

Natural Gas Monthly

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Preface

The *Natural Gas Monthly (NGM)* is prepared in the Natural Gas Division, Office of Oil and Gas, Energy Information Administration (EIA), U.S. Department of Energy (DOE), under the direction of Joan E. Heinkel.

General questions and comments regarding the *NGM* may be referred to Ann M. Ducca (202) 586-6137. Specific technical questions may be referred to the appropriate persons listed in Appendix E.

The *NGM* highlights activities, events, and analyses of interest to public and private sector organizations associated with the natural gas industry. Volume and price data are presented each month for natural gas production, distribution, consumption, and interstate pipeline activities. Producer-related activities and underground storage data are also reported. From time to time, the *NGM* features articles designed to assist readers in using and interpreting natural gas information.

The data in this publication are collected on surveys conducted by the EIA to fulfill its responsibilities for gathering and reporting energy data. Some of the data are collected under the authority of the Federal Energy Regulatory Commission (FERC), an independent commission within the DOE, which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. Geographic coverage is the 50 States and the District of Columbia.

Explanatory Notes supplement the information found in tables of the report. A description of the data collection surveys that support the *NGM* is provided in the Data Sources section. A glossary of the terms used in this report is also provided to assist readers in understanding the data presented in this publication.

All natural gas volumes are reported at a pressure base of 14.73 pounds per square inch absolute (psia) and at 60 degrees Fahrenheit. Cubic feet are converted to cubic meters by applying a factor of 0.02831685.

Common Abbreviations Used in the Natural Gas Monthly

AGA	American Gas Association	IOGCC	Interstate Oil and Gas Compact Commission
Bbl	Barrels	LNG	Liquefied Natural Gas
BLS	Bureau of Labor Statistics, U.S. Department of Labor	Mcf	Thousand Cubic Feet
Bcf	Billion Cubic Feet	MMBtu	Million British Thermal Units
BOM	Bureau of Mines, U.S. Department of the Interior	MMcf	Million Cubic Feet
Btu	British Thermal Unit	MMS	United States Minerals Management Service, U.S. Department of the Interior
DOE	U.S. Department of Energy	NGL	Natural Gas Liquids
DOI	U.S. Department of the Interior	OCS	Outer Continental Shelf
EIA	Energy Information Administration, U.S. Department of Energy	STIFS	Short-Term Integrated Forecasting System
FERC	Federal Energy Regulatory Commission	STEO	Short Term Energy Outlook
		Tcf	Trillion Cubic Feet

Contents

	Page
Highlights	1
Appendices	
A. Explanatory Notes	71
B. Data Sources	79
C. Statistical Considerations	85
D. Natural Gas Reports and Feature Articles	91
E. Technical Contacts	95
F. Natural Gas Electronic Products	97
Glossary	101

Tables

	Page
1. Summary of Natural Gas Production in the United States, 1993-1999	5
2. Supply and Disposition of Dry Natural Gas in the United States, 1993-1999	6
3. Natural Gas Consumption in the United States, 1993-1999	8
4. Selected National Average Natural Gas Prices, 1992-1998	10
5. U.S. Natural Gas Imports, by Country, 1992-1998	12
6. U.S. Natural Gas Exports, by Country, 1992-1998	13
7. Marketed Production of Natural Gas, by State, 1992-1998	14
8. Gross Withdrawals and Marketed Production of Natural Gas by State, September 1998	17
9. Underground Natural Gas Storage - All Operators, 1993-1999	18
10. Underground Natural Gas Storage - by Season, 1996-1999	20
11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1996-1998	21
12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1996-1998	22
13. Net Withdrawals from Underground Storage, by State, 1996-1998	23
14. Activities of Underground Natural Gas Storage Operators, by State, November 1998	27
15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998	28
16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998	32
17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998	36
18. Natural Gas Deliveries to Electric Utility Consumers, by State, 1996-1998	40
19. Natural Gas Deliveries to All Consumers, by State, 1996-1998	44
20. Average City Gate Price, by State, 1996-1998	48
21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998	51
22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1998	54
23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1998	57
24. Average Price of Natural Gas Delivered to Electric Utility Consumers, by State, 1996-1998	60

25.	Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998	63
26.	Gas Home Customer-Weighted Heating Degree Days	70
A1.	Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data	71
C1.	Standard Error for Natural Gas Deliveries and Price to Consumers by State, October 1998	89

Illustrations

	Page	
1.	Production and Consumption of Natural Gas in the United States, 1996-2000	7
2.	Natural Gas Deliveries to Consumers in the United States, 1995-1999	9
3.	Average Price of Natural Gas Delivered to Consumers in the United States, 1994-1998	11
4.	Average Price of Natural Gas in the United States, 1994-1998	11
5.	Underground Natural Gas Storage in the United States, 1996-1999	19
6.	Percentage of Total Deliveries Represented by Onsystem Sales, 1994-1998	69

Highlights

Overview

This issue of the *Natural Gas Monthly* contains estimates for January 1999 for many natural gas data series at the national level. Estimates of national natural gas prices are available through October 1998 for most series. Highlights of the data contained in this issue are:

- The level of working gas in underground natural gas storage facilities is estimated to be 2,073 billion cubic feet at the end of January 1999, significantly higher at this point in the heating season (November through March) than in recent years.
- Higher natural gas consumption in January 1999 relative to January 1998 is the result of relatively low consumption during January 1998 when temperatures were generally warmer than normal.
- The average decline in the national average wellhead price for January through October 1998 has been passed on to downstream consumers, but the impact varies by end-use sector.

Supply

Steady production and ample supplies both in underground storage and from imports have easily met the demand for natural gas in January 1999. Dry natural gas production in January 1999 is estimated to be 1,618 billion cubic feet (Table 1), virtually the same as for January in the previous 2 years and almost 2 percent higher than in January 1996 (Figure HI1). Net imports of natural gas in January 1999 are estimated to be 273 billion cubic feet, 2 percent higher than in January 1998 (Table 2).

Net withdrawals of natural gas from underground storage facilities are estimated to be 650 billion cubic feet during January 1999 (Table 10). This is 39 percent higher than a year ago, but the weather in January 1998 was much warmer than normal, with 20 percent fewer-than-normal heating degree days on average. Thus, the demand for natural gas to meet space-heating needs was less in January 1998 than in January 1999. The level of working gas, which began the 1998-99 heating season at its highest level since 1992, is estimated to be 2,073 billion cubic feet at the end of January 1999 (Figure HI2). This is

21 percent higher than at the end of January 1998 and 39 percent higher than at the end of January 1997.

End-Use Consumption

End-use consumption of natural gas in January 1999 is estimated to be 2,343 billion cubic feet, 5 percent higher than in January 1998 (Table 3). Warmer-than-normal weather during January 1998 contributes to this difference. Consumption in January 1999 is virtually the same as in January 1997 and is 2 percent lower than in January 1996 (Figure HI3). The residential and commercial sectors, where most natural gas is used for space heating, both had higher consumption in January 1999 than in January 1998. Residential and commercial consumption in January 1999 are estimated to be 887 and 491 billion cubic feet, respectively, both 10 percent higher than in January 1998. Industrial consumption of natural gas is estimated to be 782 billion cubic feet in January 1999, 2 percent lower than a year earlier.

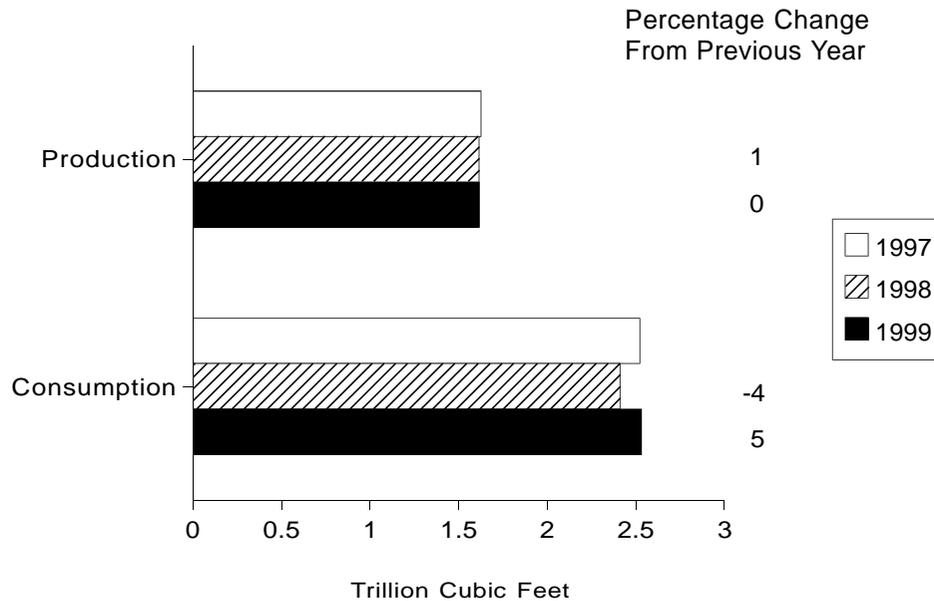
Information on the consumption of natural gas by electric utilities is available only through October 1998. Cumulatively in 1998, electric utility consumption is estimated to be 2,894 billion cubic feet or 12 percent higher than during the same period in 1997. Data estimates continue to support the expectation that the electric utility sector is the only end-use sector to see an increase in natural gas consumption from 1997 to 1998. Consumption in the other sectors in 1998 is estimated to be 4 to 9 percent lower than in 1997.

Prices

Cumulative natural gas prices in 1998 are averaging lower than in 1997. Monthly price estimates are available through October 1998 for all price series except electric utilities, which are available through September. The cumulative average wellhead price in 1998 is estimated to be \$1.90 per thousand cubic feet, \$0.37 (16 percent) lower than for the same period in 1997 (Table 4).¹ This has translated into lower prices for all the other series provided in the *Natural Gas Monthly* (Figure HI4), although the impact varies by series.

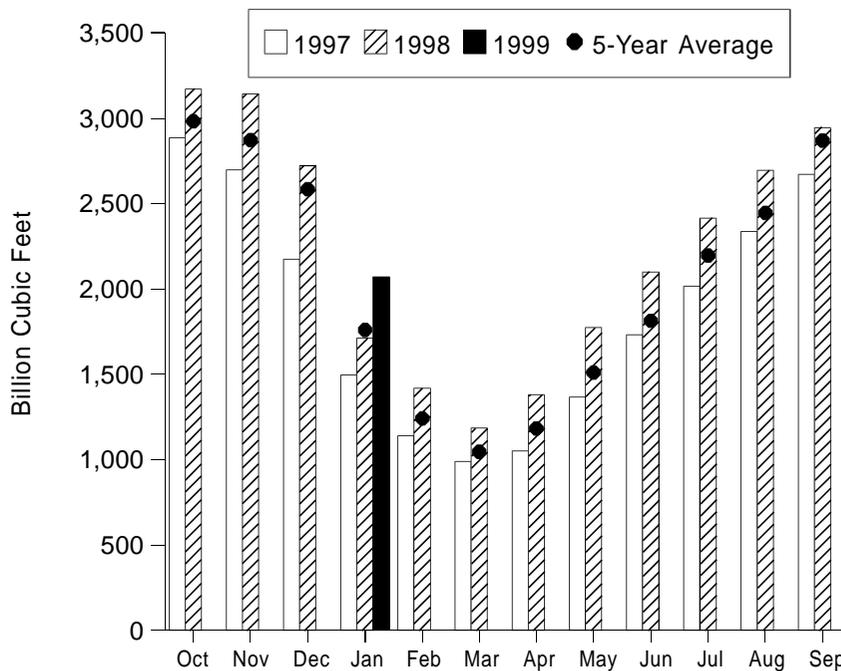
¹End-use prices in the residential, commercial, and industrial sectors are for onsystem gas sales only. While monthly onsystem sales are nearly 100 percent of residential deliveries, in 1998 they have been from 47 to 72 percent of commercial deliveries and only 13 to 17 percent of industrial deliveries (Table 4).

Figure HI1. Natural Gas Production and Consumption, January, 1997-1999



Source: Table 2.

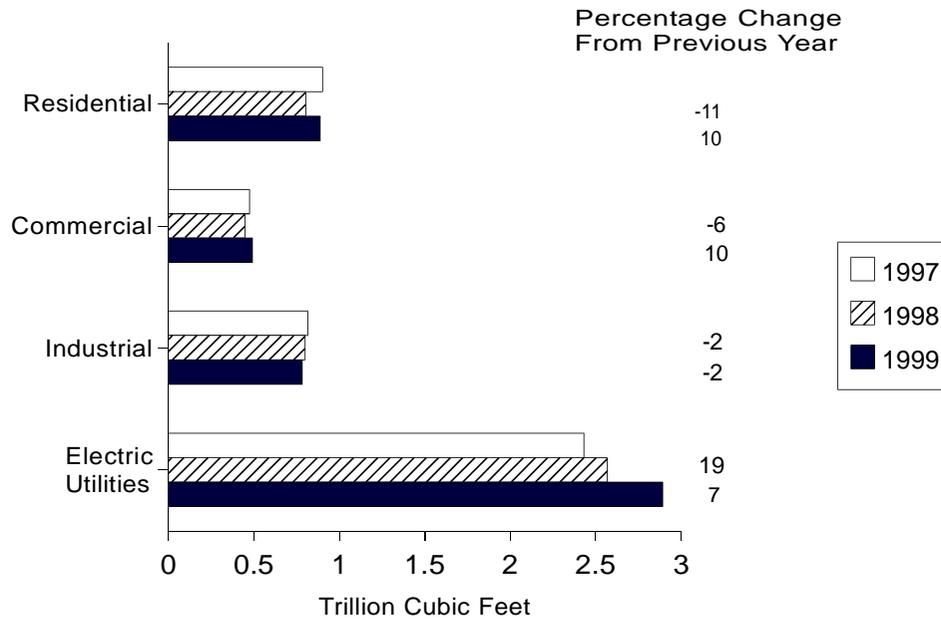
Figure HI2. Working Gas in Underground Storage in the United States, 1997-1999



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1993 to 1997 while the January average is calculated from January levels for 1994 to 1998. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

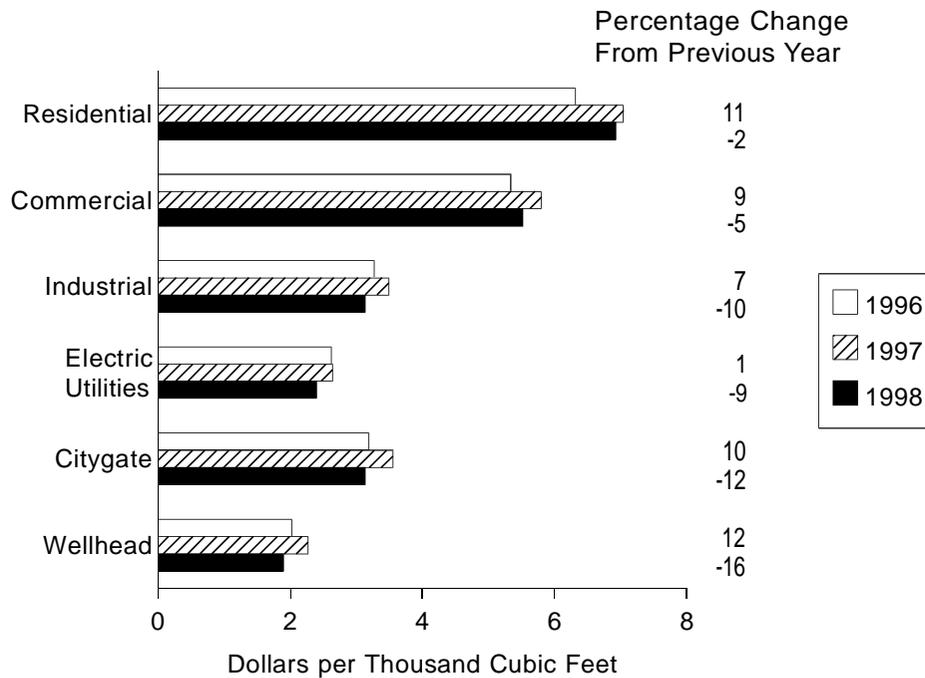
Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

Figure HI3. Natural Gas Delivered to Consumers, January, 1997-1999



Note: The reporting of electric utility deliveries is 3 months behind the reporting of other deliveries.
Source: Table 3.

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-October 1996-1998



Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of electric utility prices is 1 month behind the reporting of other prices..
Source: Table 4.

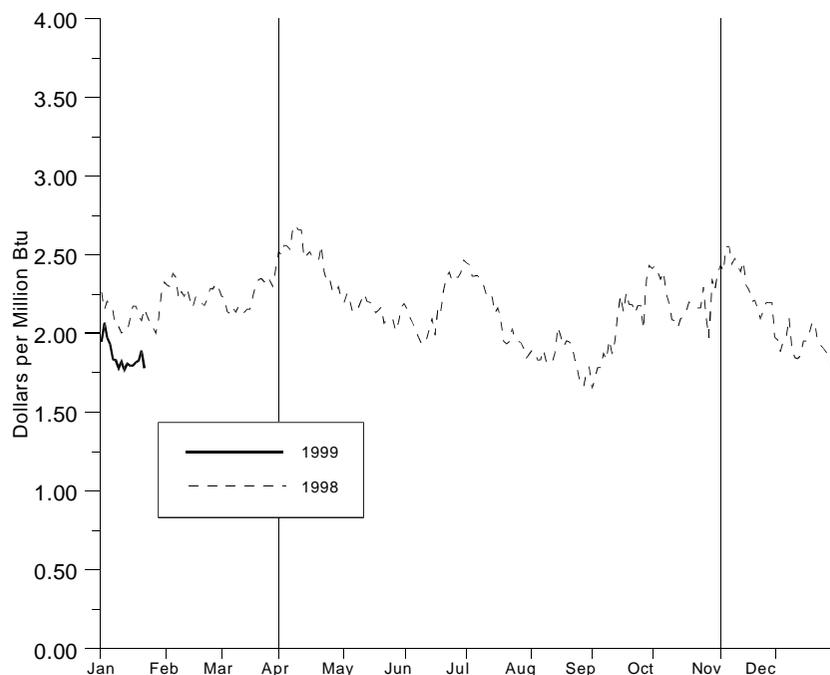
The cumulative average city gate price for January through October 1998 is estimated to be \$3.13 per thousand cubic feet, \$0.42 (12 percent) lower than for the same period in 1997. Residential users have seen the least impact from the drop in the average wellhead price. On average, residential customers paid an estimated \$6.93 per thousand cubic feet for natural gas through October 1998, only \$0.11 (2 percent) less than in 1997. Commercial and industrial customers paid \$0.28 (5 percent) and \$0.36 (10 percent) less for natural gas, respectively, in 1998 than in 1997. The estimated commercial and industrial prices through October 1998 are \$5.52 and \$3.13 per thousand cubic feet, respectively. The average price paid for natural gas by electric utilities is also lower in 1998. The average price through September is estimated to be \$2.40 per thousand cubic feet, \$0.24 (9 percent) lower than in 1997.

In the futures market, prices at the Henry Hub were fairly stable throughout 1998 and did not experience any sustained periods with exceptionally high prices (Figure HI5). The daily settlement price for the nearby month contract was in the range of \$1.652 to \$2.689 per million

Btu throughout the year. During 1996 and 1997, the lower end of the range was similar to that of 1998, but the highest prices were significantly above those of 1998. In 1996, the weather in November (the beginning of the 1996-97 heating season) had been colder than normal, and in 1997, demand for natural gas increased in the Southwest in the late summer as some electric utilities experienced problems with coal delivery and switched to gas. Both factors pushed prices higher in the futures market at that time. In 1996, the range of daily nearby month settlement prices at the Henry Hub was \$1.764 to \$4.573 per million Btu, and in 1997 it was \$1.780 to \$3.785. Both years experienced several weeks with futures prices over \$3.00.

At the beginning of 1999, the futures price has been generally below \$2.00 per million Btu settling at \$1.778 on January 22 (February contract). The daily average spot price at the Henry Hub, after falling nearly 50 percent below the futures price in early December 1998, has remained within a few cents of the futures price since late that month.

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



Note: The futures price is for the nearby month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1 is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.

Source: Commodity Futures Trading Commission, Division of Economic Analysis.

Table 1. Summary of Natural Gas Production in the United States, 1993-1999
(Billion Cubic Feet)

Year and Month	Gross Withdrawals	Repressuring	Nonhydrocarbon Gases Removed ^a	Vented and Flared	Marketed Production (Wet)	Extraction Loss ^b	Dry Gas Production ^c
1993 Total	22,726	3,103	414	227	18,982	886	18,095
1994 Total	23,581	3,231	412	228	19,710	889	18,821
1995 Total	23,744	3,565	388	284	19,506	908	18,599
1996 Total	24,052	3,510	518	272	19,751	958	18,793
1997							
January	2,089	305	50	25	1,709	83	1,626
February	1,905	289	46	22	1,549	75	1,474
March	2,103	311	51	23	1,720	83	1,636
April	1,993	285	48	22	1,639	80	1,559
May	2,041	268	50	22	1,702	83	1,619
June	1,952	275	47	18	1,612	78	1,534
July	2,020	272	51	23	1,674	81	1,593
August	2,022	279	52	21	1,671	81	1,590
September	1,988	285	50	21	1,632	79	1,553
October	2,057	307	51	20	1,678	81	1,597
November	1,999	302	52	19	1,626	79	1,547
December	2,044	314	52	22	1,655	80	1,575
Total	24,213	3,492	599	256	19,866	964	18,902
1998							
January	^E 2,096	^E 331	^E 46	^E 22	^E 1,697	^E 82	^E 1,615
February	^E 1,913	^E 293	^E 42	^E 19	^E 1,560	^E 76	^E 1,484
March	^E 2,086	^E 320	^E 45	^E 22	^E 1,699	^E 82	^E 1,617
April	^E 1,998	^E 306	^E 44	^E 21	^E 1,628	^E 79	^E 1,549
May	^E 2,061	^E 317	^E 43	^E 20	^E 1,681	^E 82	^E 1,599
June	^E 1,996	^E 294	^E 44	^E 22	^E 1,637	^E 79	^E 1,557
July	^E 2,029	^E 295	^E 45	^E 24	^E 1,665	^E 81	^E 1,585
August	^E 2,048	^{RE} 292	^E 45	^{RE} 24	^{RE} 1,687	^E 82	^{RE} 1,605
September	^{RE} 2,000	^{RE} 314	^{RE} 43	^E 22	^{RE} 1,621	^{RE} 79	^{RE} 1,542
October	^{RE} 2,044	^{RE} 303	^E 45	^E 23	^E 1,673	^E 81	^E 1,592
November	^E 2,014	^E 300	^E 44	^E 23	^E 1,647	^E 80	^E 1,567
December(STIFS)	NA	NA	NA	NA	^E 1,705	^E 83	^E 1,622
Total	^{RE} 24,353	^{RE} 3,660	^E 531	^{RE} 264	^{RE} 19,899	^{RE} 965	^{RE} 18,934
1999							
January(STIFS)	NA	NA	NA	NA	^E 1,701	^E 82	^E 1,618

^a See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

^b Extraction loss is only collected on an annual basis. Annually it is between 4 and 5 percent of marketed production. Monthly extraction loss is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

^c Equal to marketed production (wet) minus extraction loss.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

NA = Not Available.

Notes: Data for 1993 through 1997 are final. All other data are preliminary unless otherwise indicated and contain estimates for selected States (see Table 7). Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1992-1996: Energy Information Administration (EIA), *Natural Gas Annual 1997*. January 1997 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," STIFS, and EIA estimates. See Appendix A, Explanatory Notes 1, 3, and 6, for discussion of computation and estimation procedures and revision policies.

Table 2. Supply and Disposition of Dry Natural Gas in the United States, 1993-1999
(Billion Cubic Feet)

Year and Month	Dry Gas Production	Supplemental Gaseous Fuels ^a	Net Imports	Net Storage Withdrawals ^b	Balancing Item ^c	Consumption ^d
1993 Total	18,095	119	2,210	-36	-110	20,279
1994 Total	18,821	111	2,462	-286	-400	20,708
1995 Total	18,599	110	2,687	415	-230	21,581
1996 Total	18,793	109	2,784	2	279	21,967
1997						
January	1,626	12	266	709	-90	2,523
February	1,474	10	228	371	170	2,253
March	1,636	9	241	160	69	2,115
April	1,559	8	224	-61	64	1,795
May	1,619	8	232	-333	62	1,588
June	1,534	6	223	-379	67	1,451
July	1,593	7	225	-293	5	1,537
August	1,590	8	227	-334	28	1,518
September	1,553	6	226	-349	3	1,440
October	1,597	8	239	-218	-92	1,534
November	1,547	10	259	196	-116	1,895
December	1,575	11	246	553	-68	2,317
Total	18,902	103	2,837	24	106	21,972
1998						
January	^E 1,615	^E 12	267	466	50	2,410
February	^E 1,484	^E 10	237	299	78	2,108
March	^E 1,617	^E 11	244	241	18	2,131
April	^E 1,549	^E 9	235	-198	111	1,706
May	^E 1,599	^E 8	240	-393	60	1,514
June	^E 1,557	^E 7	236	-323	-6	1,472
July	^E 1,585	^E 9	^R 251	-314	42	1,574
August	^{RE} 1,605	^E 9	^R 244	-283	^R 5	1,579
September	^{RE} 1,542	^E 9	^R 255	-227	^R -103	^R 1,477
October	^E 1,592	^E 10	^E 261	-255	^R -142	1,467
November	^E 1,567	^E 11	^E 259	34	-117	^E 1,755
December(STIFS)	^E 1,622	^E 13	^E 261	^{RE} 420	^{RE} -163	^E 2,152
Total	^{RE} 18,934	^E 118	^{RE} 2,991	^R -532	^{RE} -167	^{RE} 21,344
1999						
January(STIFS)	^E 1,618	^E 13	^E 273	^E 650	^E -22	^E 2,532

^a Supplemental gaseous fuels data are only collected on an annual basis except for the Dakota Gasification Inc. coal gasification facility which provides data each month. The ratio of annual supplemental fuels (excluding Dakota Gasification Inc.) to the sum of dry gas production, net imports, and net withdrawals from storage is calculated. This ratio, which varies between .0025 and .0037, is applied to the monthly sum of these three elements. The Dakota Gasification Inc. monthly value is added to the result to produce the monthly supplemental fuels estimate.

^b Monthly and annual data for 1991 through 1996 include underground storage and liquefied natural gas storage. Data for January 1997 forward include underground storage only. See Appendix A, Explanatory Note 7 for discussion of computation procedures.

^c Represents quantities lost and imbalances in data due to differences among data sources. See Appendix A, Explanatory Note 9, for full discussion.

^d Consists of pipeline fuel use, lease and plant fuel use, vehicle fuel, and deliveries to consuming sectors as shown in Table 3.

^R = Revised Data.

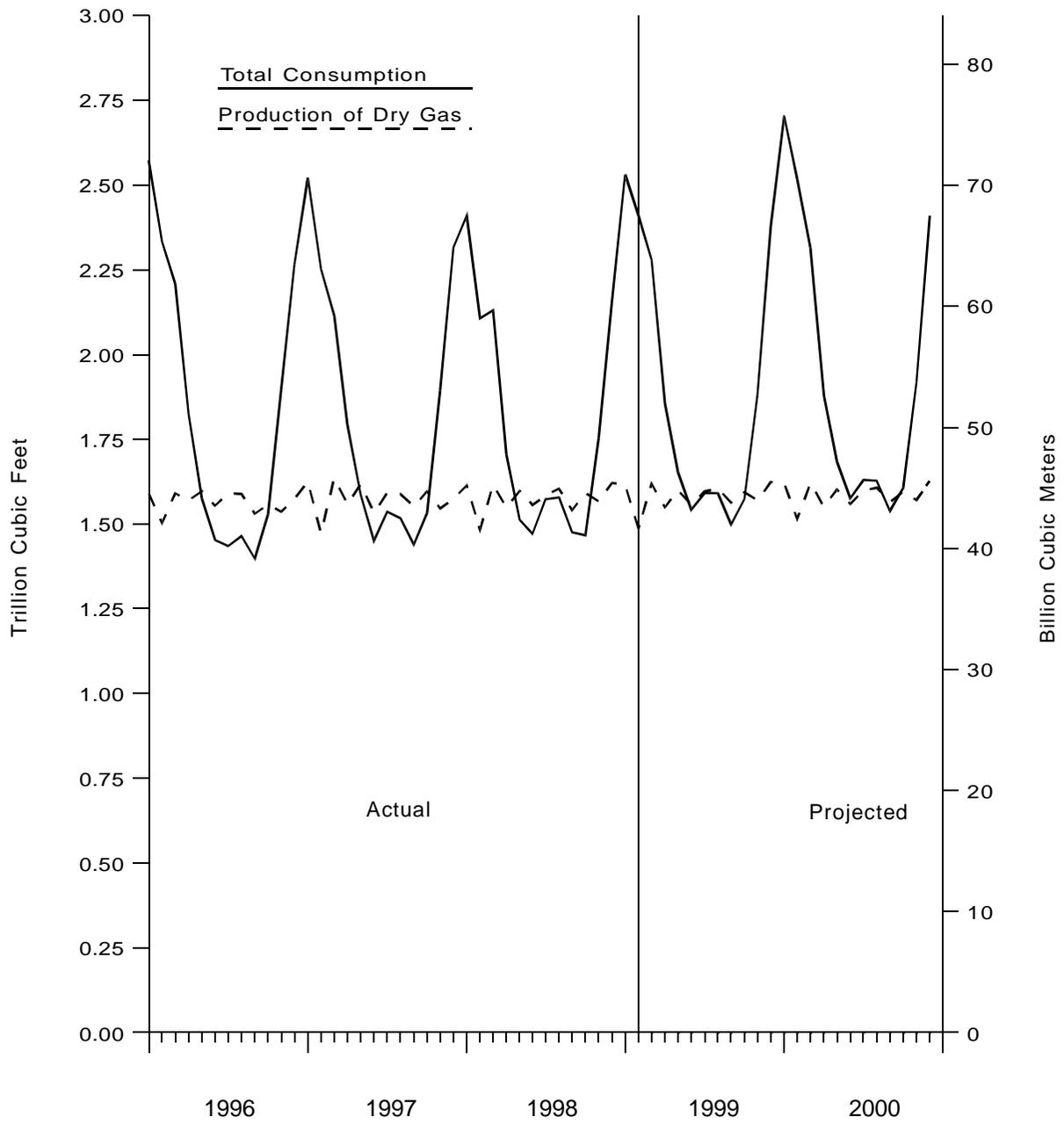
^E = Estimated Data.

