,894,086	0	9,331,856	104,639,539	
Indiana Gas Co. Inc	41,628,000	20,356,539	40,946,836	15,954	350.000	103,297,329	
	. 1,020,000	20,000,000	10,010,000	10,004	000,000	.00,201,020	

Notes: The natural gas companies with the 50 largest amounts of total deliveries were selected from the respondents to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." For each company, the total deliveries include deliveries to residential, commercial, industrial, and electric utility consumers, deliveries of natural gas for vehicle fuel; and all volumes transported to consumers for the account of others. The totals are summed from each company's reports in all States of op-

erations. Number of vehicle fuel consumers generally refers to the number of fueling stations. Totals may not equal sum of components due to independent rounding. Beginning in 1996, consumption of natural gas for agricultural use was classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use.

Source: Energy Information Administration (EIA), Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 32. Average Residential Annual Consumption and Cost of Natural Gas per Consumer by State, 1994-1998

	19	94	19	95	19	96	19	97	19	98
State	Volume (thousand cubic feet)	Cost (dollars)								
AlabamaAlaskaArizonaArkansasCalifornia	67	495	66	452	74	533	62	518	59	485
	192	690	192	695	199	680	181	683	181	664
	47	352	41	318	40	302	43	335	47	402
	80	455	77	424	86	508	78	520	69	476
	59	378	54	346	53	340	53	360	60	414
Colorado	93	456	94	451	97	425	98	469	91	473
	97	985	95	945	101	1,017	93	961	81	854
	117	974	116	931	128	1,175	117	1,101	100	889
	85	633	82	542	92	655	82	685	69	613
	28	278	28	280	31	335	25	293	26	293
Georgia	72	529	77	474	83	552	74	546	65	439
	19	318	19	330	17	345	17	363	17	333
	75	399	74	414	80	414	76	389	75	399
	139	763	145	676	154	813	141	841	115	631
	109	683	110	591	121	669	112	714	91	600
lowa	104	563	108	551	114	628	105	646	87	520
Kansas	96	490	95	467	106	593	85	549	83	500
Kentucky	94	511	96	487	101	558	93	590	76	461
Louisiana	56	350	55	330	60	405	55	392	49	330
Maine	63	496	61	448	65	506	66	561	58	470
Maryland	93	647	91	602	98	747	87	728	75	626
	101	907	90	810	96	854	93	879	84	793
	134	669	137	648	142	704	133	691	110	569
	117	604	119	572	129	705	114	654	95	521
	67	365	65	343	72	413	65	414	60	363
Missouri	96	519	99	513	108	642	99	652	85	557
Montana	96	503	97	497	108	525	100	505	88	460
Nebraska	104	520	105	509	111	543	106	603	78	399
Nevada	63	421	57	384	57	355	59	371	65	465
New Hampshire	90	720	88	628	93	690	90	763	80	646
New Jersey	104	738	92	665	104	742	99	784	87	640
New Mexico	75	423	68	344	79	351	83	485	79	413
New York	96	841	93	784	100	887	92	896	82	791
North Carolina	73	531	73	504	84	638	71	642	65	567
North Dakota	114	592	117	545	129	585	116	577	99	511
Ohio	118	691	121	659	125	739	117	787	97	625
	82	450	80	446	88	499	82	512	76	450
	74	515	68	460	77	484	71	442	72	490
	112	835	109	778	115	845	107	892	87	739
	87	789	85	685	92	783	85	820	79	756
South Carolina	56	431	61	460	69	512	58	486	55	459
South Dakota	101	532	102	513	111	581	101	582	87	489
Tennessee	75	458	75	430	84	524	74	511	66	441
Texas	64	382	60	355	65	385	66	419	55	341
Utah	97	482	94	443	97	432	102	525	97	538
Vermont	108	751	98	667	103	662	103	660	92	602
	90	690	91	655	96	766	91	782	75	638
	88	501	83	487	93	526	88	496	84	490
	100	664	100	705	104	733	99	676	82	601
	102	642	105	613	112	674	100	642	83	513
	99	503	102	491	103	437	103	474	100	517
Total	91	582	89	541	95	602	89	616	79	538