^{RE} = Revised Estimated Data.

Notes: Data for 1993 through 1997 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources: 1992-1996: Energy Information Administration (EIA), *Natural Gas Annual 1997*, 1994-1995: EIA: Form EIA-627, "Annual Quantity and Value of Natural Gas Report" (1995 data only), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-191, "Monthly Underground Gas Storage Report," Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," EIA computations and *Natural Gas Annual 1997*. January 1997 through current month: EIA, Form EIA-895, "Monthly Quantity of Natural Gas Report," Form EIA-857, Form EIA-191, EIA computations, and estimates, Short-Term Integrated Forecasting System (STIFS) computations, and Office of Fossil Energy, U.S. Department of Energy, Natural Gas Imports and Exports. See Appendix A for discussion of computation and estimation procedures and revision policies.

Figure 1. Production and Consumption of Natural Gas in the United States, 1996-2000



Sources: 1995 through the current month: Table 2. Projected data: Energy Information Administration, *Short-Term Energy Outlook* (January 1999).

Table 3. Natural Gas Consumption in the United States, 1993-1999
(Billion Cubic Feet)

Year and Month	Lease and Plant Fuel ^a	Pipeline Fuel ^b	Delivered to Consumers					Total Consumption
			Residential	Commercial	Industrial	Electric Utilities	Total	
1993 Total	1,172	624	4,956	^c 2,863	7,981	2,682	18,483	20,279
1994 Total	1,124	685	4,848	^c 2,897	8,167	2,987	18,899	20,708
1995 Total	1,220	700	4,850	^c 3,034	8,580	3,197	19,660	21,581
1996 Total	1,250	711	5,241	^c 3,161	8,870	2,732	20,006	21,967
1997								
January	104	88	902	475	816	139	2,332	2,523
February	94	78	757	421	759	143	2,081	2,253
March	104	73	606	360	782	190	1,938	2,115
April	99	61	433	270	739	193	1,635	1,795
May	102	54	284	204	713	232	1,432	1,588
June	97	49	164	154	690	297	1,305	1,451
July	101	52	128	144	683	429	1,385	1,537
August	101	51	118	140	717	391	1,366	1,518
September	99	49	129	142	689	333	1,293	1,440
October	102	52	234	190	711	244	1,380	1,534
November	99	65	497	306	748	180	1,731	1,895
December	101	81	731	411	796	197	2,135	2,317
Total	1,202	752	4,984	3,223	8,843	2,968	20,018	21,972
1998								
January	^E 106	82	803	447	800	171	2,221	2,410
February	^E 98	72	683	390	731	134	1,938	2,108
March	^E 106	73	639	369	750	194	1,952	2,131
April	^E 102	58	407	254	695	190	1,546	1,706
May	^E 105	52	220	175	669	293	1,357	1,514
June	^E 102	50	152	143	644	379	1,319	1,472
July	^E 104	54	129	153	684	449	1,416	1,574
August	^{RE} 106	54	116	160	686	458	1,419	1,579
September	^{RE} 101	51	120	159	666	380	1,325	^R 1,477
October	^E 105	50	195	176	694	246	1,312	1,467
November(STIFS)	^E 103	^E 60	^E 413	^E 266	^E 722	NA	^E 1,592	^E 1,755
December(STIFS)	^E 107	^E 72	^E 655	^E 389	^E 742	NA	^E 1,974	^E 2,152
Total	^E 1,246	^{RE} 728	^{RE} 4,533	^{RE} 3,080	^{RE} 8,485	NA	^{RE} 19,371	^{RE} 21,344
1999								
January(STIFS)	^E 105	^E 84	^E 887	^E 491	^E 782	NA	^E 2,343	^E 2,532

^a Plant fuel data are only collected on an annual basis and monthly lease fuel data are only collected annually. Lease and plant fuel estimates have been between 6 and 7 percent of marketed production annually. Monthly lease and plant fuel use is estimated from monthly marketed production by assuming that the preceding annual percentage remains constant for the next twelve months.

^b Pipeline fuel use is only collected on an annual basis. Annually it is between 3 and 4 percent of total consumption. Monthly pipeline fuel data are estimated from monthly total consumption (excluding pipeline fuel) by assuming that the preceding annual percentage remains constant for the next twelve months.

^c Vehicle fuel deliveries, in billion cubic feet, were 0.4 in 1991, 0.5 in 1992, 1.0 in 1993, 1.7 in 1994, 2.7 in 1995, 2.9 in 1996 and 4.4 in 1997.

^R = Revised Data.

^E = Estimated Data.

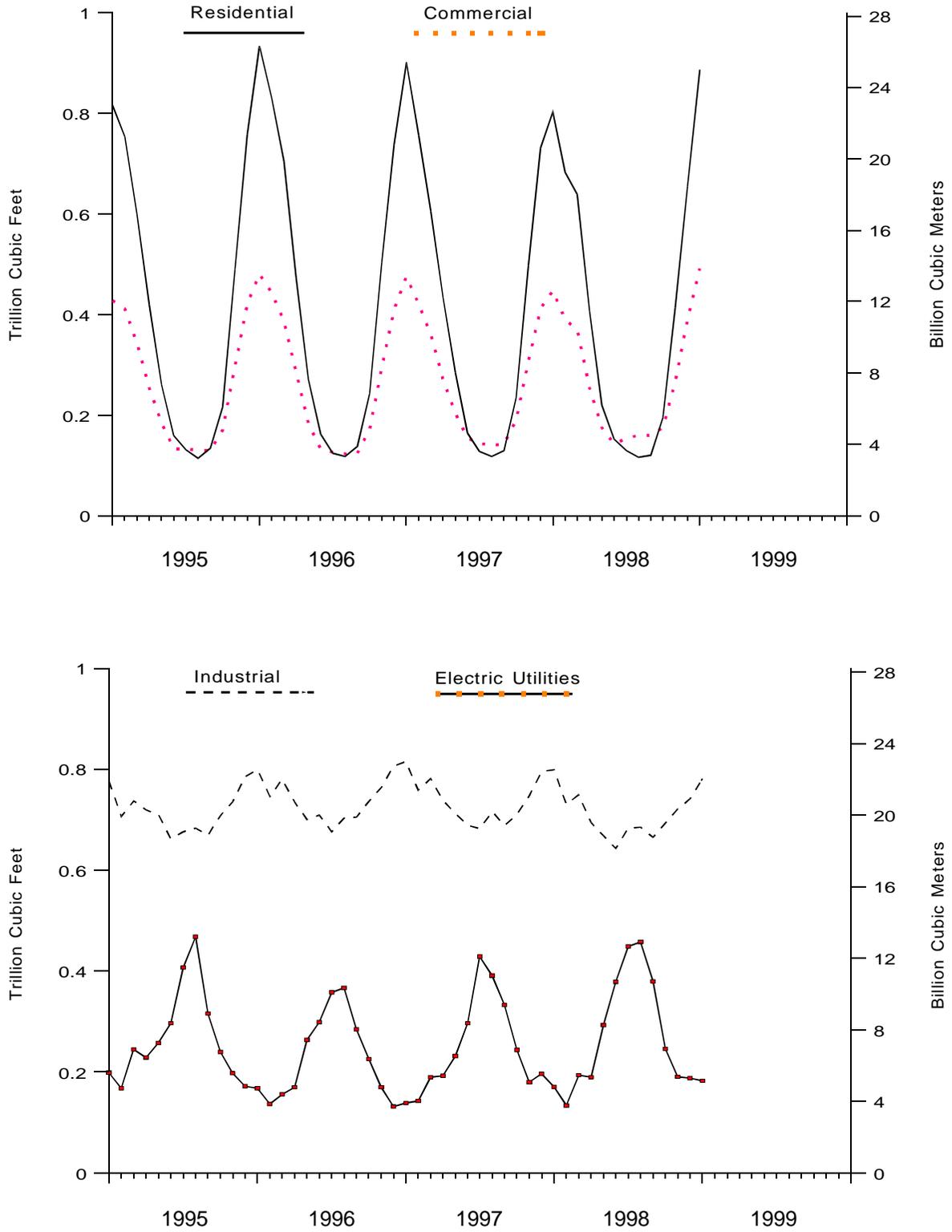
^{RE} = Revised Estimated Data.

^{NA} = Not Available.

Notes: Data for 1993 through 1997 are final. All other data are preliminary unless otherwise indicated. Estimates for the most recent three months are derived from the Short-Term Integrated Forecasting System (STIFS). Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Sources: 1992-1996: Energy Information Administration (EIA): Form EIA-627, "Annual Quantity and Value of Natural Gas Report," (thru 1994), Form EIA-895 "Monthly Quantity of Natural Gas Report," (1995 forward), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-759, "Monthly Power Plant Report," EIA computations, and *Natural Gas Annual 1997*. January 1997 through the current month: EIA: Form 895, "Monthly Quantity of Natural Gas Report," Form EIA-857, Form EIA-759, and STIFS computations. See Appendix A, Explanatory Note 5, for computation procedures and revision policy.

Figure 2. Natural Gas Deliveries to Consumers in the United States, 1995-1999



Sources: *Natural Gas Annual*, Form EIA-857, and Form EIA-759.

Table 4. Selected National Average Natural Gas Prices, 1992-1998
(Dollars per Thousand Cubic Feet)

Year and Month	Wellhead Price ^a	City Gate Price	Delivered to Consumers					Electric Utilities Price
			Residential Price	Commercial		Industrial		
				Price	% of Total ^b	Price	% of Total ^b	
1992 Annual Average	1.74	3.01	5.89	4.88	83.2	2.84	30.3	2.36
1993 Annual Average	2.04	3.21	6.16	5.22	83.9	3.07	29.7	2.61
1994 Annual Average	1.85	3.07	6.41	5.44	79.3	3.05	25.5	2.28
1995 Annual Average	1.55	2.78	6.06	5.05	76.7	2.71	24.5	2.02
1996								
January	2.05	3.14	5.64	5.29	83.2	3.61	22.0	2.87
February	1.89	3.16	5.82	5.25	83.3	3.61	22.7	3.07
March	1.95	3.17	5.93	5.36	81.8	3.52	22.3	2.73
April	2.08	3.22	6.27	5.34	79.5	3.42	20.5	2.68
May	2.01	3.18	6.84	5.40	74.6	3.14	18.7	2.52
June	2.08	3.41	7.83	5.43	70.0	3.13	16.7	2.59
July	2.25	3.49	8.64	5.46	67.8	3.17	18.6	2.69
August	2.10	3.46	8.73	5.56	66.3	3.05	17.4	2.57
September	1.85	3.05	7.99	5.46	67.1	2.77	16.9	2.24
October	1.94	2.94	7.05	5.33	69.1	2.89	17.2	2.37
November	2.50	3.46	6.37	5.40	75.7	3.57	18.5	3.04
December	3.26	4.18	6.47	5.78	78.1	4.20	20.0	3.98
Annual Average	2.17	3.34	6.34	5.40	77.6	3.42	19.4	2.69
1997								
January	3.40	4.28	6.74	6.18	78.8	4.65	21.6	4.06
February	2.49	3.76	6.79	6.13	78.4	4.20	19.7	2.97
March	1.79	3.04	6.52	5.72	74.0	3.35	18.8	2.29
April	1.81	2.92	6.53	5.46	71.8	3.02	18.4	2.30
May	2.00	3.11	6.83	5.39	65.5	2.96	18.1	2.41
June	2.08	3.41	8.30	5.64	61.7	3.10	17.4	2.52
July	2.00	3.44	8.78	5.35	59.5	3.06	15.3	2.44
August	2.08	3.34	8.99	5.43	57.9	2.90	15.6	2.53
September	2.33	3.50	8.84	5.57	59.5	3.25	15.1	2.96
October	2.68	3.86	7.69	5.73	62.9	3.69	16.8	3.24
November	2.92	3.91	6.86	5.85	70.4	4.07	18.0	3.41
December	2.28	3.42	6.54	5.70	72.8	3.79	17.2	2.77
Annual Average	2.32	3.61	6.94	5.79	70.8	3.59	17.7	2.74
1998								
January	^E 1.89	3.28	6.47	5.59	72.4	3.68	14.9	2.64
February	^E 1.80	3.08	6.41	5.56	71.0	3.52	15.3	2.51
March	^E 1.95	3.22	6.27	5.38	71.6	3.41	16.5	2.54
April	^E 2.02	3.21	6.78	5.58	67.0	3.22	15.0	2.59
May	^E 1.96	3.11	7.59	5.62	60.2	3.10	13.9	2.46
June	^E 1.78	2.98	8.41	5.53	59.9	2.95	13.9	2.40
July	^E 2.05	3.36	8.62	5.63	51.3	2.99	12.7	2.50
August	^E 1.84	3.13	9.18	5.49	46.8	2.73	13.6	2.21
September	^E 1.83	2.75	8.93	5.52	49.4	2.64	14.5	2.16
October	^E 1.84	2.93	7.66	5.32	55.0	2.75	14.2	NA
1998 YTD^c	^E 1.90	3.13	6.93	5.52	64.1	3.13	14.5	2.40
1997 YTD	2.27	3.55	7.04	5.80	70.6	3.49	17.8	2.64
1996 YTD	2.02	3.19	6.32	5.34	77.8	3.27	19.4	2.62

^a See Appendix A, Explanatory Note 8, of the *Natural Gas Monthly (NGM)* for discussion of wellhead prices.

^b Percentage of total deliveries represented by onsystem sales, see Figure 6. See Table 25 for breakdown by State.

^c Year-to-date price represents months for which price information is available in the current year.

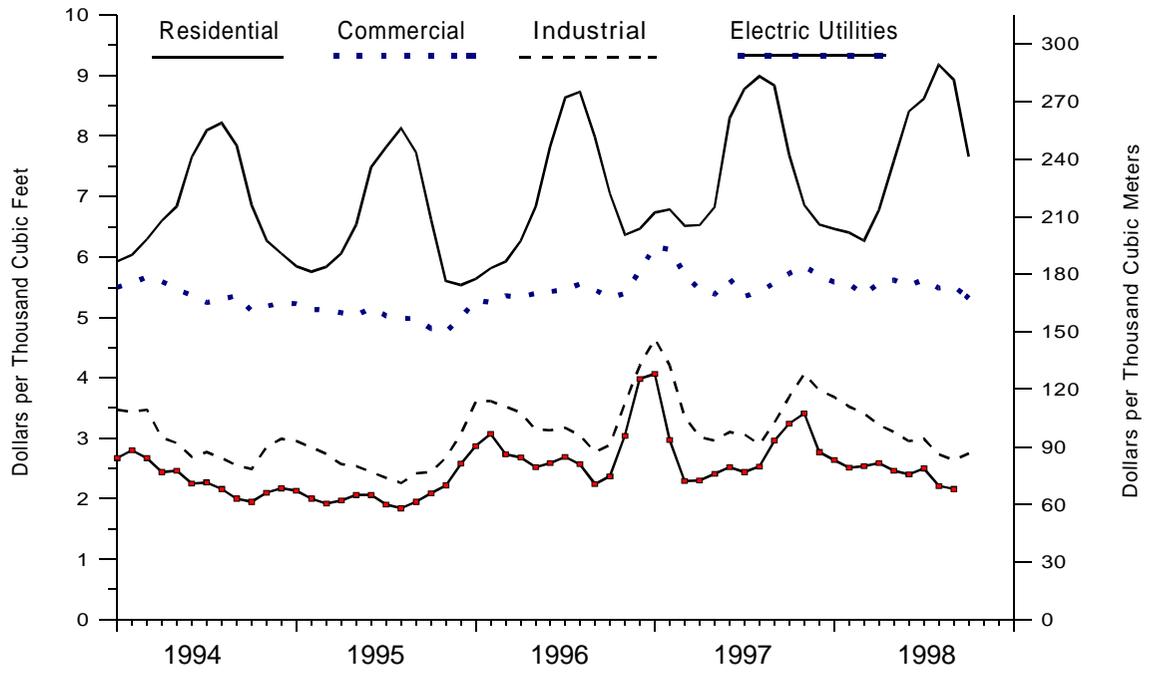
^E = Estimated Data.

NA = Not Available.

Notes: Data for 1992 through 1997 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

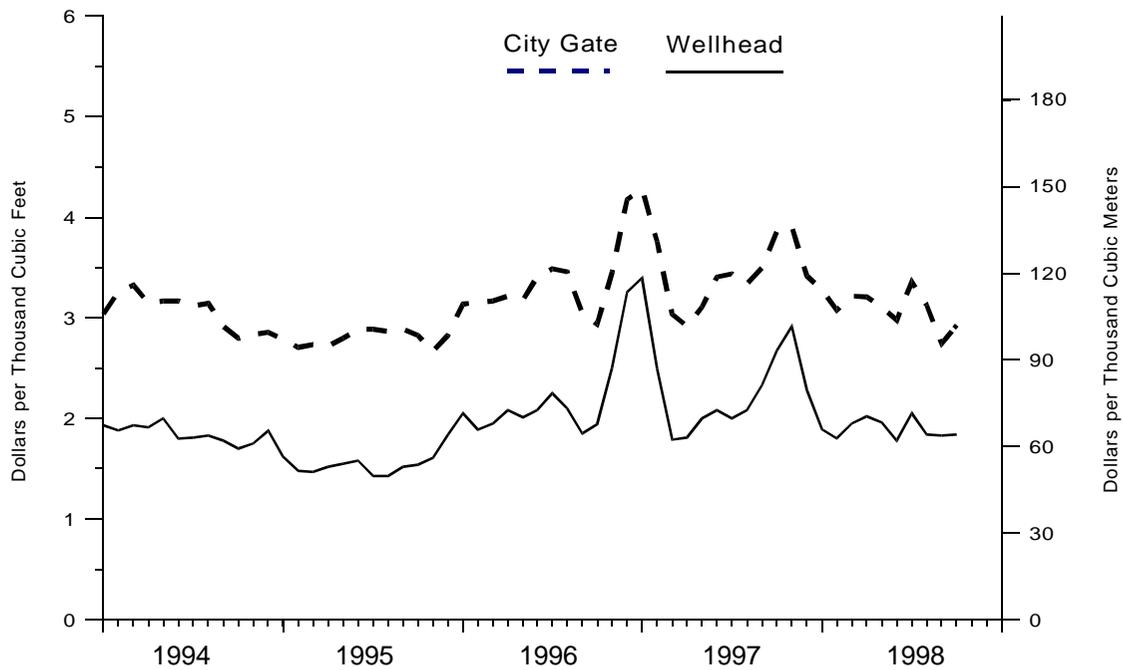
Sources: 1990-1996: Energy Information Administration (EIA) *Natural Gas Annual 1997*. 1997 forward: EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and EIA estimates. January 1997 through current month: See Appendix A, Explanatory Note 8 for estimation procedures and revision policy.

Figure 3. Average Price of Natural Gas Delivered to Consumers in the United States, 1994-1998



Source: Table 4.

Figure 4. Average Price of Natural Gas in the United States, 1994-1998



Source: Table 4.

Table 5. U.S. Natural Gas Imports, by Country, 1992-1998
(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG				Total	
	Canada		Mexico		Algeria		Other		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1992 Total	2,094,387	1.84	—	—	43,116	2.54	—	—	2,137,504	1.85
1993 Total	2,266,751	2.02	1,678	1.94	81,685	2.20	—	—	2,350,115	2.03
1994 Total	2,566,049	1.86	7,013	1.99	50,778	2.28	—	—	2,623,839	1.87
1995 Total	2,816,408	1.48	6,722	1.53	17,918	2.30	—	—	2,841,048	1.49
1996										
January	259,656	2.08	1,499	2.03	2,460	2.81	—	—	263,615	2.09
February	230,546	1.94	698	2.14	2,512	2.79	—	—	233,756	1.95
March	237,668	1.91	1,259	2.34	2,599	3.06	—	—	241,526	1.92
April	230,928	1.86	1,369	2.18	4,559	2.43	—	—	236,857	1.87
May	245,522	1.70	4,024	2.14	2,612	2.58	—	—	252,158	1.72
June	225,875	1.70	711	2.35	0	—	—	—	226,587	1.70
July	232,908	1.82	1,313	2.58	2,642	3.00	—	—	236,864	1.84
August	235,199	1.80	30	1.70	2,629	2.56	—	—	237,858	1.80
September	234,206	1.60	770	1.69	0	—	^a 2,524	3.34	237,500	1.62
October	241,294	1.68	1,110	2.37	5,116	2.96	—	—	247,520	1.71
November	245,795	2.25	982	2.85	5,031	2.59	—	—	251,807	2.26
December	263,681	3.00	96	3.30	5,164	2.51	^a 2,425	3.57	271,366	3.00
Total	2,883,277	1.96	13,862	2.25	35,325	2.70	4,949	3.45	2,937,413	1.97
1997										
January	266,756	3.27	1,555	3.09	7,560	2.78	^a 2,417	3.68	278,288	3.26
February	230,352	2.50	2,526	2.49	7,667	3.00	—	—	240,545	2.52
March	251,328	1.70	3,127	1.83	2,530	2.98	—	—	256,985	1.72
April	235,431	1.66	189	1.92	2,557	2.23	—	—	238,178	1.67
May	234,345	1.81	2,380	2.03	2,552	2.20	^b 2,455	2.68	241,732	1.83
June	225,366	1.87	1,692	2.20	5,059	2.49	—	—	232,118	1.88
July	229,479	1.82	1,088	1.98	5,026	2.48	—	—	235,593	1.84
August	237,142	1.81	6	2.35	7,535	2.43	—	—	244,684	1.83
September	232,090	2.00	29	2.47	5,030	2.41	^b 2,337	2.88	239,486	2.01
October	245,742	2.32	965	2.92	5,050	2.70	—	—	251,758	2.33
November	257,782	2.71	1,874	2.82	7,542	2.89	^b 4,893	3.07	272,091	2.72
December	253,338	2.17	1,810	2.12	7,567	2.88	—	—	262,716	2.19
Total	2,899,152	2.15	17,243	2.32	65,675	2.67	12,103	3.08	2,994,173	2.17
1998										
January	273,189	2.02	56	2.11	10,105	2.89	—	—	283,351	2.05
February	235,288	1.95	2,824	1.97	7,607	2.83	^b 2,171	3.84	247,890	1.99
March	258,067	1.99	382	2.20	5,166	3.12	—	—	263,615	2.01
April	242,191	2.00	3,251	2.37	2,549	2.20	—	—	247,991	2.01
May	242,041	1.98	846	2.15	7,596	2.52	—	—	250,483	2.00
June	243,259	^R 1.93	5	2.21	5,125	2.39	^b 2,441	2.79	250,830	^R 1.95
July	256,506	^R 1.88	^R 1,821	^R 2.13	5,086	^R 2.20	—	—	^R 263,414	^R 1.89
August	249,717	^R 1.80	^R 1,414	^R 1.78	2,540	^R 2.20	^b 2,321	^R 2.80	^R 255,993	^R 1.81
September	260,599	^R 1.75	^R 2,256	^R 1.86	5,133	^R 1.73	—	—	^R 267,988	^R 1.75
October	266,302	NA	^E 1,800	NA	5,025	NA	—	—	^E 273,127	NA
November	^E 259,659	NA	^E 1,900	NA	5,042	NA	^{ab} 5,020	NA	^E 271,621	NA
1998 YTD	^E 2,786,818	NA	^E 16,555	NA	60,974	NA	11,953	NA	^E 2,876,301	NA
1997 YTD	2,645,813	2.15	15,432	2.34	58,108	2.65	12,103	3.08	2,731,457	2.17
1996 YTD	2,619,596	1.85	13,766	2.25	30,161	2.74	2,524	3.34	2,666,047	1.87

^a Received from the United Arab Emirates.

^b Received from Australia.

^{ab} Received 2,667 from the United Arab Emirates and 2,353 from Australia.

^R = Revised Data.

^E = Estimated Data.

NA = Not Available.

— = Not Applicable.

Sources: 1991-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*. Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 6. U.S. Natural Gas Exports, by Country, 1992-1998
(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG		Total	
	Canada		Mexico		Japan		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price		
1992 Total	67,777	1.83	95,973	1.90	52,532	3.43	216,282	2.25
1993 Total	44,518	2.14	39,676	2.02	55,989	3.34	140,183	2.59
1994 Total	52,556	2.42	46,500	1.68	62,682	3.18	161,738	2.50
1995 Total	27,554	1.96	61,283	1.50	65,283	3.41	154,119	2.39
1996								
January	7,044	3.13	1,607	1.98	5,534	3.38	14,186	3.10
February	5,207	2.71	2,000	1.82	5,621	3.35	12,828	2.85
March	6,616	2.79	2,860	1.81	5,642	3.55	15,118	2.88
April	2,430	2.21	1,924	1.69	5,654	3.57	10,008	2.88
May	2,809	2.15	1,899	1.84	3,750	3.61	8,458	2.73
June	3,001	2.25	3,486	2.16	5,651	3.65	12,138	2.87
July	3,777	2.45	3,062	2.24	7,546	3.66	14,385	3.04
August	2,197	2.30	9,176	2.11	5,663	3.67	17,036	2.65
September	2,514	1.94	2,389	1.73	5,663	3.73	10,566	2.85
October	4,311	1.97	1,990	1.85	5,589	3.84	11,889	2.83
November	6,776	2.77	1,533	2.56	5,670	4.01	13,979	3.25
December	5,222	3.67	1,914	3.72	5,665	3.73	12,801	3.70
Total	51,905	2.67	33,840	2.11	67,648	3.65	153,393	2.97
1997								
January	4,193	4.08	2,231	4.08	5,604	4.25	12,028	4.16
February	5,169	3.02	1,677	2.32	5,596	4.20	12,443	3.46
March	9,115	2.05	1,486	1.55	5,675	4.16	16,276	2.74
April	5,168	1.78	3,044	1.83	5,660	4.06	13,872	2.72
May	4,107	2.08	2,177	1.96	3,812	3.83	10,097	2.72
June	3,162	2.28	2,579	2.14	3,786	3.72	9,527	2.81
July	3,257	2.14	3,122	2.17	3,756	3.66	10,136	2.71
August	3,820	2.15	6,282	2.37	7,532	3.62	17,633	2.86
September	3,129	2.37	6,159	2.59	3,767	3.58	13,055	2.83
October	2,432	2.85	4,182	2.87	5,676	3.58	12,289	3.19
November	5,579	3.10	1,782	3.16	5,691	3.66	13,051	3.35
December	7,318	2.58	3,650	2.30	5,631	3.58	16,600	2.86
Total	56,447	2.52	38,372	2.46	62,187	3.83	157,006	3.02
1998								
January	5,056	2.53	4,257	2.11	7,446	3.67	16,759	2.93
February	4,474	2.14	3,119	2.06	3,726	3.42	11,319	2.54
March	7,818	2.25	4,204	2.14	7,435	3.09	19,457	2.55
April	4,409	2.47	2,676	2.22	5,702	2.81	12,787	2.57
May	2,083	2.28	6,123	2.12	1,891	2.70	10,097	2.26
June	3,404	1.73	5,618	1.98	5,695	^R 2.69	14,717	^R 2.20
July	^R 2,533	^R 2.05	^R 3,853	^R 2.20	5,681	^R 2.70	^R 12,067	^R 2.40
August	^R 1,241	^R 1.92	^R 5,292	^R 2.55	5,676	^R 2.70	^R 12,209	^R 2.55
September	^R 2,250	^R 1.94	^R 2,892	^R 1.81	7,584	^R 2.69	^R 12,726	^R 2.36
October	^E 2,000	NA	^E 4,100	NA	5,679	NA	^E 11,779	NA
November	^E 4,500	NA	^E 4,000	NA	3,776	NA	^E 12,276	NA
1998 YTD	^E 39,768	NA	^E 46,134	NA	60,291	NA	^E 146,193	NA
1997 YTD	49,129	2.51	34,721	2.47	56,556	3.86	140,406	3.04
1996 YTD	46,683	2.55	31,926	2.01	61,983	3.64	140,592	2.91

^R = Revised Data.
^E = Estimated Data.
NA = Not Available.

Sources: 1991-1994: Energy Information Administration, Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." January 1995 through the current month (except estimates): Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*. Estimated pipeline data (shown with an "E") are taken from data from the National Energy Board of Canada plus EIA estimates. LNG data: Industry reports.

Table 7. Marketed Production of Natural Gas, by State, 1992-1998
(Million Cubic Feet)

Year and Month	Alabama ^b	Alaska	Arizona	California	Colorado	Florida	Kansas
1992 Total	355,099	443,597	771	365,632	323,041	6,657	658,007
1993 Total	388,024	430,350	597	315,851	400,985	7,085	686,347
1994 Total	515,272	555,402	752	309,427	453,207	7,486	712,730
1995 Total	519,661	469,550	558	279,555	523,084	6,463	721,436
1996							
January	45,653	44,655	41	20,714	48,619	518	62,976
February	42,668	40,433	42	22,910	45,504	493	62,683
March	45,334	43,738	45	24,686	47,843	460	63,027
April	43,868	39,694	36	23,988	45,293	456	60,858
May	45,160	36,348	39	24,091	46,893	483	62,194
June	43,319	37,334	45	23,281	45,212	503	56,318
July	43,257	37,272	30	24,495	45,570	500	57,095
August	43,873	37,239	43	24,547	51,269	540	55,144
September	42,834	38,039	31	23,826	45,437	537	55,563
October	42,200	41,204	34	24,261	50,245	468	57,589
November	45,395	40,706	37	24,493	49,824	517	58,460
December	47,278	44,166	40	25,203	50,363	531	60,890
Total	530,841	480,828	463	286,494	572,071	6,006	712,796
1997							
January	48,213	43,497	46	24,430	52,755	527	60,198
February	46,024	39,391	41	21,876	48,424	512	55,275
March	51,313	42,625	42	23,910	53,954	610	60,099
April	51,246	38,687	39	23,248	52,529	554	58,357
May	48,802	35,427	36	23,590	52,376	541	61,661
June	47,342	36,344	28	22,928	50,715	450	59,996
July	46,370	36,284	31	23,981	52,964	514	58,234
August	46,314	36,270	30	23,841	54,041	505	61,937
September	48,911	37,041	30	23,760	52,742	519	49,658
October	50,634	40,095	34	24,437	54,260	452	53,815
November	49,734	39,631	57	24,792	55,549	439	54,152
December	48,368	43,020	39	24,896	57,064	491	53,834
Total	583,272	468,311	452	285,690	637,375	6,114	687,215
1998							
January	32,739	43,715	43	24,810	53,025	479	^E 51,399
February	29,230	38,016	42	21,719	51,770	436	^E 48,969
March	33,505	41,026	53	22,869	56,834	466	^E 50,055
April	32,406	38,188	43	21,952	55,760	480	^E 49,045
May	33,656	35,200	38	23,889	56,151	512	^E 50,901
June	33,257	36,116	34	24,837	54,493	428	^E 48,050
July	33,696	36,501	42	27,152	56,370	504	^E 48,048
August	33,719	36,331	36	^F 29,717	56,841	529	^E 48,172
September	30,466	^E 40,036	32	29,096	55,501	445	^E 43,509
1998 YTD	292,675	^E 345,129	361	226,041	496,745	4,278	^E 438,147
1997 YTD	434,536	345,566	323	211,565	470,501	4,732	525,414
1996 YTD	395,968	354,752	352	212,538	421,640	4,489	535,856

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1992-1998
(Million Cubic Feet) — Continued

Year and Month	Louisiana ^b	Michigan	Mississippi	Montana	New Mexico	North Dakota	Oklahoma
1992 Total	4,914,300	194,815	91,697	53,867	1,268,863	54,883	2,017,356
1993 Total	4,991,138	204,635	80,695	54,528	1,409,429	59,851	2,049,942
1994 Total	5,169,705	222,657	63,448	50,416	1,557,689	57,805	1,934,864
1995 Total	5,108,366	238,203	95,533	50,264	1,625,837	49,468	1,811,734
1996							
January	437,274	21,912	8,089	4,503	135,594	4,276	143,693
February	412,611	18,686	7,386	4,266	126,370	3,880	139,115
March	446,371	11,208	8,385	4,443	138,091	4,164	131,701
April	436,014	32,072	8,225	4,098	132,572	4,122	147,949
May	451,148	18,021	9,026	4,244	138,946	4,273	149,425
June	434,668	23,572	8,983	3,496	131,778	3,990	143,675
July	449,052	27,119	9,335	3,603	125,193	4,047	146,451
August	449,461	23,261	9,193	4,050	126,967	4,096	148,463
September	431,768	20,208	8,641	4,172	122,040	4,185	143,302
October	421,252	20,374	8,996	4,668	123,570	4,246	150,322
November	427,566	16,081	8,487	4,521	124,377	4,216	146,828
December	443,563	13,227	8,518	4,933	128,590	4,178	143,965
Total	5,240,747	245,740	103,263	50,996	1,554,087	49,674	1,734,887
1997							
January	445,257	34,940	8,253	4,654	135,263	3,952	144,608
February	405,366	16,875	7,807	4,451	122,656	3,899	134,455
March	447,802	24,790	8,470	4,836	137,830	4,453	147,098
April	431,010	12,944	8,120	4,654	132,438	4,364	136,246
May	443,269	39,819	8,611	4,561	136,553	4,539	142,336
June	425,934	19,314	8,893	3,808	125,256	4,348	138,038
July	434,326	40,026	8,636	4,114	131,806	4,427	144,769
August	438,965	18,597	9,626	4,213	134,140	4,486	147,528
September	430,599	22,451	9,162	4,199	128,915	4,381	150,488
October	445,702	20,297	10,084	3,150	134,623	4,508	145,054
November	434,908	26,013	9,683	4,706	120,856	4,416	135,537
December	446,682	29,885	9,955	5,091	118,298	4,629	137,731
Total	5,229,821	305,950	107,300	52,437	1,558,633	52,401	1,703,888
1998							
January	463,097	28,439	9,639	[£] 5,058	142,312	4,623	145,522
February	422,324	28,259	8,574	[£] 4,668	142,383	4,020	134,651
March	468,307	30,719	9,781	[£] 5,018	141,671	4,337	142,541
April	449,961	17,983	8,957	[£] 4,714	140,963	4,284	134,885
May	461,826	29,164	9,121	[£] 4,672	140,258	4,488	142,725
June	454,466	26,962	8,586	[£] 3,805	[£] 131,574	4,210	137,906
July	454,506	26,188	9,258	[£] 3,990	[£] 132,121	4,384	140,664
August	457,471	19,037	8,835	[£] 4,242	[£] 135,482	4,499	143,345
September	438,628	[£] 20,056	8,664	[£] 4,332	[£] 130,669	4,427	142,267
1998 YTD	4,070,586	[£] 226,808	81,415	[£] 40,499	[£] 1,237,433	39,270	1,264,506
1997 YTD	3,902,528	229,755	77,578	39,491	1,184,856	38,849	1,285,566
1996 YTD	3,948,366	196,059	77,262	36,874	1,177,550	37,034	1,293,773

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1992-1998
(Million Cubic Feet) — Continued

Year and Month	Oregon	Texas ^c	Utah	Wyoming	Other ^a States	U.S. Total
1992 Total	2,580	6,145,862	171,293	842,576	800,913	18,711,808
1993 Total	4,003	6,249,624	225,401	634,957	788,472	18,981,915
1994 Total	3,221	6,353,844	270,858	696,018	774,724	19,709,525
1995 Total	1,923	6,330,048	241,290	673,775	759,728	19,506,474
1996						
January	120	545,658	19,998	58,691	69,638	1,672,623
February	75	512,557	18,027	56,037	66,726	1,580,472
March	105	552,700	21,650	57,270	72,373	1,673,596
April	121	529,015	20,864	54,662	65,643	1,649,552
May	140	547,843	21,035	52,805	67,061	1,679,176
June	132	533,168	20,759	59,346	64,752	1,634,329
July	146	557,986	20,573	55,519	64,500	1,671,743
August	117	550,499	21,137	54,567	66,523	1,670,989
September	132	529,524	21,589	51,949	65,361	1,609,140
October	133	543,264	22,152	53,649	69,163	1,637,792
November	113	517,147	21,606	53,990	70,997	1,615,362
December	102	529,659	21,376	57,551	71,875	1,656,019
Total	1,439	6,449,022	250,767	666,036	814,612	19,750,793
1997						
January	105	554,934	21,782	59,016	66,837	1,709,269
February	98	506,768	19,115	55,848	59,897	1,548,774
March	101	564,269	21,912	61,159	64,286	1,719,559
April	102	539,499	19,570	64,278	61,118	1,639,002
May	102	552,230	22,053	62,726	62,301	1,701,532
June	97	529,765	19,815	59,667	59,069	1,611,809
July	98	546,610	21,711	60,324	58,493	1,673,719
August	99	548,267	21,024	61,091	59,686	1,670,660
September	86	525,836	22,007	64,678	56,803	1,632,265
October	97	540,150	23,006	64,992	62,912	1,678,302
November	91	519,274	22,840	62,181	60,863	1,625,720
December	96	526,271	22,307	62,410	64,414	1,655,481
Total	1,173	6,453,873	257,139	738,368	736,679	19,866,093
1998						
January	90	542,462	21,826	66,074	^E 61,837	^E 1,697,189
February	79	491,530	21,758	53,970	^E 57,200	^E 1,559,599
March	96	541,311	23,656	65,704	^E 61,188	^E 1,699,137
April	92	525,602	23,513	61,974	^E 57,188	^E 1,627,991
May	92	550,442	24,967	54,304	^E 58,146	^E 1,680,552
June	90	527,613	23,968	63,574	^E 56,699	^E 1,636,666
July	95	547,880	23,036	64,917	^E 55,998	^E 1,665,349
August	94	561,133	^R 23,681	66,273	^E 57,217	^{RE} 1,686,653
September	90	529,321	^E 24,586	63,370	^E 55,348	^E 1,620,843
1998 YTD	818	4,817,294	^E 210,990	560,161	^E 520,822	^E 14,873,978
1997 YTD	889	4,868,179	188,987	548,786	548,490	14,906,590
1996 YTD	1,090	4,858,951	185,633	500,846	602,576	14,841,619

^a Includes Arkansas, Illinois, Indiana, Kentucky, Maryland, Missouri, Nebraska, Nevada, New York, Ohio, Pennsylvania, South Dakota, Tennessee, Virginia and West Virginia. The 1998 monthly values for these States are estimated.

^b All data for 1991 through 1996 include Federal Offshore production. For 1997 and 1998, data for Alabama exclude Federal Offshore production and data for Louisiana include both the Louisiana and Alabama portions of Federal Offshore production.

^c Federal offshore production volumes are included.

^R = Revised Data.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

Notes: Data for 1991 through 1997 are final. All other data are preliminary unless otherwise indicated. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources: 1991-1996: Energy Information Administration (EIA), *Natural Gas Annual 1996*. 1997 through current month: Form EIA-895, "Monthly Quantity of Natural Gas Report," Minerals Management Service reports, and EIA computations.

**Table 8. Gross Withdrawals and Marketed Production of Natural Gas by State,
September 1998**
(Million Cubic Feet)

State	Gross Withdrawals			Repressuring	Nonhydrocarbon Gases Removed ^a	Vented and Flared	Marketed Production
	From Gas Wells	From Oil Wells	Total				
Alabama	33,076	651	33,726	1,104	2,014	142	30,466
Alaska	[£] 15,934	[£] 276,619	[£] 292,553	[£] 251,644	0	[£] 873	[£] 40,036
Arizona	[£] 29	3	32	0	0	0	32
California	6,992	26,313	33,305	3,977	156	76	29,096
Colorado	48,188	7,999	56,187	604	0	82	55,501
Florida	0	503	503	0	58	0	445
Kansas	[£] 40,137	[£] 3,490	[£] 43,627	[£] 74	0	[£] 44	[£] 43,509
Louisiana	385,990	58,025	444,015	3,482	0	1,905	438,628
Michigan	[£] 16,323	[£] 4,081	[£] 20,404	[£] 144	0	[£] 204	[£] 20,056
Mississippi	10,271	559	10,830	1,246	685	235	8,664
Montana	[£] 3,832	[£] 672	[£] 4,504	[£] 5	0	[£] 167	[£] 4,332
New Mexico	[£] 123,343	[£] 21,381	[£] 144,724	[£] 881	[£] 12,938	[£] 235	[£] 130,669
North Dakota	1,426	3,316	4,742	0	5	310	4,427
Oklahoma	129,473	12,794	142,267	0	0	0	142,267
Oregon	107	0	107	4	13	0	90
Texas	469,328	113,564	582,892	37,721	13,397	2,452	529,321
Utah	[£] 22,972	[£] 3,775	[£] 26,747	[£] 44	0	[£] 2,117	[£] 24,586
Wyoming	97,732	5,085	102,817	12,457	13,486	13,504	63,370
Other States	[£] 52,374	[£] 3,644	[£] 56,018	[£] 154	[£] 402	[£] 114	[£] 55,348
Total	[£] 1,457,525	[£] 542,473	[£] 1,999,998	[£] 313,543	[£] 43,155	[£] 22,458	[£] 1,620,843

^a See Appendix A, Explanatory Note 1, for a discussion of data on Nonhydrocarbon Gases Removed.

[£] = Estimated Data.

Notes: All monthly data are considered preliminary until publication of the *Natural Gas Annual* for that year. Totals may not equal sum of components because of independent rounding. See Appendix A, Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Source: Form EIA-895, "Monthly Quantity of Natural Gas Report."

Table 9. Underground Natural Gas Storage - All Operators, 1993-1999
(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total ^b	Volume	Percent	Injections	Withdrawals	Net Withdrawals ^c
1993 Total^a	4,327	2,322	6,649	-275	-10.6	2,760	2,717	-43
1994 Total^a	4,360	2,606	6,966	284	12.2	2,796	2,508	-288
1995 Total^a	4,349	2,153	6,503	-453	3.1	2,566	2,974	408
1996 Total^a	4,341	2,173	6,513	19	-244.4	2,906	2,911	6
1997								
January	4,347	1,496	5,843	32	2.3	68	753	684
February	4,342	1,139	5,481	118	11.6	55	413	358
March	4,345	990	5,336	232	30.7	131	285	155
April	4,342	1,051	5,393	196	23.1	205	146	-59
May	4,340	1,365	5,704	202	17.5	362	41	-321
June	4,357	1,731	6,088	202	13.2	407	42	-365
July	4,356	2,017	6,372	119	6.3	361	78	-282
August	4,357	2,338	6,695	93	4.2	378	56	-322
September	4,360	2,672	7,033	67	2.6	380	44	-336
October	4,358	2,886	7,244	75	2.7	294	84	-210
November	4,359	2,699	7,058	150	5.9	113	302	189
December	4,350	2,175	6,525	2	0.1	45	579	533
Total	—	—	—	—	—	2,800	2,824	24
1998								
January	4,344	1,711	6,055	215	14.4	68	534	466
February	4,338	1,418	5,756	278	24.4	74	373	299
March	4,339	1,184	5,523	193	19.5	136	377	241
April	4,336	1,381	5,718	330	31.4	277	78	-198
May	4,338	1,773	6,111	412	30.2	435	42	-393
June	4,343	2,101	6,444	371	21.4	375	52	-323
July	4,337	2,416	6,753	402	20.0	366	52	-314
August	4,333	2,695	7,028	358	15.3	341	58	-283
September	4,337	2,946	7,284	274	10.2	305	78	-227
October	4,339	3,172	7,512	287	9.9	301	46	-255
November	4,340	3,143	7,483	444	16.5	131	165	34
December(STIFS)	^{RE} 4,340	^{RE} 2,723	^R 7,063	^{RE} 549	^{RE} 25.2	NA	NA	^{RE} 420
Total	—	—	—	—	—	NA	NA	^R -532
1999								
January(STIFS)	^E 4,340	^E 2,073	^E 6,413	^E 362	^E 21.2	NA	NA	^E 650

^a Total as of December 31.

^b Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1991 - 7,993; 1992 - 7,932; 1993 - 7,989; 1994 - 8,043; 1995 - 7,927; 1996 - 8,159; and 1997 - 8128.

^c Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

^R = Revised Data.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

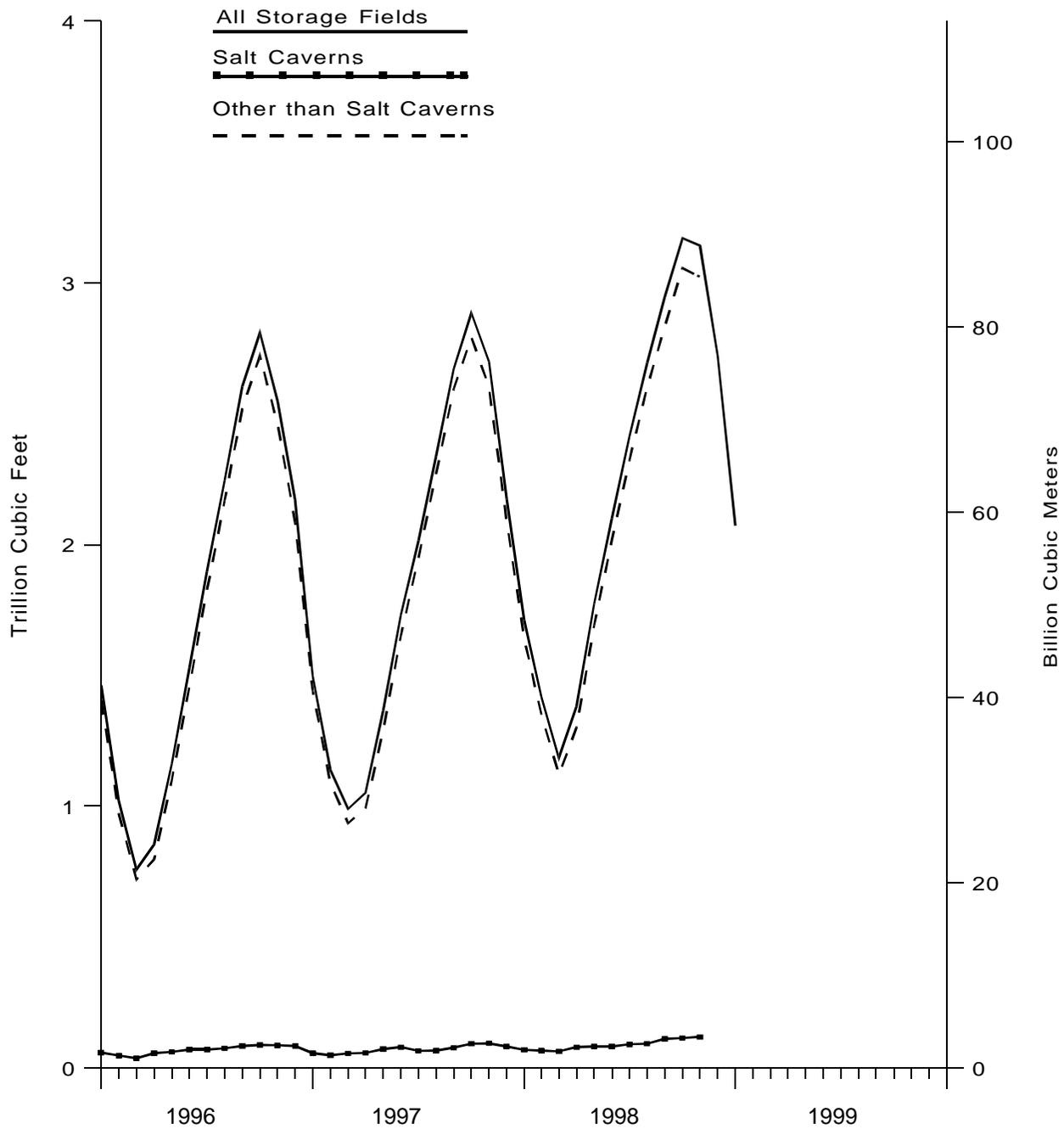
NA = Not Available.

— = Not Applicable.

Notes: Data for 1993 through 1997 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Figure 5. Underground Natural Gas Storage in the United States, 1996-1999



Sources: Energy Information Administration, Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 10. Underground Natural Gas Storage - by Season, 1996-1999
(Volumes in Billion Cubic Feet)

Year, Season and Month	Natural Gas in Underground Storage at End of Period			Change In Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals ^a
March 1996	4,290	758	5,048	-574	-43.1	80	403	323
1996 Refill Season								
April	4,312	854	5,166	-525	-38.1	227	112	-115
May	4,332	1,161	5,493	-507	-30.4	373	45	-328
June	4,341	1,529	5,870	-485	-24.1	410	35	-375
July	4,336	1,898	6,234	-404	-17.5	418	49	-370
August	4,332	2,245	6,577	-250	-10.0	400	54	-346
September	4,338	2,605	6,943	-197	-7.0	398	32	-366
October	4,335	2,810	7,145	-186	-6.2	276	73	-203
Total	—	—	—	—	—	2,502	401	-2,102
1996-97 Heating Season								
November	4,339	2,549	6,889	-179	-6.6	90	354	264
December	4,341	2,173	6,513	19	0.9	86	461	374
January	4,347	1,496	5,843	32	2.3	68	753	684
February	4,342	1,139	5,481	118	11.6	55	413	358
March	4,345	990	5,336	232	30.7	131	285	155
Total	—	—	—	—	—	430	2,266	1,835
1997 Refill Season								
April	4,342	1,051	5,393	196	23.1	205	146	-59
May	4,340	1,365	5,704	202	17.5	362	41	-321
June	4,357	1,731	6,088	202	13.2	407	42	-365
July	4,356	2,017	6,372	119	6.3	361	78	-282
August	4,357	2,338	6,695	93	4.2	378	56	-322
September	4,360	2,672	7,033	67	2.6	380	44	-336
October	4,358	2,886	7,244	75	2.7	294	84	-210
Total	—	—	—	—	—	2,388	492	-1,896
1997-98 Heating Season								
November	4,359	2,699	7,058	150	5.9	113	302	189
December	4,350	2,175	6,525	2	0.1	45	579	533
January	4,344	1,711	6,055	215	14.4	68	534	466
February	4,338	1,418	5,756	278	24.4	74	373	299
March	4,339	1,184	5,523	193	19.5	136	377	241
Total	—	—	—	—	—	436	2,165	1,729
1998 Refill Season								
April	4,336	1,381	5,718	330	31.4	277	78	-198
May	4,338	1,773	6,111	412	30.2	435	42	-393
June	4,343	2,101	6,444	371	21.4	375	52	-323
July	4,337	2,416	6,753	402	20.0	366	52	-314
August	4,333	2,695	7,028	358	15.3	341	58	-283
September	4,337	2,946	7,284	274	10.2	305	78	-227
October	4,339	3,172	7,512	287	9.9	301	46	-255
Total	—	—	—	—	—	2,399	406	-1,993
1998-99 Heating Season								
November	4,340	3,143	7,483	444	16.5	131	165	34
December(STIFS)	^{RE} 4,340	^{RE} 2,723	^R 7,063	^{RE} 549	^{RE} 25.2	NA	NA	^{RE} 420
January(STIFS)	^E 4,340	^E 2,073	^E 6,413	^E 362	^E 21.2	NA	NA	^E 650
Total	—	—	—	—	—	NA	NA	1,104

^a Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.

^R = Revised Data.

^E = Estimated Data.

^{RE} = Revised Estimated Data.

NA = Not Available.

— = Not Applicable.

Notes: Data for 1996 through 1997 are final. All other data are preliminary unless otherwise noted. Estimates for the most recent two months are derived from the Short-Term Integrated Forecasting System (STIFS). See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of revision policy. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and STIFS.

Table 11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1996-1998
(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1996								
January	63	59	122	-14	-19.3	23	41	17
February	63	48	111	-17	-26.2	23	33	10
March	63	38	101	-21	-35.2	21	32	11
April	63	57	120	-9	-13.7	30	10	-20
May	63	62	126	-11	-15.1	19	13	-6
June	63	71	135	-7	-8.9	21	12	-9
July	60	71	131	-5	-6.7	20	14	-6
August	60	76	136	13	20.5	21	16	-5
September	60	85	145	4	5.0	23	13	-9
October	60	88	148	0	0.4	17	14	-3
November	64	87	151	3	4.0	16	20	5
December	64	85	149	14	18.8	25	28	2
Total	64	85	149	14	18.8	258	246	-13
1997								
January	65	57	122	-2	-3.1	21	51	30
February	59	49	109	2	4.0	15	23	8
March	65	56	121	18	47.3	22	16	-6
April	65	58	123	1	1.8	22	19	-2
May	65	73	138	10	17.3	27	13	-14
June	66	80	145	8	11.7	22	16	-7
July	65	66	131	-6	-7.5	15	30	15
August	65	67	132	-11	-12.4	23	22	0
September	65	78	143	-9	-8.7	27	14	-12
October	66	93	159	4	5.6	30	14	-16
November	67	95	162	7	9.4	25	24	-2
December	67	83	150	-4	-3.0	19	31	12
Total	—	—	—	—	—	267	274	6
1998								
January	66	70	136	13	22.4	17	31	14
February	65	67	132	18	35.9	17	21	3
March	68	64	132	8	14.4	23	28	6
April	68	80	148	22	37.9	29	11	-17
May	68	83	150	9	12.9	26	22	-3
June	66	83	149	3	4.0	21	23	2
July	66	91	157	26	39.2	26	18	-8
August	65	93	158	26	39.5	24	21	-2
September	67	112	179	34	44.2	22	30	9
October	67	115	182	22	23.7	44	12	-32
November	67	119	187	24	25.5	22	17	-5

— = Not Applicable.

Notes: Data for 1996 and 1997 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1996-1998
(Volumes in Billion Cubic Feet)

Year and Month	Natural Gas in Non-Salt Cavern Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals	Net Withdrawals
1996								
January	4,291	1,404	5,695	-569	-28.8	26	708	682
February	4,286	973	5,259	-504	-34.1	73	510	437
March	4,228	720	4,948	-553	-43.4	59	371	312
April	4,249	797	5,046	-516	-39.3	197	102	-95
May	4,268	1,099	5,367	-496	-31.1	354	32	-322
June	4,277	1,458	5,735	-478	-24.7	390	23	-366
July	4,276	1,827	6,103	-399	-17.9	398	34	-363
August	4,272	2,169	6,441	-263	-10.8	380	39	-341
September	4,277	2,520	6,797	-201	-7.4	376	19	-357
October	4,275	2,722	6,997	-186	-6.4	259	59	-200
November	4,275	2,462	6,737	-183	-6.9	75	333	259
December	4,277	2,087	6,364	6	0.3	61	433	372
Total	4,277	2,087	6,364	6	0.3	2,647	2,665	18
1997								
January	4,282	1,439	5,721	34	2.5	47	702	654
February	4,283	1,090	5,372	116	12.0	40	390	350
March	4,280	935	5,215	214	29.8	109	269	160
April	4,277	993	5,270	195	24.6	184	127	-56
May	4,275	1,292	5,566	191	17.6	335	28	-307
June	4,291	1,651	5,942	194	13.3	385	26	-358
July	4,290	1,951	6,241	124	6.8	346	49	-297
August	4,291	2,271	6,563	103	4.7	356	34	-322
September	4,295	2,595	6,890	75	3.0	353	29	-324
October	4,292	2,793	7,085	70	2.6	265	70	-195
November	4,292	2,604	6,896	142	5.8	88	278	191
December	4,283	2,092	6,375	4	0.2	27	548	521
Total	—	—	—	—	—	2,533	2,551	18
1998								
January	4,278	1,641	5,920	202	14.0	51	504	453
February	4,273	1,351	5,624	260	23.9	56	352	296
March	4,271	1,120	5,391	185	19.8	113	349	236
April	4,269	1,301	5,570	308	31.0	248	67	-181
May	4,270	1,691	5,961	402	31.2	409	20	-390
June	4,277	2,018	6,295	367	22.3	354	29	-325
July	4,271	2,324	6,596	376	19.3	340	34	-306
August	4,268	2,602	6,870	332	14.6	317	37	-281
September	4,270	2,834	7,104	240	9.2	283	48	-235
October	4,272	3,057	7,329	265	9.5	257	34	-223
November	4,272	3,024	7,296	420	16.1	108	147	39

— = Not Applicable.

Notes: Data for 1996 and 1997 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 of the *Natural Gas Monthly* for discussion of the reporting of underground storage information. Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. Positive net withdrawals indicate the volume of withdrawals in excess of injections. Negative net withdrawals indicate the volume of injections in excess of withdrawals.

Sources: Form EIA-191, "Monthly Underground Gas Storage Report," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998
(Volumes in Million Cubic Feet)

State	1998						
	November	October	September	August	July	June	May
Alabama	-1	-613	401	-200	9	-623	-144
Arkansas	63	-580	-817	-1,005	-1,034	-1,100	-1,046
California	-10,022	-23,926	-9,990	-7,283	-9,435	-27,493	-29,210
Colorado	-1,764	-2,043	-5,919	-5,877	-4,060	-3,907	-6,040
Illinois	9,641	-27,923	-28,122	-31,634	-25,062	-31,348	-25,967
Indiana	-618	-2,904	-4,534	-3,695	-2,476	-575	-446
Iowa	-68	-7,108	-12,149	-12,102	-11,525	-8,405	-3,600
Kansas	3,658	-8,737	-9,284	-12,200	-13,108	-6,267	-19,324
Kentucky	1,776	-5,237	-8,821	-4,533	-10,622	-8,137	-11,793
Louisiana	1,326	-30,831	-9,708	-20,159	-25,597	-14,635	-22,794
Maryland	124	-1,267	-783	-1,407	-2,924	-1,251	-808
Michigan	18,548	-27,089	-31,023	-52,128	-60,857	-69,589	-69,296
Minnesota	-84	-187	-275	-214	-289	-169	0
Mississippi	701	-9,800	156	-4,139	-5,961	-2,887	-3,438
Missouri	-204	-208	-414	-203	8	143	-460
Montana	2,606	-1,532	-4,239	-4,524	-2,295	-2,024	-2,571
Nebraska	536	-363	-864	-616	-796	-528	-860
New Mexico	-1,243	-1,903	-1,185	-208	-191	-180	-1,120
New York	1,054	-4,464	-5,640	-5,247	-8,108	-8,786	-11,267
Ohio	7,921	-12,746	-19,259	-27,246	-31,220	-25,882	-35,968
Oklahoma	-473	-19,520	-12,146	-7,189	-7,554	-12,460	-23,277
Oregon	28	4	-818	-819	-852	-1,411	0
Pennsylvania	30	-20,091	-27,252	-19,657	-31,998	-34,236	-57,800
Texas	-3,908	-34,137	-5,040	-18,629	-18,872	-20,145	-27,286
Utah	2,231	-3,879	-8,260	-7,385	-7,265	-8,225	-7,364
Washington	-730	719	-1,822	-3,640	-312	-2,963	-3,932
West Virginia	3,337	-7,094	-16,425	-29,075	-28,560	-26,404	-26,003
Wyoming	-614	-1,425	-2,602	-2,008	-2,807	-3,406	-1,344
AGA Regions							
Producing	124	-105,507	-38,023	-63,530	-72,318	-57,675	-98,285
Eastern Consuming	42,077	-117,105	-154,885	-187,744	-214,131	-215,621	-244,412
Western Consuming	-8,349	-32,268	-33,925	-31,751	-27,316	-49,599	-50,461
Total	33,852	-254,881	-226,833	-283,025	-313,764	-322,895	-393,158

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998
(Volumes in Million Cubic Feet) — Continued

State	1998				1997		
	April	March	February	January	Total	December	November
Alabama	-245	248	187	396	-162	243	243
Arkansas	-471	1,039	875	1,057	250	1,526	651
California	-10,710	-2,257	26,766	29,805	16,340	58,418	2,846
Colorado	3,534	3,928	6,337	3,510	-525	5,026	2,503
Illinois	-293	28,186	36,082	58,036	-10,153	44,906	2,805
Indiana	917	4,249	3,322	4,144	984	4,193	-879
Iowa	348	6,692	5,335	18,905	-6,255	17,041	505
Kansas	-6,954	14,438	8,180	15,103	-11,372	12,277	8,384
Kentucky	-2,480	7,768	9,981	9,559	3,013	10,773	4,035
Louisiana	-21,191	7,400	5,164	21,574	-9,248	43,644	20,997
Maryland	-1,127	1,631	2,745	3,236	-544	1,298	33
Michigan	-31,779	55,388	45,886	84,170	-3,388	78,027	53,016
Minnesota	159	416	203	444	-373	4	4
Mississippi	-2,757	2,405	4,251	7,431	3,763	8,484	1,089
Missouri	48	423	10	458	-453	228	-207
Montana	224	3,017	2,554	4,421	11,962	3,169	2,760
Nebraska	754	1,090	355	376	-1,590	944	124
New Mexico	287	658	-130	-412	2,065	2,500	25
New York	-3,673	7,977	9,548	11,582	304	10,735	4,857
Ohio	-14,906	28,619	34,023	34,810	-7,336	40,530	15,502
Oklahoma	-21,343	7,159	737	21,199	-9,482	25,362	13,995
Oregon	81	934	1,253	540	-1,316	1,036	-262
Pennsylvania	-32,842	38,957	49,786	57,788	28,381	53,825	26,061
Texas	-40,395	-9,062	-3,341	35,935	10,035	53,619	18,531
Utah	-596	1,199	6,783	7,613	-7,571	13,169	2,721
Washington	1,544	3,329	4,131	-58	-1,003	3,159	83
West Virginia	-14,607	22,818	36,285	30,647	16,716	36,318	6,615
Wyoming	89	2,611	2,059	3,990	908	3,019	1,906
AGA Regions							
Producing	-92,824	24,038	15,735	101,887	-13,990	147,412	63,672
Eastern Consuming	-99,884	204,045	233,545	314,105	19,518	299,061	112,710
Western Consuming	-5,674	13,177	50,086	50,266	18,423	87,001	12,560
Total	-198,382	241,260	299,366	466,258	23,950	533,474	188,941

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998
(Volumes in Million Cubic Feet) — Continued

State	1997						
	October	September	August	July	June	May	April
Alabama	-251	-262	-286	-43	-93	-271	-130
Arkansas	271	-1,048	-1,234	-1,472	-1,340	-608	178
California	-11,717	-6,637	-7,805	-11,213	-22,886	-23,687	-18,968
Colorado	359	-5,203	-4,559	-5,592	-5,293	-5,375	5,441
Illinois	-28,399	-35,655	-35,387	-32,161	-27,571	-23,526	-636
Indiana	-3,088	-4,559	-3,722	-3,299	-1,913	-110	1,444
Iowa	-8,412	-12,825	-11,001	-8,818	-8,375	-3,470	1,634
Kansas	-7,782	-13,351	-11,129	-3,488	-11,777	-9,463	-1,497
Kentucky	-2,926	-7,983	-6,520	-7,430	-8,997	-7,828	-363
Louisiana	-24,035	-29,291	-15,446	-11,847	-19,809	-19,573	-3,990
Maryland	-2,346	-2,838	-2,353	-1,536	-1,700	-1,632	114
Michigan	-32,466	-65,209	-73,230	-75,558	-73,547	-46,757	-14,032
Minnesota	0	-130	-142	-321	-312	-273	-40
Mississippi	-2,126	-5,224	-3,109	741	-3,797	-5,573	449
Missouri	-215	-240	-379	-433	-112	-1,200	56
Montana	1,015	-1,490	-2,339	-2,710	-1,633	-846	1,810
Nebraska	-69	-1,099	-971	-76	-803	-714	-47
New Mexico	-1,305	-853	-328	587	-534	-1,228	583
New York	-2,211	-6,455	-11,606	-11,663	-11,184	-7,589	-1,623
Ohio	-8,809	-23,499	-32,174	-34,224	-37,483	-34,205	-1,447
Oklahoma	-19,663	-14,556	-8,393	-811	-7,984	-18,407	-7,180
Oregon	-97	-410	-1,178	-1,301	-1,681	-1,300	543
Pennsylvania	-15,914	-48,745	-44,878	-42,074	-50,051	-43,897	-3,188
Texas	-30,600	-21,731	-12,881	10,561	-20,379	-28,071	-17,396
Utah	-1,301	-3,235	-5,284	-8,117	-7,950	-4,255	-2,150
Washington	702	-2,268	982	-495	-3,766	-5,881	-71
West Virginia	-8,145	-19,091	-24,119	-26,183	-31,856	-24,165	1,674
Wyoming	-591	-2,454	-2,727	-3,411	-2,304	-1,127	137
AGA Regions							
Producing	-85,240	-86,054	-52,520	-5,729	-65,620	-82,922	-28,852
Eastern Consuming	-113,251	-228,461	-246,626	-243,499	-253,685	-195,364	-16,545
Western Consuming	-11,630	-21,826	-23,050	-33,161	-45,825	-42,743	-13,297
Total	-210,121	-336,341	-322,196	-282,389	-365,130	-321,030	-58,694

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1996-1998
(Volumes in Million Cubic Feet) — Continued

State	1997			1996		
	March	February	January	Total	December	November
Alabama	-25	184	531	-1,224	761	129
Arkansas	342	1,006	1,978	64	644	562
California	-289	19,814	38,462	51,292	14,985	-2,885
Colorado	2,020	4,766	5,382	-1,004	2,923	92
Illinois	22,821	39,383	63,269	-15,109	35,109	15,523
Indiana	2,537	2,954	7,425	-1,801	3,290	-853
Iowa	2,966	8,497	16,003	-1,229	18,020	5,502
Kansas	4,053	8,989	13,411	12,118	12,290	12,828
Kentucky	4,141	8,048	18,062	-7,530	8,039	4,853
Louisiana	-18,885	20,943	48,043	10,964	32,273	29,327
Maryland	1,896	2,653	5,867	24	958	1,424
Michigan	53,634	71,586	121,150	-31,671	83,640	61,160
Minnesota	177	109	551	-30	218	30
Mississippi	-2,294	2,905	12,216	-12,758	4,658	5,707
Missouri	1,174	-252	1,126	-48	76	306
Montana	2,591	3,983	5,651	11,725	5,512	4,760
Nebraska	-245	502	865	-1,489	1,108	479
New Mexico	501	1,527	591	5,338	-823	607
New York	9,239	10,141	17,664	-13,367	8,151	6,347
Ohio	21,559	28,161	58,753	-10,844	35,138	25,728
Oklahoma	-8,168	8,115	28,208	22,961	20,970	17,468
Oregon	919	1,076	1,340	783	1,240	552
Pennsylvania	50,395	52,423	94,422	-59,533	25,003	33,464
Texas	-21,279	24,835	54,826	63,869	24,153	12,557
Utah	-2,620	2,520	8,931	12,955	9,164	4,651
Washington	3,200	1,784	1,566	2,067	1,746	462
West Virginia	23,270	28,818	53,582	-35,844	21,644	19,884
Wyoming	1,090	2,995	4,376	5,056	3,529	2,903
AGA Regions						
Producing	-45,732	68,321	159,274	102,555	94,165	79,056
Eastern Consuming	193,362	253,097	458,719	-179,663	240,936	173,946
Western Consuming	7,088	37,049	66,259	82,844	39,316	10,566
Total	154,718	358,466	684,252	5,735	374,417	263,567

Notes: This table contains total net withdrawals for each State with natural gas storage facilities. Positive numbers indicate the volume of withdrawals in excess of injections. Negative values indicate the volume of injections in excess of withdrawals. Data through 1997 are final. All other data are preliminary at this time and are not considered final until publication of the *Natural Gas Annual* for that year. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

**Table 14. Activities of Underground Natural Gas Storage Operators, by State,
November 1998**

(Volumes in Million Cubic Feet)

State	Total Storage Capacity	Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Storage Activity	
		Base Gas	Working Gas	Total	Volume	Percent	Injections	Withdrawals
Alabama	3,280	1,190	1,753	2,943	230	15.1	76	75
Arkansas	31,871	9,653	8,740	18,394	1,713	24.4	175	238
California	396,430	247,419	199,564	446,983	15,247	8.3	14,454	4,432
Colorado	99,600	48,139	42,366	90,505	8,124	23.7	3,733	1,969
Illinois	898,565	649,968	249,765	899,732	-10,661	-4.1	5,103	14,745
Indiana	113,210	73,777	34,027	107,804	-516	-1.5	1,032	414
Iowa	271,200	200,700	65,788	266,488	5,642	9.4	4,869	4,801
Kansas	304,066	190,232	108,279	298,511	21,846	25.3	6,717	10,375
Kentucky	219,908	109,121	103,441	212,562	11,307	12.3	2,850	4,625
Louisiana	559,013	266,105	261,870	527,975	75,698	40.7	19,967	21,292
Maryland	62,000	46,677	14,908	61,585	519	3.6	1,146	1,270
Michigan	992,934	420,201	579,652	999,854	59,671	11.5	9,859	28,407
Minnesota	7,000	4,623	2,369	6,992	-8	-0.3	87	2
Mississippi	134,012	77,408	56,218	133,626	5,979	11.9	2,954	3,655
Missouri	31,274	21,600	9,846	31,446	172	1.8	210	6
Montana	342,785	167,365	50,439	217,804	1,207	2.5	616	3,222
Nebraska	39,469	31,507	4,434	35,941	-4	-0.1	134	670
New Mexico	96,600	26,531	9,416	35,946	3,175	50.9	2,067	824
New York	175,479	103,042	73,868	176,909	9,646	15.0	2,262	3,316
Ohio	573,434	352,680	189,177	541,857	21,360	12.7	3,759	11,680
Oklahoma	396,087	234,063	153,357	387,420	49,305	47.4	5,682	5,209
Oregon	11,623	4,896	7,070	11,966	47	0.7	0	28
Pennsylvania	684,842	354,901	364,127	719,028	41,152	12.7	15,345	15,375
Texas	683,891	253,752	292,759	546,511	90,669	44.9	18,158	14,250
Utah	121,980	64,601	46,811	111,413	9,123	24.2	1,658	3,889
Washington	37,300	22,096	14,424	36,521	416	3.0	1,815	1,084
West Virginia	734,158	296,487	174,746	471,233	20,489	13.3	5,036	8,374
Wyoming	105,869	60,782	23,844	84,626	2,625	12.4	918	304
AGA Regions								
Producing	2,205,540	1,057,744	890,639	1,948,384	248,386	38.7	55,720	55,844
Eastern Consuming	4,799,753	2,661,851	1,865,532	4,527,384	159,006	9.3	51,680	93,758
Western Consuming	1,122,586	619,922	386,887	1,006,809	36,781	10.5	23,280	14,930
Total	8,127,879	4,339,518	3,143,059	7,482,576	444,172	16.5	130,680	164,532

Notes: Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals during the period to the quantity of gas in storage at the beginning of the period. This is due to changes in the quantities of native gas included in base gas and/or losses in base gas due to migration from storage reservoirs. Totals may not equal sum of components because of independent rounding. Geographic coverage is the 50 States and the District of Columbia. The American Gas Association (AGA) publishes weekly estimates of working gas levels in underground storage by region. AGA defines the Producing Region as Texas, Oklahoma, Kansas, New Mexico, Louisiana, Arkansas, and Mississippi; the Eastern Consuming Region as all States east of the Mississippi River less Mississippi, plus Iowa, Nebraska and Missouri; the Western Consuming Region as all States west of the Mississippi River less the Producing Region and Iowa, Nebraska and Missouri.

Source: Form EIA-191, "Monthly Underground Gas Storage Report."

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				October	September	August
Alabama	39,628	36,577	46,397	1,324	1,196	1,183
Alaska	11,576	11,301	12,290	1,346	818	648
Arizona	29,201	24,320	21,337	1,122	932	894
Arkansas	27,882	32,045	36,235	1,366	1,067	1,058
California	440,872	370,477	366,703	26,155	22,034	21,621
Colorado	NA	87,973	85,538	4,185	2,690	2,480
Connecticut	27,956	30,913	34,400	1,532	937	848
Delaware	6,334	7,088	7,908	232	177	165
District of Columbia	10,563	11,972	13,632	457	338	327
Florida	12,919	10,206	13,739	718	626	639
Georgia	82,157	77,997	93,837	4,268	2,851	2,814
Hawaii	466	431	455	40	41	41
Idaho	12,034	11,441	11,147	656	316	292
Illinois	297,569	371,213	394,112	21,530	10,513	10,437
Indiana	NA	125,887	135,275	NA	NA	NA
Iowa	52,058	61,039	64,158	3,029	1,435	1,453
Kansas	57,696	50,856	61,540	2,457	1,562	1,613
Kentucky	40,386	46,767	51,033	2,239	1,167	1,104
Louisiana	NA	40,574	46,943	NA	1,703	1,574
Maine	701	760	741	62	27	25
Maryland	NA	58,475	66,279	NA	NA	1,854
Massachusetts	NA	86,482	90,476	4,257	NA	2,347
Michigan	245,803	291,860	307,936	15,851	7,533	6,740
Minnesota	79,695	96,340	105,208	5,328	2,683	2,465
Mississippi	NA	20,709	24,601	NA	NA	NA
Missouri	88,469	96,495	104,998	3,345	2,619	2,185
Montana	NA	15,758	16,431	1,272	484	488
Nebraska	33,076	36,918	37,662	1,632	885	1,036
Nevada	23,162	19,433	17,152	1,367	824	813
New Hampshire	NA	5,389	5,490	NA	159	NA
New Jersey	NA	165,583	173,704	NA	NA	4,528
New Mexico	24,781	24,312	24,338	1,169	840	845
New York	NA	292,632	NA	NA	NA	7,468
North Carolina	40,618	38,817	45,743	1,205	963	905
North Dakota	7,799	8,815	9,441	484	202	208
Ohio	NA	267,716	283,780	NA	5,905	7,246
Oklahoma	53,398	54,552	59,609	1,780	1,494	1,430
Oregon	NA	25,125	24,873	1,431	760	679
Pennsylvania	NA	198,225	214,882	10,155	NA	NA
Rhode Island	NA	14,189	15,073	645	436	438
South Carolina	20,704	18,634	22,902	606	491	463
South Dakota	8,823	10,130	10,428	533	248	227
Tennessee	NA	46,016	54,296	1,492	1,172	1,111
Texas	158,581	176,017	177,572	7,370	5,930	5,810
Utah	41,097	41,714	40,392	4,463	1,913	1,332
Vermont	1,953	2,071	2,014	102	114	57
Virginia	48,060	54,327	57,880	2,478	1,443	1,064
Washington	NA	42,813	46,678	NA	NA	NA
West Virginia	NA	25,918	28,834	1,302	NA	NA
Wisconsin	86,790	100,647	109,884	6,382	3,190	3,218
Wyoming	NA	9,484	10,456	745	303	331
Total	3,464,658	3,755,432	4,000,710	194,885	119,841	115,580

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1998					
	July	June	May	April	March	February
Alabama	1,202	1,386	2,335	4,610	7,480	9,222
Alaska	479	628	933	1,239	1,529	1,716
Arizona	1,062	1,375	2,092	3,694	5,323	5,604
Arkansas	1,146	1,171	1,731	2,270	6,069	6,668
California	25,147	33,207	38,118	54,072	62,006	76,210
Colorado	NA	1,592	7,546	11,118	15,570	16,176
Connecticut	1,028	1,195	1,878	3,638	5,051	5,585
Delaware	197	252	450	846	1,248	1,360
District of Columbia	371	435	636	1,195	2,032	2,365
Florida	707	817	1,017	1,631	2,044	2,251
Georgia	2,956	3,186	3,558	8,015	16,312	18,031
Hawaii	45	47	47	49	49	52
Idaho	402	666	904	1,560	2,032	2,232
Illinois	9,497	11,529	14,790	33,014	54,697	53,146
Indiana	NA	3,291	5,270	NA	23,358	20,668
Iowa	1,622	1,435	2,807	5,821	10,634	10,261
Kansas	1,783	2,155	3,803	7,378	11,857	11,594
Kentucky	1,321	1,360	1,961	3,937	8,164	8,515
Louisiana	1,774	1,814	2,310	3,736	7,184	7,953
Maine	22	31	45	92	120	124
Maryland	1,828	2,087	2,992	5,696	9,577	11,052
Massachusetts	2,842	NA	NA	10,697	14,514	15,644
Michigan	7,275	9,771	13,888	31,736	47,397	48,977
Minnesota	2,537	2,735	3,836	7,148	16,337	15,023
Mississippi	714	796	1,231	2,243	NA	4,564
Missouri	2,670	3,128	4,980	10,435	17,763	18,966
Montana	481	1,086	NA	1,676	2,429	2,404
Nebraska	1,014	1,199	1,961	4,324	6,482	6,642
Nevada	977	1,487	1,884	2,826	3,809	4,149
New Hampshire	169	238	378	697	845	1,010
New Jersey	4,845	5,736	11,735	17,514	26,429	29,313
New Mexico	822	284	1,270	2,589	4,740	4,337
New York	15,038	NA	NA	30,102	42,752	46,717
North Carolina	1,044	1,192	2,243	5,018	7,535	9,710
North Dakota	235	292	490	953	1,464	1,561
Ohio	NA	8,509	11,550	24,861	44,211	43,910
Oklahoma	1,633	1,855	3,094	5,854	10,832	11,652
Oregon	944	1,641	2,135	NA	NA	4,581
Pennsylvania	5,283	6,505	9,880	NA	32,526	34,714
Rhode Island	462	622	1,001	NA	2,402	2,720
South Carolina	474	562	1,071	2,421	4,006	5,177
South Dakota	274	302	512	1,127	1,738	1,666
Tennessee	1,186	1,410	2,674	5,170	9,938	9,546
Texas	5,436	6,125	9,148	15,463	28,005	34,096
Utah	1,264	1,958	2,243	4,853	6,482	8,193
Vermont	56	77	118	266	340	397
Virginia	1,425	1,737	2,509	5,172	9,618	11,067
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	NA	NA	2,785	4,553	4,906
Wisconsin	2,415	3,470	4,080	9,198	17,130	15,618
Wyoming	NA	503	704	1,182	1,566	1,560
Total	129,421	152,469	220,029	406,751	639,059	683,127

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1998	1997				
	January	Total	December	November	October	September
Alabama	9,689	48,496	7,942	3,977	1,440	1,254
Alaska	2,240	15,146	2,162	1,684	1,569	743
Arizona	7,103	31,057	4,764	1,973	1,053	1,124
Arkansas	5,336	42,428	6,369	4,013	1,345	948
California	82,302	478,904	68,486	39,940	24,538	21,448
Colorado	18,860	115,583	17,463	10,147	4,290	2,714
Connecticut	6,263	40,562	5,977	3,672	1,629	1,014
Delaware	1,408	8,972	1,213	671	252	184
District of Columbia	2,409	15,807	2,421	1,414	553	393
Florida	2,470	13,117	1,837	1,074	681	631
Georgia	20,167	114,383	19,892	16,495	6,693	3,158
Hawaii	55	517	45	42	39	40
Idaho	2,975	15,239	2,371	1,427	638	320
Illinois	78,417	497,230	69,718	56,299	29,455	11,690
Indiana	26,868	169,140	25,914	17,338	7,954	3,467
Iowa	13,560	81,696	12,051	8,606	4,048	1,646
Kansas	13,494	69,415	10,323	8,236	2,153	1,485
Kentucky	10,618	66,033	11,175	8,091	3,063	1,451
Louisiana	9,311	52,709	7,960	4,176	2,016	1,710
Maine	153	1,009	142	107	66	30
Maryland	12,609	77,500	11,130	7,894	3,543	2,067
Massachusetts	16,948	112,308	15,677	10,149	4,784	2,557
Michigan	56,636	379,838	50,037	37,942	17,853	8,775
Minnesota	21,603	128,873	17,435	15,098	6,504	2,542
Mississippi	NA	27,626	4,355	2,561	902	778
Missouri	22,378	127,625	19,041	12,090	3,656	2,623
Montana	3,418	21,002	3,207	2,038	1,234	510
Nebraska	7,902	47,105	5,787	4,399	1,382	936
Nevada	5,025	25,243	3,884	1,925	1,024	805
New Hampshire	1,140	6,939	933	616	327	165
New Jersey	30,800	216,925	31,134	20,208	9,250	5,397
New Mexico	7,884	36,623	8,217	4,095	1,217	836
New York	53,322	375,641	48,074	34,936	17,385	9,878
North Carolina	10,803	52,894	9,202	4,875	1,438	934
North Dakota	1,910	11,370	1,423	1,133	434	191
Ohio	50,527	354,543	50,352	36,474	19,056	7,124
Oklahoma	13,774	71,762	11,025	6,186	1,968	1,549
Oregon	6,117	32,522	4,684	2,713	1,536	829
Pennsylvania	31,526	262,494	37,709	26,561	12,927	6,214
Rhode Island	2,781	18,162	2,509	1,464	659	473
South Carolina	5,432	25,741	4,683	2,424	637	471
South Dakota	2,196	13,203	1,734	1,339	537	261
Tennessee	NA	64,130	11,511	6,602	1,829	1,182
Texas	41,199	234,988	37,410	21,561	9,175	7,140
Utah	8,396	58,108	10,376	6,018	4,299	1,957
Vermont	427	2,631	345	214	118	59
Virginia	11,546	73,905	12,127	7,452	2,989	1,630
Washington	NA	61,813	11,405	7,594	3,623	2,002
West Virginia	5,039	35,996	6,017	4,061	1,737	776
Wisconsin	22,087	135,819	19,045	16,127	8,106	2,957
Wyoming	NA	12,999	2,337	1,179	617	320
Total	803,496	4,983,772	731,030	497,310	234,223	129,388

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	August	July	June	May	April	March
Alabama	1,242	1,397	1,609	2,648	3,191	5,344
Alaska	418	463	508	789	1,177	1,767
Arizona	907	1,015	1,150	1,566	2,251	4,221
Arkansas	917	1,027	1,239	2,322	3,290	4,937
California	20,643	26,444	23,226	28,268	38,704	47,664
Colorado	2,590	2,965	4,130	8,492	10,975	15,768
Connecticut	914	961	1,398	2,362	4,435	5,243
Delaware	179	195	320	560	948	1,272
District of Columbia	372	419	562	944	1,316	2,049
Florida	670	709	773	852	914	1,154
Georgia	2,930	3,180	3,341	3,816	8,183	8,959
Hawaii	41	43	41	42	41	46
Idaho	294	345	433	938	1,463	1,907
Illinois	10,102	10,370	11,606	26,059	41,167	61,395
Indiana	2,968	2,832	4,924	9,417	15,114	20,542
Iowa	1,479	1,599	2,107	3,939	7,015	9,584
Kansas	1,469	1,688	1,506	3,266	5,839	7,997
Kentucky	1,073	1,499	1,575	2,959	4,893	7,304
Louisiana	1,716	1,746	2,108	2,866	3,648	5,700
Maine	26	21	34	56	85	142
Maryland	1,799	1,906	2,677	4,215	6,912	9,414
Massachusetts	2,484	2,834	4,374	6,937	12,131	15,138
Michigan	7,269	4,751	12,017	26,982	38,297	51,355
Minnesota	2,234	2,385	3,180	6,467	11,143	16,686
Mississippi	761	815	926	1,472	1,916	3,058
Missouri	2,401	2,714	3,660	6,460	10,993	15,385
Montana	449	413	634	1,147	2,003	2,477
Nebraska	939	1,015	1,376	3,176	4,353	6,229
Nevada	781	891	985	1,401	2,027	3,187
New Hampshire	155	160	263	465	744	913
New Jersey	4,726	5,214	6,599	11,505	20,284	32,686
New Mexico	849	820	239	1,965	1,513	3,836
New York	10,267	9,719	14,469	24,082	37,597	51,213
North Carolina	898	1,072	1,596	2,986	4,080	5,800
North Dakota	168	190	295	688	1,133	1,527
Ohio	6,112	7,425	14,630	21,260	32,544	43,523
Oklahoma	1,521	1,680	2,107	3,860	6,164	9,077
Oregon	758	881	1,069	1,883	3,130	4,242
Pennsylvania	5,236	5,254	7,510	15,416	25,082	33,473
Rhode Island	443	480	727	1,171	1,994	2,462
South Carolina	449	517	709	1,243	1,794	2,619
South Dakota	233	248	368	784	1,250	1,625
Tennessee	1,075	1,115	1,652	3,007	4,776	6,666
Texas	6,789	7,599	8,451	11,595	15,606	25,245
Utah	1,466	1,502	1,602	1,821	4,876	5,945
Vermont	52	57	97	189	283	383
Virginia	1,467	1,589	2,042	4,201	6,622	9,068
Washington	1,791	1,995	2,451	4,487	3,680	6,526
West Virginia	598	492	952	2,223	3,386	4,273
Wisconsin	2,535	2,862	2,948	7,413	11,047	17,278
Wyoming	245	295	397	1,080	1,062	1,550
Total	117,900	127,805	163,591	283,739	433,073	605,856

NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				October	September	August
Alabama	23,952	26,179	23,886	1,228	1,053	981
Alaska	18,150	21,104	21,336	2,012	1,396	1,208
Arizona	26,035	24,482	23,266	1,902	1,730	1,721
Arkansas	NA	22,739	24,667	2,435	2,129	2,218
California	253,210	205,788	188,920	26,720	26,660	30,322
Colorado	NA	53,180	54,079	3,413	2,714	2,329
Connecticut	34,225	32,970	31,772	2,686	2,039	2,178
Delaware	4,552	5,250	5,371	243	179	176
District of Columbia	14,223	14,284	12,827	883	837	847
Florida	32,020	29,869	34,802	2,656	2,501	2,575
Georgia	45,927	43,052	48,465	3,073	2,612	2,649
Hawaii	1,761	1,550	1,796	162	171	187
Idaho	9,029	8,794	8,778	581	388	381
Illinois	134,618	152,911	160,414	10,112	7,349	6,672
Indiana	NA	62,427	65,955	NA	NA	NA
Iowa	34,044	37,276	40,165	2,406	1,194	1,199
Kansas	35,658	32,031	43,175	1,705	1,438	1,836
Kentucky	25,590	28,297	30,641	1,705	1,143	1,134
Louisiana	NA	20,493	21,632	NA	1,829	1,913
Maine	1,955	2,050	1,976	165	78	74
Maryland	NA	38,303	35,716	NA	NA	2,147
Massachusetts	NA	85,744	74,716	5,288	NA	3,407
Michigan	128,781	147,354	155,781	8,819	5,790	5,841
Minnesota	62,480	69,194	72,771	5,382	2,747	2,311
Mississippi	NA	17,108	18,260	NA	NA	NA
Missouri	50,304	54,091	56,462	2,395	2,195	3,039
Montana	NA	10,591	11,040	789	407	405
Nebraska	22,369	27,586	32,122	1,018	935	848
Nevada	18,699	17,573	16,187	1,288	1,090	1,052
New Hampshire	NA	5,776	5,505	NA	222	NA
New Jersey	NA	129,577	119,012	NA	NA	6,079
New Mexico	23,678	23,563	20,463	1,410	1,242	1,214
New York	NA	259,017	NA	NA	NA	15,604
North Carolina	30,898	29,079	32,066	1,867	1,678	1,650
North Dakota	9,025	8,401	9,138	863	1,192	354
Ohio	NA	140,995	145,394	NA	4,919	4,070
Oklahoma	36,528	35,362	36,864	1,813	1,756	1,812
Oregon	NA	20,090	19,688	1,296	1,028	905
Pennsylvania	NA	110,288	117,202	6,876	4,436	NA
Rhode Island	NA	9,678	10,036	613	472	195
South Carolina	16,415	15,165	16,237	1,148	1,055	1,019
South Dakota	7,055	8,090	8,548	363	269	263
Tennessee	NA	42,164	45,782	2,688	2,527	2,366
Texas	189,637	172,682	147,632	14,888	26,113	25,614
Utah	22,767	22,790	22,139	2,078	1,026	840
Vermont	2,303	2,367	2,201	165	125	100
Virginia	47,217	47,119	45,997	3,304	2,561	1,971
Washington	NA	32,117	37,028	NA	NA	NA
West Virginia	NA	19,717	22,131	1,933	1,622	1,575
Wisconsin	63,204	66,076	69,419	4,339	4,937	3,410
Wyoming	NA	8,710	6,672	461	324	232
Total	2,425,504	2,501,091	2,454,557	176,096	158,946	160,093

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1998					
	July	June	May	April	March	February
Alabama	1,030	1,118	3,768	2,713	3,522	4,010
Alaska	1,190	1,274	1,684	1,911	2,251	2,340
Arizona	1,890	2,073	2,495	3,013	3,548	3,534
Arkansas	2,253	NA	1,432	1,728	3,843	4,075
California	27,131	18,132	22,410	23,269	19,321	28,787
Colorado	NA	3,415	4,768	6,738	9,008	9,159
Connecticut	2,456	2,151	2,124	4,294	4,999	5,540
Delaware	190	226	320	556	829	899
District of Columbia	871	913	1,085	1,830	2,032	2,382
Florida	2,630	2,748	3,112	3,701	3,961	3,984
Georgia	2,757	2,725	3,248	4,882	7,391	8,120
Hawaii	169	181	169	174	172	179
Idaho	407	537	689	1,077	1,423	1,570
Illinois	5,951	6,702	6,961	15,326	22,556	22,455
Indiana	NA	NA	3,258	NA	11,063	10,460
Iowa	1,353	1,237	1,566	3,605	7,584	5,962
Kansas	1,914	1,722	2,093	3,381	8,014	6,177
Kentucky	1,061	1,195	1,505	2,490	4,636	5,053
Louisiana	1,799	NA	1,629	2,048	5,056	4,998
Maine	75	90	122	255	332	342
Maryland	2,188	2,507	2,532	3,668	6,091	6,474
Massachusetts	4,054	5,209	5,789	8,771	11,570	12,943
Michigan	5,301	6,297	8,530	15,784	22,837	23,664
Minnesota	2,026	3,003	3,208	5,685	11,726	11,133
Mississippi	1,371	1,298	1,339	1,789	2,866	3,310
Missouri	2,210	2,352	2,978	5,545	8,978	9,467
Montana	400	839	NA	1,029	1,527	1,459
Nebraska	1,070	856	1,690	2,786	4,027	4,237
Nevada	1,304	1,587	1,876	2,207	2,642	2,575
New Hampshire	228	NA	375	710	869	1,051
New Jersey	6,385	6,873	10,233	11,748	19,826	18,713
New Mexico	1,174	1,096	1,832	2,727	3,814	3,839
New York	12,007	13,919	NA	20,716	NA	NA
North Carolina	1,502	1,658	2,053	3,326	4,879	5,791
North Dakota	285	312	507	953	1,372	1,434
Ohio	NA	5,165	7,134	13,211	21,443	23,991
Oklahoma	1,837	1,826	2,291	4,018	6,347	6,859
Oregon	1,047	1,428	1,618	NA	NA	3,308
Pennsylvania	4,607	4,906	6,114	NA	17,790	19,674
Rhode Island	484	495	680	NA	1,492	1,620
South Carolina	1,013	1,063	1,209	1,732	2,440	2,781
South Dakota	283	285	539	806	1,335	1,292
Tennessee	2,507	2,646	2,993	4,714	7,027	6,063
Texas	18,195	11,161	13,616	14,839	20,104	20,826
Utah	845	1,154	1,510	2,749	3,787	4,235
Vermont	102	110	116	281	381	436
Virginia	2,739	2,682	3,672	5,338	7,878	8,398
Washington	NA	NA	NA	NA	NA	NA
West Virginia	5,166	NA	1,709	2,235	3,146	3,310
Wisconsin	3,063	3,471	3,801	6,632	11,019	9,845
Wyoming	NA	409	545	861	1,128	1,288
Total	152,757	143,098	175,229	254,025	368,772	389,827

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1998	1997				
	January	Total	December	November	October	September
Alabama	4,529	32,362	3,743	2,437	1,903	2,075
Alaska	2,883	26,908	3,147	2,658	2,574	1,594
Arizona	4,129	30,284	3,381	2,269	1,751	1,836
Arkansas	4,781	29,443	3,989	2,713	1,347	1,129
California	30,457	256,044	26,978	21,157	19,602	18,459
Colorado	10,507	69,088	9,717	6,177	2,558	2,372
Connecticut	5,757	42,680	5,801	3,854	2,512	1,566
Delaware	935	6,610	845	513	286	245
District of Columbia	2,542	18,018	2,374	1,354	899	852
Florida	4,152	36,765	3,719	3,112	2,621	2,495
Georgia	8,471	57,227	8,027	6,140	3,554	2,719
Hawaii	196	1,751	165	37	152	148
Idaho	1,977	11,469	1,657	982	585	411
Illinois	30,533	202,871	27,076	22,863	12,292	6,426
Indiana	12,876	81,813	10,689	8,637	4,518	2,175
Iowa	7,938	50,194	7,208	5,707	3,037	1,359
Kansas	7,378	41,238	5,532	3,673	1,936	1,567
Kentucky	5,668	38,632	6,154	4,176	2,417	1,249
Louisiana	4,511	25,629	3,073	2,048	1,414	1,353
Maine	422	2,713	375	289	176	91
Maryland	6,659	49,859	6,536	4,962	2,839	2,283
Massachusetts	13,716	105,818	11,523	8,546	6,898	5,365
Michigan	25,919	192,300	25,857	19,047	9,791	5,997
Minnesota	15,257	92,263	12,318	10,721	5,179	2,408
Mississippi	3,264	22,073	2,934	2,028	1,224	924
Missouri	11,144	69,869	9,547	6,192	2,741	2,195
Montana	2,178	13,926	2,014	1,306	797	425
Nebraska	4,903	33,853	3,454	2,812	1,855	1,477
Nevada	3,078	22,024	2,580	1,806	1,276	1,198
New Hampshire	1,167	7,489	1,010	703	411	249
New Jersey	20,200	168,761	23,161	16,022	8,454	7,142
New Mexico	5,330	31,501	4,831	2,949	1,384	1,206
New York	NA	321,447	34,705	27,141	21,151	17,307
North Carolina	6,495	38,021	5,508	3,434	1,908	1,713
North Dakota	1,753	10,875	1,339	1,129	559	317
Ohio	27,046	184,103	25,092	17,752	9,727	4,948
Oklahoma	7,969	45,195	6,049	3,675	2,064	1,764
Oregon	3,889	25,500	3,352	2,023	1,367	1,026
Pennsylvania	21,571	144,134	19,731	14,064	9,348	5,000
Rhode Island	1,786	12,306	1,413	1,212	637	460
South Carolina	2,955	19,561	2,638	1,757	1,167	1,884
South Dakota	1,621	10,426	1,311	1,021	549	334
Tennessee	NA	55,130	7,939	5,015	2,653	2,078
Texas	24,280	216,347	24,323	19,327	14,189	14,479
Utah	4,544	31,257	5,152	3,187	2,020	1,124
Vermont	487	3,051	403	282	184	108
Virginia	8,673	61,932	9,233	5,543	3,397	2,334
Washington	NA	46,802	6,666	7,903	2,660	2,041
West Virginia	3,564	25,918	3,386	2,809	1,500	1,106
Wisconsin	12,688	88,783	12,473	10,180	5,408	2,738
Wyoming	NA	10,767	1,077	967	555	316
Total	446,662	3,223,030	411,204	306,311	190,027	142,068

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	August	July	June	May	April	March
Alabama	2,622	2,947	1,642	1,901	2,089	2,623
Alaska	1,340	1,404	1,428	1,813	2,225	2,861
Arizona	1,767	1,936	1,973	2,138	2,559	3,148
Arkansas	1,128	1,127	1,214	1,647	2,166	3,142
California	18,696	17,911	16,438	18,750	20,672	23,521
Colorado	2,118	2,354	2,955	4,847	6,434	8,355
Connecticut	1,762	2,145	2,237	2,658	4,075	4,820
Delaware	186	209	285	427	638	871
District of Columbia	853	783	951	1,373	1,739	2,183
Florida	2,589	2,516	2,851	2,837	2,950	3,227
Georgia	2,597	2,677	2,776	3,192	4,136	4,853
Hawaii	143	156	152	148	155	160
Idaho	356	373	399	686	1,041	1,345
Illinois	5,809	5,970	6,052	10,472	16,533	23,087
Indiana	2,070	1,943	3,992	6,203	6,471	9,135
Iowa	1,114	1,305	1,238	2,382	3,878	5,789
Kansas	1,999	2,452	1,549	2,113	3,188	4,707
Kentucky	948	1,157	1,166	1,863	2,878	4,049
Louisiana	1,307	1,474	1,530	1,616	1,933	2,521
Maine	78	72	92	152	231	378
Maryland	2,070	2,237	2,315	2,744	4,240	5,681
Massachusetts	5,635	5,442	7,023	6,215	9,133	11,697
Michigan	5,688	2,213	7,417	12,843	18,737	25,036
Minnesota	2,369	2,343	2,801	4,949	8,161	11,915
Mississippi	1,309	1,206	1,174	1,306	1,533	2,114
Missouri	2,063	2,169	2,459	3,556	5,761	7,934
Montana	385	365	453	718	1,349	1,634
Nebraska	2,295	4,067	1,309	2,093	2,520	3,330
Nevada	1,151	1,103	1,416	1,700	1,906	2,455
New Hampshire	217	216	286	472	739	954
New Jersey	6,699	7,213	8,127	11,571	16,399	24,061
New Mexico	1,185	1,166	1,093	2,065	2,170	3,517
New York	18,574	21,119	20,942	21,767	28,346	34,051
North Carolina	1,592	1,513	1,741	2,260	2,909	3,731
North Dakota	264	141	315	590	1,062	1,373
Ohio	4,355	4,100	8,641	11,246	15,105	23,116
Oklahoma	1,733	1,732	1,570	2,622	3,668	5,151
Oregon	915	1,011	1,071	1,579	2,312	3,086
Pennsylvania	4,248	4,661	5,408	9,952	12,750	17,530
Rhode Island	399	431	537	892	1,144	1,740
South Carolina	1,004	990	1,096	1,268	1,202	1,794
South Dakota	249	246	283	603	940	1,235
Tennessee	1,921	1,944	2,350	3,155	4,177	5,559
Texas	14,856	16,420	13,384	14,126	15,195	20,886
Utah	943	927	945	1,268	2,675	3,363
Vermont	80	80	108	160	296	429
Virginia	2,476	2,395	2,700	4,304	5,671	7,141
Washington	1,625	1,831	2,240	3,161	3,196	4,443
West Virginia	1,137	927	1,093	1,599	2,116	2,772
Wisconsin	2,806	2,631	2,712	5,242	6,917	10,587
Wyoming	287	624	491	959	1,190	1,405
Total	140,017	144,372	154,422	204,203	269,510	360,492

NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Deliveries for total year 1996 may not equal the sum of the twelve months. Gas volumes delivered for use as vehicle fuel are included in the annual total but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				October	September	August
Alabama	169,255	164,234	167,446	16,251	15,399	17,248
Alaska	NA	61,198	62,132	NA	NA	NA
Arizona	23,215	22,834	22,007	2,522	2,078	2,508
Arkansas	120,547	121,922	116,577	11,070	11,836	11,799
California	605,035	609,617	572,814	61,870	65,490	64,310
Colorado	NA	60,201	68,509	4,683	4,230	NA
Connecticut	27,000	28,276	26,052	2,571	2,417	2,455
Delaware	13,200	11,876	11,836	1,412	1,182	1,221
District of Columbia	0	0	0	0	0	0
Florida	116,324	109,040	113,907	10,774	11,553	10,827
Georgia	125,516	148,257	149,986	11,895	8,274	13,484
Hawaii	0	0	0	0	0	0
Idaho ^a	28,832	28,732	28,939	2,712	2,701	2,530
Illinois	249,106	258,940	255,801	25,507	21,840	20,413
Indiana	NA	235,072	238,784	NA	NA	NA
Iowa	91,112	87,017	91,862	9,295	7,469	7,741
Kansas	91,086	91,923	91,025	9,086	7,312	10,790
Kentucky	75,466	77,775	76,130	7,705	6,695	6,702
Louisiana	NA	837,682	872,396	NA	84,209	85,378
Maine	1,745	2,008	1,784	224	190	179
Maryland	NA	48,058	41,085	NA	NA	4,000
Massachusetts	NA	91,146	82,120	8,006	NA	8,134
Michigan	249,018	276,374	284,299	22,636	18,483	17,707
Minnesota	81,208	87,006	81,913	8,990	4,187	8,677
Mississippi	NA	68,654	67,877	NA	7,663	NA
Missouri	54,249	57,925	58,866	5,194	4,581	4,658
Montana	14,213	14,746	14,451	1,400	1,206	1,126
Nebraska	31,068	36,618	29,257	2,673	786	4,050
Nevada	22,816	24,279	27,042	2,836	1,793	2,739
New Hampshire	NA	4,920	3,984	NA	476	NA
New Jersey	NA	168,162	155,976	NA	NA	15,840
New Mexico	33,064	34,006	18,810	3,627	3,805	3,556
New York	NA	251,967	264,522	NA	NA	NA
North Carolina	96,102	91,628	84,747	9,423	8,986	9,283
North Dakota	8,453	17,079	6,032	805	791	711
Ohio	NA	274,613	283,797	NA	24,368	23,492
Oklahoma	166,455	174,041	165,888	17,337	19,543	18,236
Oregon	NA	71,863	70,730	8,988	8,452	6,988
Pennsylvania	191,488	194,295	199,793	18,082	17,892	17,882
Rhode Island	NA	20,146	20,284	2,196	1,963	2,126
South Carolina	86,545	85,018	78,148	8,837	8,475	8,389
South Dakota	4,383	5,704	5,774	294	411	440
Tennessee	NA	114,334	101,893	13,618	12,499	12,815
Texas	NA	1,721,622	1,785,419	NA	151,722	164,970
Utah	38,003	35,554	34,857	3,432	3,192	3,040
Vermont	1,722	1,874	1,551	179	154	135
Virginia	77,486	70,042	67,101	7,333	8,135	9,453
Washington	NA	88,657	93,618	NA	NA	NA
West Virginia	NA	47,354	41,136	2,618	NA	NA
Wisconsin	115,091	126,031	119,409	11,321	10,713	10,267
Wyoming	NA	38,575	40,865	4,318	3,897	NA
Total	7,020,291	7,298,895	7,299,230	694,257	666,216	686,233

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1998					
	July	June	May	April	March	February
Alabama	16,167	16,737	17,308	17,013	18,208	16,441
Alaska	6,542	6,251	5,854	6,455	6,878	6,152
Arizona	2,307	2,034	2,313	2,281	2,413	2,226
Arkansas	11,321	11,102	11,839	12,765	13,363	12,114
California	59,188	53,880	66,080	55,492	47,185	67,501
Colorado	NA	NA	5,649	6,278	6,323	6,388
Connecticut	2,271	2,225	2,546	2,782	3,183	3,149
Delaware	1,097	1,160	1,256	1,348	1,477	1,443
District of Columbia	0	0	0	0	0	0
Florida	11,384	11,469	11,765	11,608	12,960	11,053
Georgia	12,768	13,149	12,501	12,866	13,434	13,335
Hawaii	0	0	0	0	0	0
Idaho ^a	2,620	2,672	2,593	3,047	3,130	3,482
Illinois	20,256	20,738	22,462	26,752	29,211	28,719
Indiana	NA	23,465	23,136	NA	27,772	25,847
Iowa	7,647	7,574	8,097	10,660	11,792	9,516
Kansas	11,626	9,583	8,483	8,011	8,686	7,811
Kentucky	6,738	6,787	7,022	7,543	8,884	7,550
Louisiana	80,693	73,666	75,577	77,970	81,959	74,500
Maine	153	184	168	122	159	164
Maryland	3,779	3,622	4,047	4,407	11,276	10,677
Massachusetts	7,812	NA	7,635	8,209	8,759	8,443
Michigan	18,191	22,705	25,012	26,873	32,052	31,380
Minnesota	7,803	7,847	6,901	8,548	9,039	10,044
Mississippi	NA	NA	NA	NA	NA	6,814
Missouri	4,672	4,646	4,830	5,473	6,788	6,360
Montana	1,215	1,687	1,244	1,521	1,481	1,449
Nebraska	5,853	3,076	2,662	2,543	3,043	2,902
Nevada	2,458	2,337	2,455	2,453	2,174	1,979
New Hampshire	438	431	473	457	468	498
New Jersey	15,601	14,727	15,723	16,455	17,152	17,655
New Mexico	3,536	3,179	3,131	3,190	2,891	2,895
New York	NA	21,404	NA	22,542	26,423	NA
North Carolina	8,561	9,042	9,439	9,366	10,846	10,404
North Dakota	729	771	773	898	1,017	948
Ohio	NA	24,008	25,977	29,362	32,257	31,779
Oklahoma	16,672	16,280	13,793	14,388	16,578	17,131
Oregon	NA	6,767	7,015	NA	NA	8,744
Pennsylvania	17,111	17,926	18,161	19,808	21,699	20,811
Rhode Island	2,121	2,042	NA	2,078	2,117	2,011
South Carolina	7,613	8,464	8,713	8,159	9,121	9,129
South Dakota	416	307	697	279	474	500
Tennessee	11,939	11,714	11,710	12,020	14,188	12,628
Texas	181,812	150,210	154,540	153,724	159,503	148,544
Utah	3,424	3,678	3,668	4,480	4,273	4,080
Vermont	153	152	164	164	194	205
Virginia	9,466	8,290	6,375	7,746	6,497	7,444
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	NA	NA	4,099	4,553	1,696
Wisconsin	7,967	9,204	9,508	11,658	14,819	13,298
Wyoming	NA	4,119	4,293	3,344	NA	NA
Total	684,497	644,397	668,754	695,045	749,842	731,232

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1998	1997				
	January	Total	December	November	October	September
Alabama	18,483	201,240	19,049	17,956	16,677	15,298
Alaska	6,454	73,599	6,851	5,551	6,290	4,218
Arizona	2,533	27,864	2,678	2,352	2,329	2,576
Arkansas	13,339	147,969	13,294	12,753	12,551	11,111
California	64,039	737,354	64,122	63,615	58,363	68,290
Colorado	6,949	73,781	7,037	6,542	5,174	4,717
Connecticut	3,402	34,554	3,438	2,840	2,627	2,378
Delaware	1,604	14,805	1,599	1,331	1,193	1,114
District of Columbia	0	0	0	0	0	0
Florida	12,931	130,816	11,157	10,619	10,628	10,448
Georgia	13,808	174,747	13,568	12,922	13,369	12,457
Hawaii	0	342	342	0	0	0
Idaho ^a	3,344	34,999	3,158	3,109	3,226	2,756
Illinois	33,208	317,755	30,894	27,921	24,667	22,090
Indiana	28,857	290,723	27,648	28,003	24,659	21,620
Iowa	11,321	107,463	10,549	9,896	9,571	8,083
Kansas	9,699	112,089	11,682	8,483	8,107	7,599
Kentucky	9,839	95,724	9,220	8,729	8,508	6,879
Louisiana	82,928	1,004,383	84,522	82,180	87,977	83,556
Maine	202	2,525	218	299	246	211
Maryland	13,699	65,954	13,535	4,361	4,427	4,406
Massachusetts	9,923	108,295	8,984	8,165	7,916	7,449
Michigan	33,980	338,456	33,117	28,965	25,006	23,949
Minnesota	9,171	107,338	10,132	10,200	9,130	7,261
Mississippi	NA	83,967	7,562	7,751	7,063	5,976
Missouri	7,047	71,164	6,842	6,397	5,161	4,392
Montana	1,884	18,766	2,120	1,900	1,656	1,325
Nebraska	3,481	44,418	5,064	2,736	3,638	2,797
Nevada	1,593	28,925	2,330	2,316	2,512	2,528
New Hampshire	481	5,830	468	442	499	463
New Jersey	18,980	202,418	18,335	15,921	15,505	14,356
New Mexico	3,254	40,854	3,528	3,319	3,092	3,258
New York	NA	305,521	26,822	26,731	20,891	25,050
North Carolina	10,752	111,513	9,830	10,055	9,948	8,313
North Dakota	1,010	20,580	1,975	1,525	1,556	1,518
Ohio	35,912	335,993	31,923	29,457	26,118	23,913
Oklahoma	16,497	206,677	16,693	15,943	15,546	16,738
Oregon	9,760	90,403	9,751	8,789	8,242	8,019
Pennsylvania	22,115	238,220	21,967	21,958	17,472	16,814
Rhode Island	2,173	24,472	2,179	2,148	1,509	1,440
South Carolina	9,645	102,929	9,226	8,685	8,238	8,832
South Dakota	565	6,928	606	618	424	470
Tennessee	NA	138,877	12,776	11,768	11,228	10,408
Texas	169,452	2,058,755	169,958	167,175	167,787	165,238
Utah	4,735	44,162	4,492	4,116	4,216	2,488
Vermont	223	2,334	235	226	223	176
Virginia	6,747	85,264	8,128	7,094	5,989	6,911
Washington	NA	111,159	12,255	10,247	9,459	10,909
West Virginia	4,510	57,380	5,201	4,824	4,640	4,515
Wisconsin	16,337	155,677	15,154	14,492	12,184	10,289
Wyoming	5,156	46,936	4,066	4,296	3,889	3,285
Total	799,818	8,842,896	796,281	747,720	711,325	688,885

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	August	July	June	May	April	March
Alabama	15,537	14,984	15,862	17,051	17,881	16,890
Alaska	6,373	5,948	5,893	5,598	6,420	6,968
Arizona	2,369	2,240	2,174	2,336	2,091	2,354
Arkansas	12,082	11,872	11,684	11,991	12,097	12,445
California	68,738	66,660	59,353	57,369	57,182	57,146
Colorado	6,458	4,912	6,073	6,278	5,736	7,425
Connecticut	2,549	2,444	2,444	2,878	3,318	3,536
Delaware	1,009	1,096	1,147	1,301	1,352	1,242
District of Columbia	0	0	0	0	0	0
Florida	10,872	10,607	10,621	11,537	11,506	11,075
Georgia	13,862	13,233	12,135	16,473	17,034	16,629
Hawaii	0	0	0	0	0	0
Idaho ^a	2,371	2,635	2,724	2,673	3,180	3,200
Illinois	20,598	22,236	22,534	25,392	26,558	29,871
Indiana	20,894	20,324	17,709	20,338	24,261	27,581
Iowa	8,285	7,409	7,489	8,159	8,785	9,405
Kansas	8,302	12,164	8,674	8,540	9,183	9,220
Kentucky	6,862	6,341	6,457	7,556	7,603	8,241
Louisiana	86,060	81,897	83,336	84,944	83,486	83,322
Maine	193	157	199	228	249	184
Maryland	5,041	4,765	5,178	4,872	4,468	5,775
Massachusetts	8,618	8,696	10,308	7,856	10,239	10,327
Michigan	24,022	15,926	25,902	28,281	29,068	34,268
Minnesota	8,379	8,154	7,724	7,623	8,561	10,471
Mississippi	6,650	6,989	6,559	6,150	6,990	7,216
Missouri	4,336	4,611	4,784	5,083	7,278	5,435
Montana	1,287	1,122	1,208	1,402	1,210	1,767
Nebraska	3,505	1,717	3,334	3,514	4,583	4,658
Nevada	2,521	2,353	2,335	2,625	2,208	2,491
New Hampshire	451	428	451	559	638	576
New Jersey	18,611	14,648	14,516	15,097	17,337	19,610
New Mexico	3,217	3,447	3,355	3,490	3,181	3,196
New York	22,613	24,246	23,418	24,289	26,049	29,294
North Carolina	8,157	8,382	8,873	9,043	9,764	9,738
North Dakota	1,593	1,362	1,621	1,599	1,806	2,299
Ohio	23,310	21,999	28,629	25,952	26,354	30,215
Oklahoma	17,677	16,664	17,580	17,354	17,384	17,264
Oregon	8,218	7,240	5,515	6,070	6,402	6,841
Pennsylvania	17,511	16,838	16,471	18,876	21,649	21,951
Rhode Island	1,491	2,159	2,265	2,401	2,514	2,241
South Carolina	8,184	7,967	8,568	9,111	9,069	9,012
South Dakota	499	322	460	531	624	705
Tennessee	12,556	10,581	10,591	9,665	12,484	11,889
Texas	174,495	168,624	168,087	170,594	167,379	188,635
Utah	3,361	3,473	3,398	3,623	3,746	3,769
Vermont	157	144	146	218	199	234
Virginia	9,236	8,535	6,165	7,401	6,362	4,015
Washington	10,178	7,788	7,709	8,184	7,891	8,923
West Virginia	4,616	4,480	4,393	4,990	7,557	2,912
Wisconsin	9,734	9,244	9,672	11,545	13,885	15,950
Wyoming	3,833	3,218	3,837	4,101	3,843	3,773
Total	717,470	683,279	689,559	712,740	738,645	782,185

^a Small volumes of natural gas representing onsystem sales to industrial consumers in Idaho are included in the annual total but not in monthly components. Deliveries for total year 1995 in Idaho do not equal the sum of the twelve months.

NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

**Table 18. Natural Gas Deliveries to Electric Utility^a Consumers,
by State, 1996-1998**
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				October	September	August
Alabama	24,194	9,614	5,375	974	4,214	5,130
Alaska	23,071	27,829	26,006	2,182	2,392	2,030
Arizona	32,226	22,233	18,509	4,778	6,201	8,186
Arkansas	40,445	24,136	32,465	1,769	6,824	8,248
California	233,326	329,250	277,953	25,316	31,817	34,626
Colorado	8,783	4,701	4,738	691	1,543	1,419
Connecticut	10,590	14,762	9,413	210	1,606	2,673
Delaware	9,073	14,711	20,192	986	1,319	1,673
District of Columbia	0	0	0	0	0	0
Florida	245,366	261,134	252,525	28,039	27,475	29,258
Georgia	20,717	7,170	4,551	741	3,350	5,026
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	53,879	35,683	23,454	1,439	6,137	7,737
Indiana	9,289	4,313	3,838	423	1,066	1,829
Iowa	5,846	3,664	3,023	184	1,134	1,083
Kansas	34,471	21,353	21,358	1,675	6,370	7,339
Kentucky	5,475	1,847	1,650	206	978	1,060
Louisiana	279,252	246,122	224,260	24,391	36,598	44,645
Maine	0	0	0	0	0	0
Maryland	11,618	10,434	7,980	233	2,566	3,147
Massachusetts	16,967	45,903	40,394	921	1,130	1,970
Michigan	41,909	27,123	26,520	3,954	5,437	5,545
Minnesota	7,463	5,848	4,479	513	1,563	1,483
Mississippi	67,697	64,451	73,018	4,005	8,142	11,127
Missouri	15,033	6,815	4,916	230	3,068	4,002
Montana	452	370	313	48	69	83
Nebraska	5,005	2,545	2,175	155	974	1,185
Nevada	49,149	46,327	41,997	5,734	6,460	8,819
New Hampshire	124	504	3	0	0	26
New Jersey	29,538	27,642	24,342	376	3,447	6,217
New Mexico	34,787	29,153	25,302	2,709	3,783	4,850
New York	189,377	190,891	126,864	15,889	20,469	34,234
North Carolina	12,356	4,483	2,379	136	2,132	3,116
North Dakota	0	1	3	0	0	0
Ohio	7,135	3,119	2,502	272	1,332	1,424
Oklahoma	150,707	109,183	122,261	12,040	21,198	26,923
Oregon	20,489	7,689	12,391	3,702	2,814	3,781
Pennsylvania	6,424	6,794	6,303	219	560	455
Rhode Island	15,593	22,070	20,455	0	0	2,251
South Carolina	5,755	2,583	1,170	73	919	1,238
South Dakota	2,487	1,558	610	61	366	608
Tennessee	6,215	1,636	571	190	1,860	1,123
Texas	1,111,157	914,593	928,761	95,144	143,056	161,305
Utah	4,686	3,729	3,157	574	1,071	1,175
Vermont	180	29	18	7	11	8
Virginia	19,016	10,368	9,749	1,436	3,324	3,647
Washington	10,977	2,211	6,211	3,319	2,749	3,470
West Virginia	336	206	159	52	20	34
Wisconsin	15,053	14,908	5,797	487	2,047	2,341
Wyoming	261	65	75	13	9	1
Total	2,893,947	2,591,750	2,430,183	246,496	379,598	457,551

See footnotes at end of table.

**Table 18. Natural Gas Deliveries to Electric Utility^a Consumers,
by State, 1996-1998**
(Million Cubic Feet) — Continued

State	1998					
	July	June	May	April	March	February
Alabama	5,072	4,764	2,844	296	383	157
Alaska	2,154	2,093	2,411	2,266	2,382	2,307
Arizona	6,792	1,986	674	1,127	718	804
Arkansas	7,084	6,676	5,479	2,283	1,521	272
California	26,022	15,338	13,745	18,055	23,374	18,278
Colorado	1,739	901	656	586	416	451
Connecticut	1,582	1,709	1,386	157	23	109
Delaware	1,648	1,196	900	548	475	74
District of Columbia	0	0	0	0	0	0
Florida	31,976	33,192	26,827	15,860	18,020	15,637
Georgia	5,455	4,958	746	98	183	57
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	7,707	7,387	7,068	4,835	4,022	3,535
Indiana	2,084	1,878	1,187	205	426	104
Iowa	965	774	697	298	245	202
Kansas	8,026	5,333	3,207	594	935	446
Kentucky	650	950	1,017	107	282	138
Louisiana	43,685	38,810	31,812	18,082	16,198	9,860
Maine	0	0	0	0	0	0
Maryland	2,186	1,396	932	373	371	223
Massachusetts	1,407	2,169	2,666	1,579	1,565	1,320
Michigan	4,573	5,093	4,212	3,602	3,758	2,496
Minnesota	1,410	994	804	268	204	105
Mississippi	10,889	10,630	8,717	4,400	3,921	2,775
Missouri	3,753	2,440	952	210	161	80
Montana	80	26	89	15	39	0
Nebraska	1,046	719	634	176	59	21
Nevada	8,189	4,036	3,761	3,549	2,446	3,128
New Hampshire	37	35	0	0	0	26
New Jersey	7,107	4,303	3,926	1,380	1,835	419
New Mexico	4,218	4,019	4,948	3,448	3,092	1,802
New York	29,304	24,084	18,926	9,076	10,397	10,274
North Carolina	2,042	3,789	1,026	12	91	1
North Dakota	0	0	0	0	0	0
Ohio	1,306	1,102	1,005	178	307	96
Oklahoma	26,857	20,792	13,893	7,944	9,394	5,205
Oregon	3,008	835	176	2,266	1,335	1,102
Pennsylvania	1,409	2,013	621	260	406	257
Rhode Island	2,238	1,453	1,943	1,606	1,889	1,599
South Carolina	1,239	1,413	687	37	106	11
South Dakota	627	315	366	33	42	6
Tennessee	1,407	1,202	432	0	0	0
Texas	174,175	153,171	117,366	83,043	80,475	49,071
Utah	1,000	141	138	135	156	144
Vermont	15	7	12	6	3	47
Virginia	2,970	2,254	2,158	699	1,197	476
Washington	621	33	14	152	121	5
West Virginia	53	46	30	22	29	29
Wisconsin	3,064	2,557	2,282	395	1,108	353
Wyoming	5	10	6	8	3	200
Total	448,875	379,024	293,378	190,266	194,113	133,700

See footnotes at end of table.

**Table 18. Natural Gas Deliveries to Electric Utility^a Consumers,
by State, 1996-1998**
(Million Cubic Feet) — Continued

State	1998	1997				
	January	Total	December	November	October	September
Alabama	362	9,997	87	295	846	1,247
Alaska	2,852	33,510	3,013	2,668	2,680	2,289
Arizona	962	23,385	752	399	1,542	5,103
Arkansas	289	24,805	294	375	2,293	3,376
California	26,755	377,946	26,274	22,422	35,151	56,539
Colorado	381	5,536	450	385	641	667
Connecticut	1,136	16,761	554	1,446	2,234	1,722
Delaware	256	16,092	699	681	356	667
District of Columbia	0	0	0	0	0	0
Florida	19,082	296,903	21,491	14,278	21,229	27,022
Georgia	102	7,342	49	124	308	1,159
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	4,014	44,607	5,018	3,906	3,795	2,375
Indiana	87	4,661	137	211	281	242
Iowa	264	4,124	208	252	459	235
Kansas	545	25,822	1,991	2,478	2,643	2,111
Kentucky	86	2,194	158	190	200	181
Louisiana	15,171	277,438	16,781	14,535	22,047	30,516
Maine	0	0	0	0	0	0
Maryland	191	11,007	209	364	749	623
Massachusetts	2,241	51,490	2,411	3,176	3,245	4,785
Michigan	3,239	33,287	3,028	3,135	3,242	2,922
Minnesota	119	6,098	112	139	382	289
Mississippi	3,092	73,083	4,573	4,060	5,428	8,115
Missouri	135	7,465	310	340	557	749
Montana	1	420	21	30	40	27
Nebraska	37	2,656	34	77	354	263
Nevada	3,027	51,777	3,648	1,803	4,364	6,209
New Hampshire	0	564	34	26	0	60
New Jersey	528	29,534	552	1,340	2,085	1,349
New Mexico	1,918	33,375	1,998	2,224	3,224	2,834
New York	16,724	217,504	14,287	12,326	16,084	19,134
North Carolina	11	4,512	3	25	507	433
North Dakota	0	1	0	0	0	0
Ohio	114	3,486	122	245	396	268
Oklahoma	6,460	128,818	11,401	8,233	10,061	14,023
Oregon	1,471	10,680	1,917	1,075	990	2,765
Pennsylvania	225	7,370	365	212	301	417
Rhode Island	2,613	27,160	2,602	2,488	2,503	2,364
South Carolina	33	2,731	35	112	240	212
South Dakota	63	1,731	83	90	45	88
Tennessee	0	1,636	0	0	209	0
Texas	54,351	1,056,550	69,566	72,391	90,883	126,044
Utah	153	4,078	177	173	134	906
Vermont	65	36	4	2	4	2
Virginia	853	11,572	851	353	732	541
Washington	492	2,618	187	220	164	1,191
West Virginia	21	219	11	2	17	15
Wisconsin	418	15,776	467	400	743	697
Wyoming	7	95	15	15	5	5
Total	170,946	2,968,453	196,980	179,723	244,394	332,781

See footnotes at end of table.

**Table 18. Natural Gas Deliveries to Electric Utility^a Consumers,
by State, 1996-1998**
(Million Cubic Feet) — Continued

State	1997					
	August	July	June	May	April	March
Alabama	2,373	2,901	931	483	386	168
Alaska	2,432	2,729	2,574	2,897	2,917	3,584
Arizona	4,808	4,117	1,932	2,742	723	588
Arkansas	5,269	7,491	3,445	576	606	247
California	48,248	43,993	26,550	37,246	25,416	24,349
Colorado	716	704	337	394	265	323
Connecticut	2,300	2,412	1,364	1,139	1,227	965
Delaware	1,592	2,002	1,097	1,064	1,841	2,279
District of Columbia	0	0	0	0	0	0
Florida	33,982	33,658	31,546	29,444	27,857	28,937
Georgia	2,199	2,595	440	204	177	30
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	3,807	7,989	4,591	2,901	4,925	2,449
Indiana	478	1,683	718	210	199	219
Iowa	373	843	395	272	256	364
Kansas	3,489	6,353	3,143	1,238	847	563
Kentucky	311	525	170	21	117	130
Louisiana	34,790	39,934	29,946	25,567	19,111	15,859
Maine	0	0	0	0	0	0
Maryland	1,051	3,382	1,857	726	1,478	336
Massachusetts	5,579	6,021	6,210	3,814	6,615	5,276
Michigan	2,852	3,680	2,756	2,752	2,265	2,395
Minnesota	669	1,136	685	595	620	693
Mississippi	11,934	14,013	8,386	4,689	3,034	2,930
Missouri	1,211	2,792	1,022	95	174	77
Montana	46	116	8	7	15	18
Nebraska	364	879	218	108	172	79
Nevada	7,830	7,264	5,272	5,219	3,518	3,819
New Hampshire	77	12	353	0	0	0
New Jersey	4,238	8,150	4,613	1,479	1,868	2,091
New Mexico	4,337	4,025	2,923	2,445	2,548	2,767
New York	28,915	36,082	29,210	17,438	12,102	14,764
North Carolina	747	1,888	811	61	26	1
North Dakota	0	1	0	0	0	0
Ohio	303	1,073	596	106	107	72
Oklahoma	20,503	20,874	12,256	6,716	7,026	6,647
Oregon	2,957	358	147	3	0	172
Pennsylvania	923	2,725	886	295	326	324
Rhode Island	2,423	2,005	2,185	2,447	1,854	2,179
South Carolina	422	922	621	67	72	12
South Dakota	228	582	360	85	85	39
Tennessee	328	844	255	0	0	0
Texas	141,896	144,621	103,332	73,259	59,315	60,360
Utah	1,080	819	25	146	142	180
Vermont	4	4	3	3	3	3
Virginia	1,369	2,863	1,508	622	1,389	1,125
Washington	731	25	1	86	5	0
West Virginia	9	23	40	33	9	23
Wisconsin	895	2,171	1,688	1,854	1,770	2,146
Wyoming	3	4	13	6	6	6
Total	391,090	429,286	297,424	231,548	193,416	189,590

^a Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

Notes: Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-759, "Monthly Power Plant Report."

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998
(Million Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998		
				October	September	August
Alabama	257,030	236,604	243,104	19,777	21,861	24,543
Alaska	NA	121,432	121,764	NA	NA	NA
Arizona	110,678	93,869	85,118	10,325	10,941	13,310
Arkansas	NA	200,841	209,944	16,639	21,855	23,323
California	1,532,444	1,515,133	1,406,390	140,061	146,002	150,879
Colorado	NA	206,055	212,864	12,972	11,177	7,832
Connecticut	99,770	106,920	101,637	6,999	6,999	8,154
Delaware	33,159	38,925	45,307	2,872	2,857	3,234
District of Columbia	24,787	26,255	26,459	1,340	1,176	1,174
Florida	406,629	410,249	414,973	42,187	42,155	43,299
Georgia	274,318	276,476	296,840	19,977	17,087	23,973
Hawaii	2,227	1,980	2,252	202	212	228
Idaho	49,896	48,967	48,864	3,948	3,405	3,203
Illinois	735,172	818,746	833,781	58,587	45,838	45,258
Indiana	NA	427,699	443,852	NA	NA	NA
Iowa	183,059	188,997	199,208	14,913	11,231	11,476
Kansas	218,911	196,164	217,098	14,923	16,681	21,579
Kentucky	146,917	154,686	159,454	11,855	9,983	10,000
Louisiana	NA	1,144,870	NA	NA	124,339	133,511
Maine	4,401	4,818	4,502	452	295	278
Maryland	NA	155,270	151,061	NA	NA	11,149
Massachusetts	NA	309,275	287,706	18,472	NA	15,857
Michigan	665,511	742,711	774,536	51,260	37,242	35,834
Minnesota	230,845	258,387	264,370	20,213	11,180	14,937
Mississippi	NA	170,922	183,757	NA	NA	NA
Missouri	208,054	215,325	225,242	11,165	12,463	13,884
Montana	38,940	41,464	42,235	3,509	2,167	2,102
Nebraska	91,518	103,668	101,216	5,477	3,579	7,119
Nevada	113,826	107,612	102,378	11,224	10,166	13,422
New Hampshire	NA	16,589	14,981	NA	857	NA
New Jersey	NA	490,963	473,034	NA	NA	32,664
New Mexico	116,310	111,034	88,912	8,915	9,670	10,466
New York	NA	994,507	NA	NA	NA	76,920
North Carolina	179,974	164,007	164,936	12,631	13,759	14,954
North Dakota	25,277	34,297	24,614	2,153	2,186	1,272
Ohio	NA	686,442	715,472	NA	36,523	36,233
Oklahoma	407,087	373,138	384,623	32,970	43,991	48,401
Oregon	NA	124,766	127,682	15,419	13,053	12,354
Pennsylvania	NA	509,602	538,180	35,333	NA	NA
Rhode Island	NA	66,082	65,848	3,454	2,871	5,009
South Carolina	129,419	121,401	118,457	10,663	10,940	11,109
South Dakota	22,748	25,480	25,360	1,250	1,294	1,539
Tennessee	NA	204,150	202,543	17,987	18,058	17,415
Texas	NA	2,984,913	NA	NA	326,821	357,700
Utah	106,552	103,787	100,544	10,547	7,201	6,387
Vermont	6,158	6,341	5,783	453	403	301
Virginia	191,779	181,856	180,727	14,551	15,463	16,135
Washington	NA	165,797	183,535	NA	NA	NA
West Virginia	NA	93,195	92,260	5,905	NA	NA
Wisconsin	280,137	307,663	304,509	22,529	20,887	19,236
Wyoming	NA	56,834	58,067	5,537	4,533	4,607
Total	15,804,399	16,147,167	16,184,680	1,311,733	1,324,601	1,419,458

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1998					
	July	June	May	April	March	February
Alabama	23,472	24,005	26,256	24,632	29,592	29,830
Alaska	10,365	10,247	10,881	11,872	13,040	12,516
Arizona	12,051	7,467	7,574	10,115	12,001	12,168
Arkansas	21,804	NA	20,481	19,046	24,796	23,129
California	137,488	120,557	140,353	150,888	151,886	190,777
Colorado	NA	NA	18,619	24,720	31,317	32,174
Connecticut	7,337	7,280	7,933	10,871	13,255	14,383
Delaware	3,131	2,833	2,925	3,298	4,030	3,776
District of Columbia	1,242	1,348	1,720	3,025	4,064	4,747
Florida	46,698	48,225	42,720	32,801	36,986	32,925
Georgia	23,937	24,018	20,054	25,861	37,321	39,542
Hawaii	214	228	216	223	221	232
Idaho	3,429	3,876	4,186	5,684	6,585	7,284
Illinois	43,411	46,356	51,280	79,927	110,485	107,855
Indiana	NA	31,509	32,851	NA	62,620	57,078
Iowa	11,588	11,021	13,167	20,383	30,256	25,941
Kansas	23,349	18,793	17,585	19,364	29,491	26,029
Kentucky	9,770	10,292	11,505	14,076	21,967	21,257
Louisiana	127,951	NA	111,328	101,836	110,398	97,310
Maine	251	305	335	470	610	629
Maryland	9,982	9,612	10,503	14,145	27,315	28,426
Massachusetts	16,115	NA	21,846	29,256	36,408	38,350
Michigan	35,339	43,866	51,642	77,995	106,043	106,517
Minnesota	13,777	14,579	14,749	21,649	37,306	36,306
Mississippi	18,767	18,596	17,372	15,119	18,465	17,463
Missouri	13,305	12,566	13,741	21,664	33,690	34,874
Montana	2,176	3,638	2,838	4,240	5,477	5,313
Nebraska	8,983	5,849	6,946	9,830	13,612	13,802
Nevada	12,929	9,447	9,976	11,035	11,071	11,832
New Hampshire	871	999	1,226	1,864	2,183	2,585
New Jersey	33,937	31,639	41,616	47,096	65,242	66,099
New Mexico	9,749	8,579	11,181	11,954	14,537	12,873
New York	79,590	71,088	NA	82,436	107,969	115,160
North Carolina	13,149	15,680	14,761	17,721	23,352	25,906
North Dakota	1,249	1,374	1,770	2,804	3,853	3,944
Ohio	NA	38,783	45,665	67,612	98,218	99,776
Oklahoma	47,000	40,753	33,071	32,204	43,151	40,846
Oregon	NA	10,671	10,944	NA	NA	17,736
Pennsylvania	28,410	31,351	34,776	NA	72,421	75,456
Rhode Island	5,305	4,612	5,733	NA	7,900	7,949
South Carolina	10,339	11,503	11,680	12,349	15,673	17,097
South Dakota	1,600	1,209	2,114	2,244	3,588	3,464
Tennessee	17,040	16,972	17,809	21,904	31,153	28,238
Texas	379,619	320,668	294,670	267,069	288,086	252,538
Utah	6,533	6,931	7,559	12,218	14,697	16,652
Vermont	325	347	409	716	918	1,085
Virginia	16,601	14,963	14,715	18,956	25,191	27,386
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	NA	NA	9,140	12,281	9,941
Wisconsin	16,508	18,703	19,671	27,884	44,076	39,114
Wyoming	NA	5,041	5,547	5,396	NA	NA
Total	1,415,549	1,318,988	1,357,389	1,546,087	1,951,786	1,937,886

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1998	1997				
	January	Total	December	November	October	September
Alabama	33,062	292,094	30,822	24,666	20,865	19,874
Alaska	14,428	149,164	15,172	12,560	13,113	8,844
Arizona	14,726	112,590	11,575	6,994	6,675	10,639
Arkansas	23,745	244,644	23,947	19,854	17,536	16,564
California	203,553	1,850,248	185,860	147,134	137,655	164,736
Colorado	36,697	263,988	34,668	23,250	12,664	10,469
Connecticut	16,558	134,557	15,769	11,812	9,002	6,681
Delaware	4,203	46,480	4,356	3,196	2,086	2,211
District of Columbia	4,951	33,824	4,795	2,768	1,452	1,245
Florida	38,634	477,601	38,205	29,083	35,159	40,597
Georgia	42,548	353,700	41,536	35,681	23,924	19,492
Hawaii	252	2,611	552	78	191	188
Idaho	8,295	61,707	7,186	5,519	4,449	3,487
Illinois	146,173	1,062,463	132,707	110,989	70,209	42,581
Indiana	68,688	546,337	64,388	54,190	37,412	27,504
Iowa	33,082	243,476	30,016	24,461	17,115	11,323
Kansas	31,116	248,563	29,528	22,869	14,839	12,763
Kentucky	26,211	202,583	26,707	21,185	14,189	9,760
Louisiana	111,920	1,360,160	112,335	102,939	113,454	117,136
Maine	777	6,247	735	694	488	332
Maryland	33,158	204,319	31,410	17,582	11,557	9,379
Massachusetts	42,828	377,911	38,594	30,037	22,843	20,155
Michigan	119,774	943,881	112,039	89,089	55,893	41,643
Minnesota	46,151	334,572	39,996	36,158	21,195	12,500
Mississippi	18,722	206,749	19,424	16,400	14,616	15,793
Missouri	40,704	276,124	35,740	25,019	12,114	9,958
Montana	7,480	54,114	7,361	5,273	3,728	2,287
Nebraska	16,322	128,031	14,339	10,024	7,229	5,472
Nevada	12,723	127,969	12,443	7,850	9,176	10,741
New Hampshire	2,788	20,822	2,445	1,788	1,237	937
New Jersey	70,507	617,638	73,183	53,491	35,294	28,244
New Mexico	18,386	142,353	18,573	12,587	8,917	8,133
New York	130,336	1,220,113	123,888	101,134	75,512	71,369
North Carolina	28,061	206,940	24,543	18,390	13,802	11,392
North Dakota	4,673	42,826	4,737	3,787	2,549	2,025
Ohio	113,599	878,124	107,489	83,928	55,298	36,252
Oklahoma	44,699	452,453	45,168	34,038	29,638	34,074
Oregon	21,237	159,105	19,704	14,600	12,135	12,639
Pennsylvania	75,437	652,219	79,772	62,794	40,047	28,446
Rhode Island	9,352	82,100	8,703	7,312	5,308	4,738
South Carolina	18,065	150,962	16,582	12,978	10,282	11,399
South Dakota	4,445	32,289	3,735	3,069	1,556	1,152
Tennessee	NA	259,773	32,226	23,385	15,919	13,668
Texas	289,282	3,566,640	301,259	280,454	282,035	312,902
Utah	17,827	137,605	20,196	13,494	10,669	6,475
Vermont	1,202	8,052	988	723	529	345
Virginia	27,819	232,674	30,339	20,442	13,107	11,415
Washington	NA	222,391	30,513	25,964	15,906	16,143
West Virginia	13,133	119,512	14,615	11,696	7,894	6,412
Wisconsin	51,531	396,055	47,139	41,199	26,442	16,682
Wyoming	8,805	70,797	7,494	6,457	5,066	3,926
Total	2,220,922	20,018,151	2,135,495	1,731,064	1,379,970	1,293,122

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1996-1998
(Million Cubic Feet) — Continued

State	1997					
	August	July	June	May	April	March
Alabama	21,774	22,227	20,045	22,082	23,547	25,026
Alaska	10,563	10,544	10,403	11,097	12,740	15,180
Arizona	9,851	9,309	7,229	8,782	7,625	10,311
Arkansas	19,396	21,517	17,581	16,536	18,160	20,770
California	156,325	155,009	125,567	141,632	141,973	152,681
Colorado	11,882	10,936	13,495	20,011	23,411	31,870
Connecticut	7,525	7,962	7,442	9,037	13,055	14,564
Delaware	2,965	3,502	2,849	3,351	4,779	5,664
District of Columbia	1,226	1,202	1,513	2,317	3,054	4,232
Florida	48,113	47,490	45,791	44,670	43,228	44,393
Georgia	21,587	21,684	18,692	23,684	29,529	30,471
Hawaii	184	199	192	189	196	206
Idaho	3,021	3,353	3,555	4,297	5,683	6,452
Illinois	40,316	46,565	44,784	64,825	89,183	116,802
Indiana	26,411	26,781	27,343	36,167	46,045	57,477
Iowa	11,251	11,156	11,230	14,752	19,933	25,141
Kansas	15,259	22,657	14,872	15,156	19,057	22,487
Kentucky	9,195	9,522	9,369	12,400	15,491	19,724
Louisiana	123,872	125,051	116,921	114,992	108,177	107,402
Maine	296	250	326	436	565	703
Maryland	9,962	12,289	12,027	12,557	17,099	21,207
Massachusetts	22,316	22,993	27,915	24,821	38,118	42,439
Michigan	39,832	26,571	48,092	70,858	88,367	113,055
Minnesota	13,651	14,017	14,390	19,634	28,484	39,766
Mississippi	20,654	23,023	17,045	13,616	13,472	15,318
Missouri	10,011	12,287	11,925	15,195	24,205	28,831
Montana	2,167	2,016	2,303	3,275	4,578	5,897
Nebraska	7,103	7,678	6,238	8,891	11,628	14,296
Nevada	12,283	11,610	10,009	10,945	9,659	11,952
New Hampshire	901	817	1,353	1,496	2,121	2,443
New Jersey	34,275	35,224	33,854	39,652	55,888	78,447
New Mexico	9,587	9,459	7,610	9,965	9,412	13,316
New York	80,369	91,166	88,040	87,576	104,095	129,322
North Carolina	11,394	12,855	13,021	14,350	16,779	19,270
North Dakota	2,025	1,694	2,231	2,876	4,001	5,200
Ohio	34,081	34,596	52,496	58,563	74,110	96,926
Oklahoma	41,433	40,951	33,513	30,552	34,243	38,138
Oregon	12,849	9,489	7,802	9,535	11,844	14,341
Pennsylvania	27,918	29,477	30,274	44,540	59,808	73,278
Rhode Island	4,756	5,074	5,715	6,911	7,507	8,622
South Carolina	10,059	10,397	10,994	11,689	12,137	13,437
South Dakota	1,210	1,397	1,471	2,004	2,899	3,603
Tennessee	15,880	14,483	14,849	15,826	21,437	24,113
Texas	338,035	337,264	293,254	269,575	257,495	295,126
Utah	6,849	6,720	5,971	6,858	11,439	13,258
Vermont	293	285	354	569	782	1,048
Virginia	14,548	15,383	12,414	16,528	20,044	21,350
Washington	14,325	11,639	12,401	15,918	14,772	19,893
West Virginia	6,360	5,922	6,478	8,845	13,069	9,980
Wisconsin	15,970	16,908	17,020	26,053	33,620	45,960
Wyoming	4,369	4,142	4,738	6,145	6,101	6,734
Total	1,366,476	1,384,742	1,304,996	1,432,229	1,634,645	1,938,123

NA = Not Available.

Notes: Geographic coverage is the 50 States and the District of Columbia. Gas volumes delivered for use as vehicle fuel are included in the annual total for commercial deliveries but not in the monthly components. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-759, "Monthly Power Plant Report."

Table 20. Average City Gate Price, by State, 1996-1998
(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				
				October	September	August	July	June
Alabama	3.28	3.87	3.39	3.64	3.43	3.82	3.97	3.86
Alaska	1.72	1.81	1.57	1.73	1.71	1.71	1.64	1.67
Arizona	2.59	3.24	2.42	2.61	2.76	2.84	2.85	2.60
Arkansas	2.88	3.20	2.54	2.93	1.88	2.38	3.23	2.31
California	2.31	2.98	2.37	2.22	1.95	2.46	2.39	2.34
Colorado	NA	2.88	2.31	2.24	NA	2.26	NA	2.43
Connecticut	5.06	5.27	5.02	4.28	4.69	4.87	5.14	4.74
Delaware	2.84	3.54	3.51	3.75	3.76	2.70	2.86	4.35
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.33	3.94	3.59	3.48	2.99	3.10	3.14	2.96
Georgia	3.42	4.06	3.63	3.08	3.37	3.45	3.57	3.01
Hawaii	5.36	6.47	5.95	4.95	5.12	5.06	4.77	4.86
Idaho	1.98	2.20	2.24	1.95	2.38	2.14	2.81	2.18
Illinois	2.76	3.26	3.13	2.43	2.24	2.49	3.16	2.15
Indiana	NA	3.04	2.95	NA	NA	NA	NA	NA
Iowa	3.72	3.87	3.35	4.98	4.00	4.29	4.11	1.98
Kansas	3.09	3.36	2.88	2.97	2.83	3.03	4.31	3.66
Kentucky	3.26	3.71	3.21	2.94	3.58	2.85	3.57	3.12
Louisiana	NA	2.98	2.97	NA	2.01	2.05	2.45	2.19
Maine	NA	4.22	4.39	3.37	2.69	3.21	5.39	NA
Maryland	NA	4.07	3.95	NA	NA	5.86	7.62	5.94
Massachusetts	NA	3.97	3.90	3.77	NA	7.10	5.83	5.52
Michigan	2.78	2.92	2.80	2.61	2.69	2.79	2.92	2.50
Minnesota	3.02	3.49	2.89	2.74	2.78	3.06	3.31	2.88
Mississippi	NA	3.34	3.12	NA	NA	NA	3.09	2.86
Missouri	3.48	3.86	3.08	4.06	4.50	4.61	5.12	4.87
Montana	2.36	3.41	2.93	2.08	2.20	1.87	2.27	2.39
Nebraska	3.31	3.89	2.89	3.03	2.90	3.01	3.65	2.98
Nevada	3.17	3.50	2.83	2.48	3.79	4.43	3.75	3.37
New Hampshire	NA	4.18	4.08	NA	3.34	NA	4.63	NA
New Jersey	NA	4.22	3.70	NA	NA	3.75	3.86	3.57
New Mexico	2.04	2.53	1.55	1.75	1.64	1.86	1.94	1.76
New York	NA	3.20	3.30	NA	NA	NA	3.34	2.88
North Carolina	3.59	3.99	3.68	3.46	3.20	3.43	3.95	3.83
North Dakota	2.65	3.34	2.72	2.74	2.11	1.51	2.57	2.34
Ohio	NA	5.43	4.22	NA	3.55	4.70	NA	4.75
Oklahoma	2.56	3.09	2.53	2.16	2.73	2.61	2.38	2.51
Oregon	NA	2.60	2.32	2.72	2.93	3.60	4.13	3.22
Pennsylvania	NA	4.12	3.67	3.74	5.18	NA	5.50	4.79
Rhode Island	NA	4.57	4.34	4.02	4.23	3.53	3.68	3.61
South Carolina	3.50	3.78	3.81	3.49	3.48	3.57	4.09	3.81
South Dakota	3.40	3.68	2.98	2.76	3.91	4.68	4.27	2.91
Tennessee	NA	3.18	3.80	3.06	2.42	2.77	3.12	3.39
Texas	2.90	3.58	3.03	2.73	2.46	2.70	2.91	2.65
Utah	3.17	2.59	2.11	2.94	3.37	3.48	2.64	2.73
Vermont	2.58	2.21	2.78	1.99	2.26	2.34	2.60	2.69
Virginia	3.83	4.23	3.71	3.80	4.52	5.14	4.51	4.32
Washington	NA	2.63	2.29	NA	NA	NA	NA	NA
West Virginia	NA	3.20	3.36	3.48	3.59	NA	NA	NA
Wisconsin	3.47	3.72	3.27	3.24	4.97	4.38	4.36	3.82
Wyoming	NA	3.08	2.35	2.88	2.46	2.93	NA	2.53
Total	3.13	3.55	3.19	2.93	2.75	3.13	3.36	2.98

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1996-1998
(Dollars per Thousand Cubic Feet) — Continued

State	1998					1997		
	May	April	March	February	January	Total	December	November
Alabama	3.56	3.20	3.03	2.93	3.18	3.65	2.60	3.97
Alaska	1.68	1.71	1.73	1.72	1.75	1.81	1.82	1.82
Arizona	2.93	2.75	2.55	2.28	2.46	3.15	2.53	3.48
Arkansas	3.00	2.96	3.13	2.85	3.09	3.23	3.19	3.44
California	2.49	2.33	2.38	2.12	2.35	2.98	2.65	3.30
Colorado	2.46	NA	NA	NA	NA	2.92	2.57	3.59
Connecticut	5.08	5.89	4.87	5.24	5.23	5.11	5.55	3.87
Delaware	1.79	2.63	2.73	3.02	2.71	3.53	2.43	5.78
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.15	3.92	3.25	3.20	3.81	3.97	3.85	4.45
Georgia	3.55	3.63	3.85	3.18	3.43	3.98	3.65	4.01
Hawaii	5.21	5.21	6.25	5.75	6.40	6.42	6.23	6.22
Idaho	1.94	1.96	1.81	1.94	1.89	2.12	1.79	2.07
Illinois	3.64	2.90	2.81	2.85	2.78	3.28	2.92	3.72
Indiana	2.80	NA	2.32	2.48	2.49	3.03	2.79	3.21
Iowa	4.17	3.33	3.42	3.33	3.80	4.06	4.45	4.85
Kansas	3.17	2.79	2.86	2.73	3.56	3.47	3.60	4.28
Kentucky	3.33	3.99	3.23	3.09	3.22	3.83	4.07	4.28
Louisiana	2.36	2.29	2.53	2.25	2.81	3.04	2.86	3.75
Maine	NA	3.25	3.25	3.25	3.25	3.84	3.10	2.72
Maryland	5.58	4.37	3.44	3.43	2.96	4.02	3.57	4.22
Massachusetts	4.56	3.48	3.30	2.89	3.40	3.85	3.09	4.14
Michigan	2.69	2.78	2.97	2.89	2.94	2.99	3.19	3.51
Minnesota	3.24	2.95	3.00	2.90	3.27	3.67	4.06	4.52
Mississippi	NA	NA	NA	2.99	NA	3.39	3.31	3.83
Missouri	4.47	3.72	2.97	2.99	2.96	3.75	3.13	3.92
Montana	2.22	2.29	2.50	2.41	2.71	3.16	2.51	3.15
Nebraska	3.73	3.29	2.98	2.70	4.71	4.24	5.31	6.30
Nevada	3.25	3.00	3.29	3.00	3.03	3.39	2.84	3.71
New Hampshire	3.36	3.37	3.93	3.74	3.77	4.10	3.72	4.02
New Jersey	3.00	3.54	3.53	3.38	4.37	4.19	3.77	4.49
New Mexico	2.04	2.19	2.20	2.02	2.24	2.53	2.31	2.85
New York	NA	3.01	NA	NA	NA	3.51	3.33	4.00
North Carolina	3.66	3.91	3.49	3.47	3.65	3.97	3.72	4.09
North Dakota	2.74	2.86	2.91	2.85	2.93	3.38	3.01	4.01
Ohio	5.04	4.89	4.87	4.27	4.82	5.18	4.35	4.66
Oklahoma	2.46	2.36	2.38	2.61	2.86	3.12	3.33	3.19
Oregon	2.78	NA	NA	2.31	2.53	2.58	2.42	2.73
Pennsylvania	3.94	NA	5.26	3.64	3.68	4.09	3.84	4.20
Rhode Island	3.70	NA	3.38	3.35	3.93	4.49	4.02	4.46
South Carolina	3.90	3.66	3.34	3.05	3.37	3.81	3.72	4.13
South Dakota	4.42	4.37	2.60	3.66	3.22	3.65	3.46	3.68
Tennessee	3.90	6.62	2.42	3.84	NA	3.36	3.66	4.37
Texas	2.97	2.94	2.84	2.87	3.26	3.66	3.97	3.86
Utah	2.62	2.89	3.23	3.68	3.25	2.79	3.46	3.07
Vermont	2.82	2.74	2.92	2.66	2.59	2.33	2.64	2.77
Virginia	4.37	3.64	3.25	3.63	3.97	4.14	3.69	4.11
Washington	NA	NA	NA	NA	NA	2.62	2.39	2.82
West Virginia	NA	3.61	2.58	3.15	3.34	3.17	3.11	3.07
Wisconsin	3.63	3.54	3.33	2.99	3.21	3.67	3.32	3.75
Wyoming	NA	1.28	3.29	3.31	NA	3.11	2.93	3.61
Total	3.11	3.21	3.22	3.08	3.28	3.61	3.42	3.91

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1996-1998
(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	October	September	August	July	June	May	April	March
Alabama	4.17	3.83	3.88	4.10	3.86	3.54	3.16	3.20
Alaska	1.78	1.79	1.73	1.74	1.70	1.78	1.81	1.84
Arizona	3.80	3.74	3.16	2.98	3.32	3.18	2.61	2.22
Arkansas	3.61	2.87	3.28	2.78	2.77	2.59	2.48	2.46
California	3.18	2.74	2.79	3.72	2.67	2.55	2.30	2.25
Colorado	2.71	2.66	2.41	2.67	2.57	2.42	2.52	2.32
Connecticut	4.96	5.29	5.33	4.55	4.76	4.81	4.94	4.82
Delaware	5.23	1.44	3.17	3.35	3.42	3.17	2.88	3.69
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.64	3.82	3.31	3.41	3.50	3.09	3.62	4.04
Georgia	4.05	5.29	3.89	3.95	4.37	3.20	3.08	3.31
Hawaii	6.09	6.11	6.35	6.59	5.46	6.47	7.21	6.50
Idaho	2.01	2.17	2.50	2.16	2.83	2.98	2.08	1.85
Illinois	4.00	3.78	3.37	2.81	3.11	3.06	2.48	2.43
Indiana	3.64	3.15	2.87	2.54	2.35	2.32	2.07	2.31
Iowa	4.98	5.39	5.86	6.62	4.75	3.50	2.83	3.05
Kansas	3.67	3.47	3.09	2.88	3.02	2.85	2.38	2.67
Kentucky	3.83	3.57	3.62	3.68	3.69	3.30	3.62	3.41
Louisiana	3.44	3.02	2.50	2.58	2.64	2.41	2.37	2.44
Maine	4.11	3.79	4.43	4.34	4.53	4.69	3.43	4.26
Maryland	4.69	5.77	6.05	5.81	4.34	4.33	3.21	3.24
Massachusetts	4.52	5.00	4.91	5.29	5.61	2.86	3.26	2.97
Michigan	3.12	2.87	2.63	2.54	2.69	2.60	2.56	2.66
Minnesota	4.26	4.02	2.97	3.92	3.49	2.64	2.41	2.70
Mississippi	3.86	3.25	2.88	2.87	2.95	2.43	2.89	2.82
Missouri	4.66	5.08	4.80	4.62	5.32	3.96	3.12	2.79
Montana	4.47	3.76	3.96	3.63	3.91	2.28	3.09	2.70
Nebraska	5.76	7.03	5.51	4.96	4.09	3.11	2.28	3.02
Nevada	3.46	4.12	3.99	3.87	3.64	2.72	2.81	2.96
New Hampshire	3.95	4.02	4.45	4.28	4.34	3.66	3.15	3.99
New Jersey	4.84	4.34	4.41	4.29	4.21	3.86	3.15	3.99
New Mexico	2.59	2.62	2.18	2.13	2.13	2.04	1.91	1.38
New York	3.68	2.92	2.79	2.59	2.87	2.64	2.69	2.85
North Carolina	3.95	4.13	3.96	3.90	3.84	3.83	3.40	3.51
North Dakota	3.73	3.53	3.36	3.14	3.17	2.95	2.50	2.43
Ohio	5.09	4.91	5.51	7.16	6.45	5.96	5.79	5.01
Oklahoma	3.04	2.58	2.66	3.23	2.66	2.22	2.22	3.09
Oregon	2.48	3.12	4.01	3.45	3.00	3.02	1.95	1.92
Pennsylvania	4.60	4.22	4.95	4.32	4.90	4.30	3.48	3.48
Rhode Island	4.53	5.71	6.64	7.53	6.42	4.81	3.46	3.16
South Carolina	4.15	4.03	3.86	3.74	3.78	3.54	3.25	2.95
South Dakota	3.43	4.03	4.26	4.40	4.58	3.75	3.02	2.78
Tennessee	3.93	2.78	2.51	2.71	2.82	2.96	2.51	2.78
Texas	3.57	3.21	3.11	3.23	3.01	2.50	2.38	3.01
Utah	2.64	2.81	3.02	2.83	2.35	1.93	2.15	2.69
Vermont	2.34	2.29	2.33	2.41	2.58	2.77	2.39	2.26
Virginia	4.71	4.69	4.47	4.27	3.77	5.12	3.28	3.49
Washington	2.27	2.44	2.41	2.53	2.28	2.53	2.70	1.89
West Virginia	3.62	3.53	3.90	1.87	3.90	3.02	2.88	2.17
Wisconsin	3.91	4.63	5.12	3.71	5.09	3.49	3.11	2.89
Wyoming	3.25	3.35	2.90	2.94	2.85	1.64	2.48	3.19
Total	3.86	3.50	3.34	3.44	3.41	3.11	2.92	3.04

NA = Not Available.
— = Not Applicable.

Notes: Geographic coverage is the 50 States and the District of Columbia. Prices in this table represent the average price of natural gas by State at the point where the gas transferred from a pipeline to a local distribution company within the State. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998
(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				
				October	September	August	July	June
Alabama	7.94	8.62	7.15	10.92	10.71	10.78	11.13	10.91
Alaska	3.69	3.81	3.45	3.74	3.01	3.75	4.71	4.02
Arizona	8.49	7.76	7.66	12.07	13.01	13.19	12.24	11.02
Arkansas	7.45	6.78	5.78	8.13	8.81	8.99	9.03	8.72
California	6.94	6.67	6.49	6.88	7.01	7.21	7.07	7.32
Colorado	NA	4.78	4.49	5.75	8.36	7.44	NA	NA
Connecticut	10.54	10.37	9.99	11.13	11.73	11.80	11.62	11.11
Delaware	8.85	8.38	6.99	11.62	12.78	12.61	11.67	10.99
District of Columbia	8.94	9.28	9.00	10.65	11.22	8.59	8.87	8.50
Florida	11.66	11.81	10.68	14.12	13.56	13.59	13.79	13.30
Georgia	7.91	8.08	6.81	7.99	15.53	15.94	16.76	11.73
Hawaii	19.33	21.97	19.76	19.27	13.34	23.96	18.60	18.75
Idaho	5.37	5.12	5.25	5.80	6.55	6.71	6.26	5.86
Illinois	5.67	6.11	5.34	5.97	8.06	8.16	8.69	8.09
Indiana	NA	6.62	5.52	NA	NA	NA	NA	9.95
Iowa	6.14	6.17	5.48	7.32	10.97	10.78	11.56	8.41
Kansas	6.19	6.52	5.57	7.54	7.97	7.94	8.04	7.61
Kentucky	6.14	6.42	5.39	7.83	9.19	9.75	7.87	8.15
Louisiana	NA	7.24	6.62	NA	8.91	8.84	8.85	8.36
Maine	8.06	8.52	7.70	7.61	8.88	9.13	9.11	8.33
Maryland	NA	8.49	7.60	NA	NA	11.52	12.03	10.82
Massachusetts	NA	9.31	8.71	9.55	NA	11.36	10.45	NA
Michigan	5.21	5.25	4.93	5.38	6.96	7.35	7.12	6.23
Minnesota	5.56	5.83	5.31	6.01	7.04	7.32	7.57	7.15
Mississippi	NA	6.42	5.55	NA	NA	NA	7.60	7.32
Missouri	6.62	6.62	5.96	8.84	9.86	10.94	9.76	8.84
Montana	NA	4.95	4.91	5.90	7.04	6.89	6.70	6.44
Nebraska	5.29	5.61	4.77	5.74	6.91	7.12	6.87	6.42
Nevada	7.18	6.24	6.30	8.00	9.25	9.27	8.69	7.74
New Hampshire	NA	8.44	7.08	NA	9.03	NA	9.15	8.20
New Jersey	NA	8.01	7.17	NA	NA	9.93	9.63	9.32
New Mexico	5.92	6.83	4.74	7.96	10.19	10.57	10.89	31.23
New York	NA	9.76	NA	NA	NA	13.55	7.01	NA
North Carolina	8.64	9.30	7.47	11.73	12.56	13.29	12.05	11.81
North Dakota	5.24	4.78	4.68	5.69	7.69	9.87	7.09	7.03
Ohio	NA	6.91	5.74	NA	9.30	9.89	NA	7.35
Oklahoma	6.15	6.41	5.67	8.64	9.50	9.33	8.91	8.37
Oregon	NA	6.24	6.39	7.62	8.78	9.04	8.33	7.48
Pennsylvania	NA	8.49	7.29	9.23	NA	NA	11.22	10.51
Rhode Island	NA	9.71	8.38	10.78	12.15	12.14	11.94	10.94
South Carolina	8.37	8.60	7.32	9.57	10.10	10.32	10.18	9.76
South Dakota	5.74	5.66	5.20	6.34	8.38	8.63	8.90	6.54
Tennessee	NA	7.01	6.31	8.09	8.51	9.03	8.68	8.15
Texas	6.42	6.47	5.89	8.16	8.79	8.97	8.86	7.94
Utah	5.58	5.01	4.36	4.78	6.13	7.01	6.70	5.39
Vermont	6.55	6.44	6.43	7.46	5.12	8.77	8.91	8.08
Virginia	8.76	8.72	7.80	10.97	12.22	12.28	12.22	11.73
Washington	NA	5.61	5.70	NA	NA	NA	NA	NA
West Virginia	NA	7.05	7.06	7.64	NA	NA	NA	NA
Wisconsin	6.12	6.35	5.84	5.42	6.51	6.82	7.16	6.50
Wyoming	NA	4.27	4.38	5.26	6.74	6.58	NA	5.99
Total	6.93	7.04	6.32	7.66	8.93	9.18	8.62	8.41

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1998					1997		
	May	April	March	February	January	Total	December	November
Alabama	8.99	7.73	7.00	7.10	7.41	8.35	7.28	7.95
Alaska	3.83	3.66	3.71	3.65	3.56	3.77	3.62	3.69
Arizona	9.58	8.14	7.39	7.40	7.23	7.83	7.61	9.20
Arkansas	5.83	6.86	6.41	6.50	9.42	6.67	6.26	6.43
California	7.01	6.80	6.78	6.49	7.28	6.81	7.20	7.48
Colorado	5.24	4.74	4.49	4.57	4.50	4.81	4.73	5.18
Connecticut	11.57	9.78	10.18	10.33	10.36	10.33	10.15	10.30
Delaware	9.44	8.51	8.15	8.08	8.07	8.36	8.04	8.69
District of Columbia	9.70	8.86	8.62	8.44	9.01	9.39	8.97	11.01
Florida	13.08	11.34	10.51	10.47	10.33	11.90	11.78	13.01
Georgia	13.50	7.09	5.78	6.15	6.40	7.41	6.05	5.91
Hawaii	19.37	19.21	19.87	20.46	19.99	21.74	20.43	20.87
Idaho	5.59	5.38	5.18	5.14	5.01	5.12	4.98	5.28
Illinois	7.94	5.79	4.90	4.91	4.88	5.95	5.38	5.65
Indiana	8.81	NA	6.13	6.22	6.12	6.37	5.51	5.85
Iowa	7.80	6.36	4.79	4.97	5.49	6.17	6.02	6.41
Kansas	6.60	5.92	5.76	5.80	5.82	6.42	5.92	6.42
Kentucky	7.15	6.56	5.25	5.47	5.48	6.37	6.39	6.09
Louisiana	8.95	6.46	5.28	5.60	6.10	7.16	6.34	7.88
Maine	8.66	7.90	7.90	7.90	7.90	8.47	8.36	8.21
Maryland	9.82	8.36	7.53	7.36	7.38	8.36	7.38	8.71
Massachusetts	NA	9.64	9.37	9.26	9.19	9.43	9.94	9.70
Michigan	5.85	5.11	4.69	4.92	4.85	5.20	4.98	5.13
Minnesota	6.45	5.60	5.18	5.11	5.07	5.76	5.09	6.04
Mississippi	6.44	5.88	NA	5.39	NA	6.35	5.74	6.79
Missouri	7.40	6.14	5.58	5.86	6.30	6.61	6.46	6.70
Montana	NA	5.15	4.97	5.03	4.87	5.05	5.31	5.39
Nebraska	5.99	5.09	4.74	4.93	5.28	5.69	6.01	6.01
Nevada	7.30	6.90	6.80	6.79	6.53	6.27	6.18	6.72
New Hampshire	7.07	6.50	8.50	8.38	8.30	8.48	8.46	8.87
New Jersey	6.80	7.71	7.39	7.23	7.41	7.93	7.62	7.77
New Mexico	9.69	6.26	4.55	5.23	3.72	5.87	3.68	4.56
New York	NA	9.26	8.54	8.62	8.75	9.73	9.34	9.93
North Carolina	9.29	7.91	7.77	7.93	8.33	8.98	8.03	8.21
North Dakota	5.96	5.12	4.79	4.68	4.52	4.99	5.67	5.81
Ohio	6.56	6.22	5.97	5.75	6.25	6.75	6.20	6.31
Oklahoma	6.84	5.56	5.43	5.73	5.56	6.23	5.44	6.06
Oregon	7.19	NA	NA	6.44	6.09	6.21	6.01	6.28
Pennsylvania	9.02	NA	8.05	8.03	9.60	8.33	7.75	7.87
Rhode Island	9.67	NA	9.03	8.86	8.83	9.61	8.97	9.74
South Carolina	8.44	7.88	8.02	8.27	8.17	8.37	7.77	7.79
South Dakota	6.88	5.88	5.31	5.07	5.01	5.75	5.94	6.16
Tennessee	6.95	6.42	5.96	6.31	NA	6.91	6.66	6.68
Texas	7.31	6.29	5.14	6.58	5.42	6.32	5.59	6.40
Utah	5.72	4.85	5.51	5.73	5.83	5.13	5.29	5.70
Vermont	7.28	6.45	6.30	6.23	6.19	6.41	6.21	6.43
Virginia	10.14	8.28	7.75	8.05	8.11	8.60	7.90	8.80
Washington	NA	NA	NA	NA	NA	5.64	5.68	5.75
West Virginia	NA	7.55	6.85	6.78	6.81	6.81	5.87	6.63
Wisconsin	6.29	6.02	6.28	5.98	5.96	6.43	6.28	7.13
Wyoming	5.79	5.25	5.13	5.14	NA	4.58	6.16	5.26
Total	7.59	6.78	6.27	6.41	6.47	6.94	6.54	6.86

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1996-1998
(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	October	September	August	July	June	May	April	March
Alabama	11.05	11.56	11.64	11.21	10.40	8.65	9.17	8.61
Alaska	3.75	3.94	4.49	4.43	4.27	3.88	3.75	3.75
Arizona	11.36	9.13	10.57	10.08	9.62	8.71	7.95	7.05
Arkansas	8.70	9.57	9.29	8.68	8.26	6.96	6.43	6.17
California	7.80	7.42	7.56	7.05	7.70	6.38	6.18	6.42
Colorado	5.96	7.16	6.95	6.91	5.94	4.91	4.71	4.38
Connecticut	10.27	11.45	11.35	11.22	10.59	10.59	9.96	9.55
Delaware	10.74	11.79	11.86	11.61	10.06	8.87	8.19	7.89
District of Columbia	11.27	11.34	8.40	8.46	8.28	9.18	8.74	8.57
Florida	13.85	14.01	14.09	13.72	13.25	12.51	12.07	11.35
Georgia	8.08	10.62	11.74	11.85	12.36	10.41	6.22	8.87
Hawaii	21.07	21.36	21.64	21.20	21.54	21.81	21.33	22.32
Idaho	5.66	6.37	6.52	6.16	5.81	5.26	5.10	4.95
Illinois	6.05	8.01	7.88	7.84	7.94	5.43	5.10	5.28
Indiana	6.65	8.81	9.44	10.22	8.89	7.26	6.73	6.31
Iowa	7.69	11.05	10.11	9.41	7.97	6.13	5.16	5.49
Kansas	7.68	8.49	8.21	7.47	7.98	6.20	6.00	5.94
Kentucky	7.41	7.82	9.10	8.52	7.44	6.57	6.74	6.23
Louisiana	9.43	8.96	8.49	8.21	8.21	7.25	5.96	6.27
Maine	7.80	9.46	9.25	9.69	8.39	7.95	9.05	8.65
Maryland	9.91	10.72	11.35	10.88	9.62	8.26	8.14	7.73
Massachusetts	8.51	10.00	10.39	9.78	8.25	7.43	9.82	9.62
Michigan	5.80	6.88	7.33	6.95	6.21	5.15	4.97	4.87
Minnesota	6.67	8.31	7.94	7.76	6.78	5.39	4.63	4.73
Mississippi	8.40	8.06	7.91	7.62	7.45	7.00	6.50	5.56
Missouri	8.86	9.63	9.42	8.81	7.58	5.91	5.35	5.73
Montana	5.81	6.70	6.95	7.42	6.07	4.98	4.71	4.67
Nebraska	7.31	7.67	7.47	7.21	6.48	4.51	4.77	4.72
Nevada	7.64	7.92	7.96	7.55	7.28	6.61	6.14	5.76
New Hampshire	7.47	8.93	9.17	9.01	7.59	6.62	6.62	9.36
New Jersey	8.53	9.91	10.12	9.80	9.55	8.45	7.18	7.56
New Mexico	8.48	11.05	11.33	11.85	41.56	6.66	8.95	4.55
New York	11.38	12.59	11.62	12.70	10.83	9.01	8.51	8.86
North Carolina	11.17	13.08	13.12	12.39	10.28	8.56	8.66	9.57
North Dakota	6.50	7.36	7.39	7.19	6.29	5.33	4.20	4.21
Ohio	7.40	8.29	8.46	8.71	7.42	6.74	6.60	6.51
Oklahoma	8.77	9.11	9.19	8.79	7.99	6.68	5.85	5.56
Oregon	6.59	7.34	7.54	7.31	7.08	6.51	6.18	6.00
Pennsylvania	8.98	10.93	11.68	11.83	10.14	8.87	8.40	8.12
Rhode Island	10.64	12.10	12.53	12.30	10.90	9.70	9.67	9.39
South Carolina	9.28	9.88	9.97	9.47	8.72	7.87	8.14	8.99
South Dakota	7.07	9.10	8.07	8.39	7.83	5.92	4.95	4.83
Tennessee	8.26	8.74	8.93	8.85	8.05	6.44	6.34	6.67
Texas	8.00	8.55	8.78	8.26	7.72	6.33	5.58	5.48
Utah	4.65	5.59	5.98	5.65	5.71	5.84	4.19	5.17
Vermont	7.06	8.41	8.78	8.51	7.35	6.52	6.23	6.08
Virginia	10.85	12.04	12.20	11.99	10.50	8.88	7.97	7.42
Washington	5.83	5.86	5.88	5.90	5.84	5.71	5.70	5.50
West Virginia	6.02	8.96	9.68	10.50	8.53	7.31	6.96	6.85
Wisconsin	5.98	6.82	6.89	6.48	6.58	5.06	6.22	5.80
Wyoming	5.54	6.29	6.59	5.91	5.32	3.27	4.80	4.07
Total	7.69	8.84	8.99	8.78	8.30	6.83	6.53	6.52

NA = Not Available.

Notes: Data for 1997 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				
				October	September	August	July	June
Alabama	6.54	7.08	6.14	7.06	6.92	6.96	7.25	7.24
Alaska	2.39	2.42	2.31	2.32	3.22	2.15	2.08	2.05
Arizona	5.87	5.24	5.03	6.45	5.78	6.30	6.25	6.19
Arkansas	NA	5.22	4.51	4.90	5.02	4.99	5.29	NA
California	6.29	6.29	5.96	5.64	5.83	5.88	5.50	5.91
Colorado	NA	3.96	3.75	4.01	4.44	4.16	NA	4.44
Connecticut	6.77	7.16	7.29	5.49	5.44	5.53	4.66	5.88
Delaware	7.11	6.70	5.74	8.05	8.72	8.40	8.14	7.81
District of Columbia	7.33	7.95	7.22	7.49	7.35	7.14	6.98	6.97
Florida	6.62	6.76	6.46	6.38	6.27	6.22	6.55	6.70
Georgia	6.50	6.70	5.84	4.90	9.08	8.96	9.40	7.59
Hawaii	13.23	14.94	14.25	13.00	15.00	10.50	12.36	12.60
Idaho	4.60	4.49	4.59	4.91	4.94	4.88	4.90	4.83
Illinois	4.97	5.49	4.87	5.20	5.13	5.99	6.29	5.72
Indiana	NA	5.57	4.62	NA	NA	NA	NA	NA
Iowa	4.69	5.14	4.40	5.02	6.38	6.27	7.53	4.17
Kansas	5.09	5.39	4.55	5.45	5.57	4.36	5.45	5.65
Kentucky	5.53	5.72	4.91	5.58	5.69	5.69	6.14	5.57
Louisiana	NA	6.19	5.96	NA	5.82	5.68	5.85	NA
Maine	7.22	7.69	6.90	6.55	6.89	6.89	6.81	6.70
Maryland	NA	6.57	6.04	NA	NA	7.49	8.19	6.65
Massachusetts	NA	7.20	6.51	6.06	NA	6.45	6.22	6.55
Michigan	4.88	5.02	4.69	5.05	5.35	5.70	5.88	5.38
Minnesota	4.43	4.82	4.42	4.23	3.93	4.44	4.66	4.46
Mississippi	NA	5.21	5.18	NA	NA	NA	4.25	4.23
Missouri	5.68	5.79	5.27	6.17	5.71	6.04	5.93	5.65
Montana	NA	4.83	4.67	5.73	6.23	5.86	6.06	5.47
Nebraska	4.64	4.76	4.36	3.72	3.52	3.73	3.91	3.91
Nevada	5.91	5.02	4.91	6.61	6.92	6.90	6.08	5.91
New Hampshire	NA	7.59	6.45	NA	6.40	NA	6.59	NA
New Jersey	NA	6.08	6.16	NA	NA	2.87	3.96	3.74
New Mexico	4.24	4.24	3.37	4.11	4.49	4.71	4.88	6.66
New York	NA	6.45	NA	NA	NA	4.68	5.67	5.01
North Carolina	6.53	7.04	6.03	6.23	6.26	6.28	6.45	6.16
North Dakota	4.34	4.16	4.01	4.39	4.73	7.28	4.72	4.86
Ohio	NA	6.33	5.20	NA	7.19	7.81	NA	6.30
Oklahoma	5.31	5.38	4.64	5.34	5.39	5.34	5.39	5.24
Oregon	NA	4.61	4.88	5.53	5.55	5.89	5.75	5.52
Pennsylvania	NA	7.50	6.36	7.33	7.92	NA	8.03	8.25
Rhode Island	NA	8.26	7.42	8.65	9.14	9.35	8.98	8.88
South Carolina	6.41	6.59	6.14	5.73	5.89	5.91	5.94	6.00
South Dakota	4.52	4.58	4.18	4.84	5.65	5.60	6.23	4.33
Tennessee	NA	6.04	5.75	6.65	5.79	6.24	5.98	5.95
Texas	4.55	4.86	4.10	4.33	4.33	4.19	4.30	4.12
Utah	4.26	3.70	3.26	4.00	4.43	4.81	4.37	3.93
Vermont	5.15	5.21	5.26	4.81	4.63	5.17	4.91	5.30
Virginia	6.06	6.47	5.79	6.44	6.06	6.21	5.76	6.14
Washington	NA	4.71	4.82	NA	NA	NA	NA	NA
West Virginia	NA	6.39	6.04	6.21	6.22	6.55	6.86	NA
Wisconsin	4.86	5.23	4.64	4.08	4.21	4.37	4.82	4.44
Wyoming	NA	3.62	3.98	4.70	4.69	5.84	NA	NA
Total	5.52	5.80	5.34	5.32	5.52	5.49	5.63	5.53

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1998
(Dollars per Thousand Cubic Feet) — Continued

State	1998					1997		
	May	April	March	February	January	Total	December	November
Alabama	6.18	6.00	6.27	6.47	6.65	6.98	6.56	6.77
Alaska	2.24	2.31	2.39	2.45	2.49	2.44	2.55	2.53
Arizona	6.14	5.79	5.50	5.59	5.65	5.31	5.55	5.82
Arkansas	5.31	5.23	5.04	5.19	5.14	5.23	5.13	5.47
California	5.68	6.65	7.06	6.75	6.69	6.41	6.99	7.04
Colorado	4.21	4.05	4.04	4.07	4.18	4.06	4.43	4.39
Connecticut	7.03	6.86	7.42	7.28	7.73	7.23	7.48	7.59
Delaware	7.33	6.85	6.75	6.72	6.70	6.70	6.60	6.88
District of Columbia	6.99	7.09	7.46	7.34	7.65	7.37	3.15	8.77
Florida	6.83	6.71	6.69	6.72	6.83	6.85	7.22	7.32
Georgia	7.99	5.53	5.51	5.86	6.16	6.43	5.73	5.53
Hawaii	13.20	13.32	13.66	14.41	14.35	15.77	13.87	59.38
Idaho	4.77	4.76	4.46	4.40	4.41	4.49	4.35	4.68
Illinois	6.81	5.21	4.70	4.25	4.76	5.43	5.21	5.26
Indiana	6.35	NA	5.44	5.97	5.52	5.44	5.11	4.96
Iowa	5.48	5.19	3.72	4.08	4.71	5.18	5.16	5.46
Kansas	5.75	6.08	3.85	5.43	5.44	5.38	5.14	5.72
Kentucky	5.33	5.67	5.44	5.63	5.32	5.79	5.92	6.03
Louisiana	6.10	5.49	4.94	5.24	5.73	6.22	5.91	7.00
Maine	7.20	7.41	7.41	7.41	7.41	7.70	7.79	7.62
Maryland	7.82	6.82	6.15	6.18	6.14	6.52	5.61	7.12
Massachusetts	6.86	7.65	7.46	7.73	7.39	7.34	8.03	7.74
Michigan	5.21	4.92	4.58	4.76	4.77	5.00	4.87	5.03
Minnesota	4.63	4.53	4.41	4.42	4.50	4.80	4.34	5.20
Mississippi	4.67	4.90	4.69	4.35	5.11	5.26	5.23	5.75
Missouri	5.52	5.37	5.27	5.63	6.08	5.88	6.23	6.08
Montana	NA	5.05	4.91	4.97	4.85	4.83	5.39	3.92
Nebraska	4.25	4.42	6.13	4.44	4.66	4.88	5.35	5.41
Nevada	5.75	5.76	5.69	5.76	5.63	5.08	5.32	5.42
New Hampshire	5.98	6.06	7.64	7.57	7.60	7.63	7.77	7.81
New Jersey	3.84	4.17	3.83	4.13	4.85	5.88	4.97	5.34
New Mexico	5.15	4.42	3.91	4.35	3.66	4.01	3.25	3.52
New York	NA	6.20	NA	NA	NA	6.49	6.80	6.58
North Carolina	6.18	6.09	6.45	6.72	7.05	7.00	6.96	6.70
North Dakota	4.54	4.16	4.17	4.13	4.03	4.35	4.94	5.14
Ohio	5.76	5.79	5.62	5.43	5.96	6.23	5.86	5.97
Oklahoma	4.97	4.57	5.27	5.56	5.53	5.34	5.23	5.17
Oregon	5.51	NA	NA	5.17	4.92	4.63	4.66	4.73
Pennsylvania	8.23	NA	7.33	7.36	7.14	7.35	6.89	6.83
Rhode Island	8.37	NA	7.88	7.78	7.75	8.21	7.98	8.02
South Carolina	5.98	6.40	6.55	6.91	6.92	6.74	7.31	7.22
South Dakota	5.07	4.69	4.37	4.10	4.12	4.71	5.06	5.22
Tennessee	5.83	5.68	5.55	6.37	NA	6.11	6.36	6.27
Texas	4.44	4.75	4.32	5.37	4.66	4.91	4.99	5.27
Utah	3.93	3.76	4.36	4.35	4.54	3.92	4.39	4.65
Vermont	5.98	5.14	5.10	5.23	5.21	5.18	5.15	4.99
Virginia	5.44	5.63	5.82	6.33	6.41	6.45	6.37	6.42
Washington	NA	NA	NA	NA	NA	4.73	4.78	4.81
West Virginia	7.34	6.60	6.32	6.31	6.28	6.34	6.18	6.24
Wisconsin	4.16	4.75	5.24	4.96	5.12	5.35	5.46	5.98
Wyoming	4.77	4.62	4.55	4.56	NA	3.93	5.52	4.62
Total	5.62	5.58	5.38	5.56	5.59	5.79	5.70	5.85

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1996-1998
(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	October	September	August	July	June	May	April	March
Alabama	7.40	7.53	7.44	7.54	7.16	6.79	7.05	7.20
Alaska	2.52	2.28	2.09	2.24	2.15	2.23	2.37	2.53
Arizona	5.82	5.81	5.33	5.21	5.20	5.18	5.08	5.26
Arkansas	5.77	5.56	5.19	5.33	5.39	5.15	4.91	4.87
California	6.65	5.84	4.96	5.86	6.27	5.29	6.05	6.66
Colorado	4.72	4.01	4.70	4.45	4.23	4.08	3.98	3.97
Connecticut	6.36	6.48	5.14	5.54	5.67	6.69	7.12	7.54
Delaware	7.46	7.15	8.54	7.81	7.30	6.74	6.53	6.39
District of Columbia	8.07	8.10	7.19	6.91	7.02	6.86	10.04	7.60
Florida	7.04	6.85	6.54	6.89	6.84	6.80	6.66	6.87
Georgia	6.22	6.49	7.02	7.63	7.71	6.33	5.60	7.57
Hawaii	14.59	14.46	14.93	14.91	15.21	15.09	15.18	15.55
Idaho	4.75	4.75	4.85	4.78	4.80	4.68	4.64	4.37
Illinois	5.79	6.22	6.08	5.66	5.53	4.91	4.62	4.95
Indiana	4.97	6.10	6.12	6.55	6.33	6.20	6.02	5.41
Iowa	5.91	7.37	6.39	5.64	5.99	4.83	4.30	4.76
Kansas	5.63	5.42	4.65	4.71	4.65	4.98	4.89	5.16
Kentucky	5.42	5.90	5.95	6.20	6.00	5.53	5.85	5.72
Louisiana	7.14	6.03	5.66	5.31	6.00	5.84	5.01	5.84
Maine	6.84	7.61	7.16	7.12	6.94	6.67	8.28	8.10
Maryland	7.19	6.90	6.32	6.09	6.53	6.06	6.11	5.92
Massachusetts	5.63	5.45	5.65	5.34	5.04	5.44	7.94	8.14
Michigan	5.49	6.07	6.06	5.90	5.53	4.90	4.70	4.79
Minnesota	5.11	5.20	4.59	4.63	4.64	4.02	3.86	4.11
Mississippi	5.77	4.93	4.90	4.54	4.93	5.23	5.08	4.75
Missouri	6.16	5.74	5.22	5.13	4.89	4.43	4.60	5.12
Montana	5.54	4.52	5.89	5.78	5.54	4.95	4.65	4.70
Nebraska	5.27	4.34	3.77	3.57	5.90	5.01	3.92	4.24
Nevada	5.43	5.18	5.18	5.07	5.03	5.08	5.14	4.91
New Hampshire	6.14	6.25	6.45	6.47	6.19	5.85	6.50	8.65
New Jersey	4.92	4.30	4.54	4.35	4.41	5.81	5.09	7.04
New Mexico	4.14	4.51	4.67	4.73	6.54	3.79	4.13	3.20
New York	5.62	5.09	4.86	4.40	5.32	5.95	6.15	6.78
North Carolina	6.29	6.46	6.44	6.44	5.99	6.10	6.50	7.85
North Dakota	5.15	5.11	4.58	5.11	4.76	4.38	3.69	3.65
Ohio	6.14	6.45	6.73	6.67	6.91	6.00	6.10	5.95
Oklahoma	5.38	4.87	4.80	4.79	5.00	4.83	4.67	5.11
Oregon	4.65	4.80	4.87	4.75	4.78	4.61	4.60	4.56
Pennsylvania	7.25	7.68	8.04	8.05	8.12	7.98	7.69	7.36
Rhode Island	8.00	8.77	9.12	8.96	8.77	8.07	8.46	8.17
South Carolina	6.52	3.49	6.45	6.31	6.33	6.33	7.05	7.70
South Dakota	5.50	6.51	5.22	5.44	6.09	4.77	4.04	3.96
Tennessee	6.33	6.05	5.99	6.09	6.00	5.38	5.07	5.85
Texas	4.96	4.72	4.54	4.41	4.68	4.48	4.18	4.31
Utah	3.78	3.99	4.02	3.82	3.60	3.37	3.09	3.81
Vermont	4.91	5.01	5.43	5.42	5.41	5.58	5.10	5.15
Virginia	6.55	6.58	6.56	6.66	6.08	6.29	6.27	5.91
Washington	4.87	4.90	5.29	4.93	4.63	4.80	4.19	4.68
West Virginia	6.76	7.54	8.13	8.42	7.68	6.72	6.34	6.14
Wisconsin	4.83	4.80	4.66	4.26	4.69	3.79	5.02	4.98
Wyoming	5.08	4.55	4.43	4.11	3.93	2.65	3.59	3.46
Total	5.73	5.57	5.43	5.35	5.64	5.39	5.46	5.72

NA = Not Available.

Notes: Data for 1997 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to commercial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 25 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				
				October	September	August	July	June
Alabama	3.22	3.61	3.53	3.18	2.95	3.06	3.15	3.11
Alaska	NA	1.54	1.43	NA	NA	NA	1.22	1.40
Arizona	3.38	3.68	3.80	3.11	3.22	3.20	3.36	3.51
Arkansas	3.42	3.61	3.11	3.24	3.04	3.09	3.47	3.28
California	3.61	4.03	3.64	2.77	3.46	3.28	3.48	3.38
Colorado	NA	3.49	0.58	2.12	1.90	NA	NA	NA
Connecticut	4.30	4.67	4.67	3.85	3.46	3.63	3.61	3.69
Delaware	4.22	4.31	4.24	3.75	4.39	5.12	4.32	4.35
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.33	4.34	4.17	4.47	4.05	4.02	4.37	4.20
Georgia	5.05	4.59	4.40	3.86	4.51	5.06	3.85	4.90
Hawaii	—	—	—	—	—	—	—	—
Idaho ^a	3.09	2.76	2.85	3.02	2.94	3.32	2.97	3.10
Illinois	4.00	3.88	4.12	3.32	3.71	4.38	3.10	4.49
Indiana	NA	4.39	3.56	NA	NA	NA	NA	4.53
Iowa	1.91	3.97	3.52	3.40	3.31	3.65	4.14	3.18
Kansas	2.87	3.25	2.89	2.76	2.06	2.45	2.44	3.11
Kentucky	3.85	4.04	3.78	3.71	3.66	3.71	3.61	3.48
Louisiana	NA	2.82	2.69	NA	1.85	1.98	2.30	2.43
Maine	4.89	5.33	4.91	4.22	3.92	3.80	4.17	4.10
Maryland	NA	3.22	5.50	NA	NA	4.69	6.15	NA
Massachusetts	NA	5.64	5.21	4.34	NA	4.36	4.83	4.89
Michigan	4.04	4.02	3.83	4.29	4.67	5.21	4.77	4.32
Minnesota	2.79	3.21	2.79	2.67	2.18	2.51	2.84	2.09
Mississippi	NA	3.49	3.30	NA	3.24	NA	NA	NA
Missouri	4.46	4.61	4.20	4.16	4.13	4.27	3.73	4.27
Montana	5.07	4.78	4.87	5.54	11.14	7.57	6.88	3.72
Nebraska	3.18	3.75	3.09	2.86	2.56	2.72	3.20	3.34
Nevada	4.89	7.60	4.96	4.39	4.35	4.46	5.86	5.81
New Hampshire	NA	4.66	4.58	NA	3.67	NA	3.58	3.38
New Jersey	NA	3.71	3.75	NA	NA	2.88	3.17	3.39
New Mexico	3.29	3.14	3.11	2.95	2.99	3.19	3.13	3.45
New York	NA	4.95	5.04	NA	NA	NA	NA	3.92
North Carolina	3.94	4.56	4.20	3.63	3.55	3.62	3.60	3.57
North Dakota	2.88	2.98	2.99	2.51	2.11	2.53	2.85	2.60
Ohio	NA	4.96	4.19	NA	5.78	7.46	NA	5.05
Oklahoma	3.75	4.12	3.17	3.64	3.40	3.44	3.41	3.43
Oregon	NA	2.99	3.23	3.96	3.57	3.80	NA	3.77
Pennsylvania	4.29	4.64	4.15	3.98	4.04	3.88	3.94	4.09
Rhode Island	NA	2.16	4.23	3.93	3.08	2.98	3.59	3.58
South Carolina	3.24	3.63	3.65	3.11	2.93	2.47	3.37	3.21
South Dakota	3.33	4.00	3.04	3.27	3.38	3.17	3.21	3.54
Tennessee	NA	4.06	3.86	3.30	3.34	3.38	4.37	3.50
Texas	NA	2.72	2.41	NA	1.87	2.15	2.53	2.24
Utah	3.05	2.45	2.07	3.03	3.08	3.36	3.20	2.78
Vermont	2.88	3.05	3.51	2.84	2.74	2.77	2.78	2.78
Virginia	3.87	4.55	4.18	4.00	3.16	3.33	3.61	3.44
Washington	NA	3.14	2.53	NA	NA	NA	NA	NA
West Virginia	NA	2.92	2.71	2.93	NA	NA	NA	NA
Wisconsin	3.85	3.98	3.26	3.38	3.02	3.49	3.76	3.44
Wyoming	NA	3.46	3.12	3.79	3.80	NA	NA	3.82
Total	3.13	3.49	3.27	2.75	2.64	2.73	2.99	2.95

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1998					1997		
	May	April	March	February	January	Total	December	November
Alabama	3.16	3.44	3.03	3.50	3.47	3.65	3.79	3.81
Alaska	1.43	1.42	1.45	1.52	1.56	1.54	1.56	1.55
Arizona	3.44	3.45	3.33	3.76	3.53	3.60	3.40	3.23
Arkansas	3.28	3.39	3.78	3.62	3.77	3.71	4.01	4.31
California	2.88	3.97	3.31	5.34	4.55	4.18	4.51	4.58
Colorado	2.48	2.26	2.62	2.58	2.69	3.66	3.79	4.91
Connecticut	4.13	4.55	4.74	5.13	5.12	4.73	5.10	4.94
Delaware	4.32	4.63	3.79	4.08	4.22	4.40	4.72	4.87
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.46	4.58	4.40	4.29	4.59	4.41	4.70	4.96
Georgia	5.30	5.15	5.18	5.37	5.63	4.56	4.22	4.63
Hawaii	—	—	—	—	—	10.79	—	—
Idaho ^a	3.09	3.10	3.25	3.02	3.06	2.76	2.77	2.74
Illinois	4.18	4.02	4.08	4.12	4.22	3.97	4.17	4.80
Indiana	4.51	NA	4.56	4.29	4.68	4.33	4.73	3.67
Iowa	3.39	0.73	0.64	2.42	3.43	4.11	4.55	4.53
Kansas	3.31	3.56	3.61	3.67	3.91	3.32	3.61	3.81
Kentucky	3.21	3.85	3.79	4.51	4.59	4.19	4.85	4.91
Louisiana	2.62	2.19	2.89	2.22	2.90	2.87	2.91	3.42
Maine	4.70	6.02	6.02	6.02	6.02	5.55	7.19	5.88
Maryland	5.02	5.10	4.68	4.82	5.42	3.25	3.76	3.64
Massachusetts	4.66	6.64	6.77	6.70	6.79	5.78	6.72	6.34
Michigan	4.01	3.81	3.61	4.11	3.90	4.02	4.02	4.07
Minnesota	3.03	3.06	3.08	3.00	3.25	3.28	3.24	3.87
Mississippi	NA	NA	NA	3.22	NA	3.55	3.60	4.12
Missouri	4.25	4.30	4.27	4.69	5.30	4.78	5.48	4.23
Montana	5.89	5.22	5.02	4.85	4.82	4.79	4.85	4.80
Nebraska	3.34	3.35	3.34	3.27	3.30	3.85	4.08	4.44
Nevada	5.94	5.84	6.00	6.06	5.90	7.77	7.98	9.55
New Hampshire	3.90	3.77	5.47	5.84	7.08	4.90	7.36	6.48
New Jersey	3.43	3.42	3.24	3.42	3.71	3.78	3.99	4.24
New Mexico	3.77	4.00	4.09	5.69	2.18	2.99	2.14	2.81
New York	NA	4.49	15.18	NA	NA	5.05	5.56	5.29
North Carolina	3.68	3.63	4.19	4.41	4.95	4.66	5.03	4.98
North Dakota	3.15	3.10	3.22	3.01	3.22	3.05	3.24	3.64
Ohio	4.98	5.21	5.67	5.06	5.62	4.93	4.84	4.79
Oklahoma	3.13	3.32	4.12	4.18	4.10	4.18	4.39	4.50
Oregon	3.75	NA	NA	3.73	3.67	3.03	3.32	3.10
Pennsylvania	4.05	4.40	4.57	4.55	4.80	4.61	4.62	4.32
Rhode Island	NA	3.86	4.06	4.25	4.59	4.33	3.77	2.92
South Carolina	3.31	3.42	3.53	3.38	3.67	3.72	4.00	4.31
South Dakota	3.44	3.37	3.38	3.25	3.30	4.02	3.72	4.37
Tennessee	3.54	3.64	3.59	3.98	NA	4.18	4.81	4.72
Texas	2.44	2.49	2.49	2.44	2.66	2.82	2.76	3.54
Utah	2.90	2.95	3.05	3.19	3.06	2.55	3.02	2.90
Vermont	2.87	2.86	2.94	3.01	3.06	3.07	3.11	3.12
Virginia	3.01	3.45	4.08	4.99	4.81	4.68	5.20	4.73
Washington	NA	NA	NA	NA	NA	3.16	3.08	3.38
West Virginia	NA	2.97	2.79	2.75	2.81	2.91	2.87	2.88
Wisconsin	3.69	4.20	4.17	4.48	3.79	4.13	4.53	5.05
Wyoming	4.19	4.12	NA	NA	3.29	3.49	3.65	3.66
Total	3.10	3.22	3.41	3.52	3.68	3.59	3.79	4.07

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	October	September	August	July	June	May	April	March
Alabama	3.85	3.38	3.38	3.24	3.37	3.35	3.14	3.34
Alaska	1.54	1.57	1.56	1.56	1.48	1.44	1.53	1.55
Arizona	3.71	3.29	3.13	3.19	3.94	3.94	4.35	4.10
Arkansas	3.90	3.61	3.40	3.35	3.40	3.20	3.22	3.34
California	4.36	3.54	3.43	3.81	4.05	2.57	3.51	4.32
Colorado	4.07	3.31	3.15	3.02	2.99	3.18	2.99	3.16
Connecticut	4.33	4.06	3.85	3.92	4.01	4.21	4.44	4.89
Delaware	4.63	4.13	4.14	4.11	4.06	3.69	3.65	4.43
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.78	4.56	4.41	4.11	4.19	4.13	4.20	4.20
Georgia	4.52	5.57	4.04	4.16	5.30	4.03	3.79	4.38
Hawaii	—	—	—	—	—	—	—	—
Idaho ^a	2.72	2.69	2.68	3.28	2.52	2.73	2.75	2.75
Illinois	3.77	3.23	3.78	3.50	2.67	2.53	3.46	4.05
Indiana	3.59	4.29	4.16	4.12	4.62	4.74	4.92	4.65
Iowa	4.41	3.89	3.51	4.10	3.36	3.95	3.13	4.03
Kansas	3.96	3.14	2.84	2.75	2.77	3.18	2.49	2.62
Kentucky	3.97	3.81	3.75	3.78	3.67	3.61	3.70	3.85
Louisiana	3.27	2.78	2.43	2.69	2.65	2.34	2.27	2.04
Maine	4.68	4.65	4.43	4.40	4.45	4.10	5.77	7.08
Maryland	2.99	3.33	3.07	3.68	3.20	3.22	13.80	3.88
Massachusetts	4.34	4.03	3.85	4.00	3.57	5.01	6.08	6.81
Michigan	4.33	3.99	4.35	4.41	4.23	4.07	3.95	3.98
Minnesota	3.83	3.10	2.77	2.78	2.75	2.72	2.60	2.74
Mississippi	3.93	3.43	3.23	3.15	3.27	3.12	3.04	2.98
Missouri	4.51	4.03	4.03	3.97	3.95	3.56	3.84	4.58
Montana	4.91	4.90	4.90	4.88	4.80	4.77	4.76	4.76
Nebraska	4.28	3.59	3.48	3.19	3.11	2.86	2.74	3.29
Nevada	11.41	9.10	7.31	6.98	7.39	7.66	5.72	4.60
New Hampshire	4.50	3.61	3.43	3.39	3.59	3.56	3.99	6.05
New Jersey	3.79	3.43	2.11	3.06	3.27	3.30	2.88	4.51
New Mexico	3.57	3.10	2.91	2.86	3.87	2.93	7.28	3.64
New York	4.69	3.47	3.69	3.82	3.93	4.27	4.66	5.42
North Carolina	4.07	4.24	4.16	3.95	3.59	3.96	4.08	4.73
North Dakota	3.84	3.16	3.46	2.97	2.85	2.29	2.24	1.51
Ohio	4.31	4.80	4.65	3.82	5.79	3.89	5.15	4.75
Oklahoma	4.22	3.59	3.46	3.44	3.41	2.83	3.17	4.02
Oregon	2.86	2.78	2.69	2.89	2.88	2.95	3.03	3.12
Pennsylvania	4.36	4.13	4.04	4.47	4.58	4.36	4.61	4.78
Rhode Island	2.49	3.08	2.19	2.13	1.64	1.94	1.09	1.62
South Carolina	4.02	3.27	3.29	3.44	3.36	3.30	3.25	3.47
South Dakota	4.65	4.17	3.97	4.50	4.09	3.55	3.12	3.00
Tennessee	4.47	3.95	3.51	3.18	3.77	3.50	3.53	4.22
Texas	3.33	2.69	2.32	2.42	2.49	2.33	2.05	2.10
Utah	2.73	2.54	2.73	2.63	2.21	2.21	2.25	2.46
Vermont	2.97	3.00	2.96	2.97	3.01	3.05	2.98	3.10
Virginia	3.92	4.32	4.32	4.53	4.18	4.47	2.15	4.91
Washington	2.86	2.69	2.71	2.87	2.90	3.03	2.83	2.97
West Virginia	2.97	2.93	2.82	2.91	2.72	2.81	2.49	2.82
Wisconsin	4.23	3.62	3.34	3.32	3.39	3.00	3.92	3.54
Wyoming	3.42	3.42	3.44	3.48	3.45	3.34	3.51	3.51
Total	3.69	3.25	2.90	3.06	3.10	2.96	3.02	3.35

^{NA} = Not Available.
 — = Not Applicable.

Notes: Data for 1997 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Average prices for gas delivered to industrial consumers reflect onsystem sales prices only. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy. See Table 25 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries. In 1996, consumption of natural gas for agricultural use is classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use. See Explanatory Note 5 for further explanation.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

**Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers,
by State, 1996-1998**
(Dollars per Thousand Cubic Feet)

State	YTD 1998	YTD 1997	YTD 1996	1998				
				September	August	July	June	May
Alabama	2.54	2.63	2.76	2.46	2.50	2.63	2.49	2.62
Alaska	1.83	1.70	1.39	1.73	1.76	1.80	1.87	1.84
Arizona	2.45	2.97	2.96	2.33	2.28	2.41	2.79	3.20
Arkansas	2.28	2.54	2.46	2.15	2.05	2.49	2.33	2.33
California	2.79	3.01	2.57	2.50	2.83	2.92	2.70	2.94
Colorado	2.84	3.30	1.82	2.82	3.31	2.77	2.83	2.56
Connecticut	2.43	2.42	2.66	2.22	2.34	2.46	2.38	2.56
Delaware	2.82	3.06	3.28	2.41	2.66	3.47	3.27	1.34
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.33	2.44	3.08	2.18	2.18	2.27	2.31	2.31
Georgia	3.16	2.68	2.99	4.00	2.82	3.18	2.91	3.72
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.25	2.39	2.58	2.01	1.95	2.27	2.37	2.37
Indiana	2.85	3.07	3.31	2.74	2.58	2.80	2.95	2.98
Iowa	2.99	3.15	3.07	2.91	2.80	3.01	2.86	3.16
Kansas	2.12	2.24	2.20	1.87	1.99	2.28	2.14	2.20
Kentucky	3.12	3.15	3.40	2.42	2.43	2.86	3.68	3.59
Louisiana	2.41	2.68	2.90	2.12	2.17	2.59	2.40	2.52
Maine	—	—	—	—	—	—	—	—
Maryland	2.75	2.84	3.07	2.53	2.49	2.84	2.93	2.96
Massachusetts	2.85	2.94	3.03	2.13	2.35	2.62	2.24	2.86
Michigan	1.21	0.69	0.78	1.67	1.38	1.34	1.29	1.20
Minnesota	2.40	2.42	2.20	2.00	2.41	2.48	2.42	2.74
Mississippi	2.36	2.64	2.92	2.16	2.16	2.47	2.36	2.41
Missouri	2.22	2.56	2.53	2.13	1.95	2.39	2.41	2.31
Montana	4.32	8.47	6.57	1.02	4.99	2.47	2.59	5.34
Nebraska	2.37	2.38	1.95	1.93	2.49	2.62	2.37	2.40
Nevada	2.40	2.09	2.02	2.42	2.42	2.34	2.73	2.44
New Hampshire	—	2.71	—	—	—	—	—	—
New Jersey	2.73	2.91	2.96	2.56	2.46	2.92	2.73	2.77
New Mexico	2.24	2.56	2.10	1.90	2.03	2.32	2.20	2.33
New York	2.58	2.73	2.90	2.21	2.29	2.63	2.51	2.64
North Carolina	2.72	3.08	3.11	2.53	2.55	2.92	2.78	2.89
North Dakota	—	3.81	3.06	—	—	—	—	—
Ohio	3.46	3.57	3.15	4.09	3.93	2.98	2.79	3.06
Oklahoma	2.49	2.82	2.88	2.16	2.07	2.52	2.41	2.52
Oregon	1.39	1.50	1.25	1.48	1.56	1.46	1.31	1.50
Pennsylvania	3.18	2.76	2.84	3.74	2.63	3.18	2.32	5.37
Rhode Island	3.38	3.18	2.23	—	3.40	3.38	3.40	3.43
South Carolina	3.60	4.15	4.09	3.37	3.53	3.58	3.92	3.41
South Dakota	1.77	—	2.36	1.77	—	—	—	—
Tennessee	—	—	1.20	—	—	—	—	—
Texas	2.32	2.59	2.44	2.05	2.11	2.46	2.34	2.38
Utah	2.04	2.12	2.74	1.95	2.04	2.15	1.94	—
Vermont	2.90	3.04	3.07	2.54	2.67	3.09	2.81	3.03
Virginia	2.97	2.83	2.97	2.76	2.60	3.02	2.93	2.99
Washington	2.79	NA	4.68	—	—	—	—	—
West Virginia	4.26	3.97	3.53	2.94	3.85	6.31	2.62	3.58
Wisconsin	2.69	2.96	2.82	2.31	2.49	2.80	2.64	2.95
Wyoming	8.60	13.10	10.28	6.64	67.70	8.23	7.66	11.70
Total	2.40	2.64	2.62	2.16	2.21	2.50	2.40	2.46

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers, by State, 1996-1998

(Dollars per Thousand Cubic Feet) — Continued

State	1998				1997			
	April	March	February	January	Total	December	November	October
Alabama	2.69	2.55	2.44	2.86	2.86	2.90	3.70	3.75
Alaska	1.84	1.85	1.88	1.85	1.74	1.84	1.84	1.85
Arizona	2.82	3.07	2.56	2.84	2.99	2.86	4.00	3.11
Arkansas	2.56	2.36	2.16	2.25	2.69	2.24	3.12	3.12
California	2.71	2.85	2.79	2.94	3.08	2.96	3.64	3.40
Colorado	2.53	2.61	2.65	3.01	3.16	2.93	3.90	2.37
Connecticut	2.70	2.79	2.63	2.74	2.47	2.74	3.38	2.76
Delaware	1.41	4.15	3.21	5.34	3.15	4.28	2.58	5.69
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.68	2.64	2.49	2.25	2.51	2.52	3.29	3.21
Georgia	1.94	1.72	2.88	2.35	2.72	4.97	3.33	3.94
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.55	2.34	2.28	2.25	2.55	2.48	3.31	3.13
Indiana	3.37	3.25	2.64	3.84	3.23	3.67	4.03	5.25
Iowa	3.14	3.35	3.00	3.36	3.41	2.99	4.16	3.81
Kansas	2.40	2.36	1.97	3.35	2.53	3.33	3.02	3.06
Kentucky	5.25	4.04	3.58	3.46	3.45	3.47	4.24	4.00
Louisiana	2.66	2.51	2.47	2.61	2.79	2.86	3.61	3.40
Maine	—	—	—	—	—	—	—	—
Maryland	3.33	3.18	3.32	3.75	2.97	3.61	4.10	3.91
Massachusetts	3.66	3.64	2.95	3.16	3.11	3.57	4.08	4.10
Michigan	1.35	0.75	0.84	0.51	0.79	0.47	1.08	1.58
Minnesota	2.76	2.83	2.62	2.63	2.44	2.99	3.72	3.67
Mississippi	2.56	2.46	2.46	2.48	2.72	2.80	3.51	3.35
Missouri	2.56	2.52	2.82	2.63	2.81	2.77	3.52	3.35
Montana	1.40	12.33	8.49	4.61	NA	4.18	6.84	2.98
Nebraska	1.98	2.72	4.47	2.72	2.86	4.94	4.29	3.21
Nevada	2.31	2.02	2.37	2.41	2.18	2.16	2.80	2.64
New Hampshire	—	—	—	—	2.71	—	—	—
New Jersey	3.05	2.88	2.83	2.98	3.06	3.20	4.19	4.23
New Mexico	2.41	2.39	2.30	2.43	2.64	2.55	3.02	3.05
New York	2.87	2.96	2.95	3.00	2.88	3.38	3.83	3.37
North Carolina	3.37	4.03	—	3.02	3.22	3.60	4.95	3.68
North Dakota	—	—	—	—	3.43	—	—	—
Ohio	4.01	4.14	3.16	3.32	3.72	4.13	4.12	4.00
Oklahoma	2.88	2.62	2.72	4.47	2.97	2.89	4.05	3.46
Oregon	1.36	1.23	1.03	1.14	1.49	1.48	1.44	1.45
Pennsylvania	5.94	2.69	2.64	2.79	3.02	3.16	3.69	3.65
Rhode Island	3.45	3.19	3.24	3.48	3.35	3.78	4.05	4.02
South Carolina	3.44	3.58	3.53	4.05	4.07	4.46	4.00	4.10
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.52	2.43	2.41	2.49	2.69	2.74	3.33	3.15
Utah	—	—	—	—	2.09	—	—	2.00
Vermont	3.08	2.81	2.77	3.02	3.16	3.42	4.21	3.96
Virginia	4.46	3.34	3.78	3.05	2.93	2.54	4.09	4.73
Washington	5.59	3.86	4.11	1.64	NA	5.73	5.16	4.21
West Virginia	—	—	—	5.59	3.35	3.31	3.00	3.29
Wisconsin	3.13	2.75	2.91	2.90	3.17	2.92	4.11	3.94
Wyoming	4.77	10.42	8.72	5.39	NA	1.63	3.43	4.88
Total	2.59	2.54	2.51	2.64	2.74	2.77	3.41	3.24

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers, by State, 1996-1998
(Dollars per Thousand Cubic Feet) — Continued

State	1997							
	September	August	July	June	May	April	March	February
Alabama	2.88	2.56	2.51	2.65	2.44	3.21	2.12	2.04
Alaska	1.88	1.69	1.87	1.79	1.64	1.63	1.55	1.69
Arizona	3.37	2.63	2.20	3.03	3.11	4.47	2.85	4.01
Arkansas	2.89	2.64	2.38	2.40	1.92	1.98	1.60	1.92
California	3.14	2.77	2.68	2.77	2.60	2.66	3.04	4.14
Colorado	2.42	2.77	4.07	2.31	6.20	2.47	2.26	3.32
Connecticut	2.37	2.35	2.33	2.26	2.22	2.22	2.45	3.08
Delaware	3.40	3.00	2.83	1.95	3.68	2.53	2.61	2.90
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.03	2.50	2.30	2.33	2.09	2.26	2.05	2.13
Georgia	3.07	2.27	2.75	3.13	2.64	2.64	3.34	8.15
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.82	2.39	2.31	2.37	2.29	2.12	2.00	2.97
Indiana	3.67	3.39	2.77	2.99	3.06	2.88	2.74	3.74
Iowa	3.28	3.12	2.70	3.28	2.89	2.79	2.73	3.74
Kansas	2.70	2.13	2.06	2.11	2.14	2.00	1.80	2.92
Kentucky	3.25	2.92	2.87	2.96	2.83	3.13	3.20	3.69
Louisiana	3.03	2.60	2.44	2.65	2.45	2.18	2.10	2.93
Maine	—	—	—	—	—	—	—	—
Maryland	3.42	2.89	2.35	2.69	2.98	3.14	4.18	5.75
Massachusetts	3.21	2.87	2.81	2.92	2.84	2.54	2.64	3.29
Michigan	0.73	0.58	0.96	0.89	0.42	0.61	0.69	0.59
Minnesota	3.56	2.43	2.43	2.34	2.30	2.34	2.17	3.35
Mississippi	3.02	2.61	2.46	2.52	2.37	2.27	2.08	2.61
Missouri	2.94	2.51	2.39	2.44	2.74	2.77	2.26	4.62
Montana	64.31	1.92	1.37	9.35	13.57	2.87	4.08	9.68
Nebraska	2.98	2.49	2.32	2.00	1.89	1.89	2.29	3.20
Nevada	2.39	2.02	1.98	2.09	1.99	2.02	2.05	2.33
New Hampshire	2.85	2.55	2.74	2.72	2.68	—	—	—
New Jersey	3.42	2.87	2.80	2.85	2.76	2.69	2.57	3.60
New Mexico	2.82	2.47	2.46	2.38	2.39	2.07	2.01	2.85
New York	2.89	2.60	2.58	2.65	2.62	2.53	2.56	3.35
North Carolina	3.38	3.09	3.12	2.87	2.64	2.79	—	—
North Dakota	—	—	4.00	—	4.14	3.98	2.93	—
Ohio	4.35	4.28	3.10	3.20	4.13	4.06	4.03	4.16
Oklahoma	3.20	2.49	2.37	2.63	2.91	2.57	2.57	4.36
Oregon	1.49	1.49	1.35	1.57	—	—	1.40	—
Pennsylvania	2.99	2.81	2.54	3.04	2.57	2.31	2.22	2.91
Rhode Island	3.32	3.04	2.98	3.21	3.09	2.82	2.90	4.09
South Carolina	4.54	4.54	4.35	3.51	3.84	3.87	2.84	4.22
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.85	2.50	2.39	2.46	2.34	2.14	2.12	2.84
Utah	2.66	1.79	1.86	4.82	—	—	—	—
Vermont	3.23	2.90	2.95	3.06	2.83	2.27	2.61	3.60
Virginia	3.77	2.95	2.58	2.93	3.05	2.71	2.76	1.80
Washington	8.62	0.67	4.83	3.83	7.21	5.93	NA	4.50
West Virginia	3.41	3.71	3.79	3.23	3.22	3.63	3.82	7.68
Wisconsin	3.09	2.85	3.12	2.81	2.58	2.46	2.33	3.42
Wyoming	7.74	34.13	20.44	4.00	11.82	24.02	22.85	2.47
Total	2.96	2.53	2.44	2.52	2.41	2.30	2.29	2.97

^a Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.

NA = Not Available.

— = Not Applicable.

Notes: Data for 1997 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. See Appendix A, Explanatory Note 5 for discussion of computations and revision policy.

Sources: Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998

State	YTD 1998		YTD 1997		YTD 1996		1998	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	October	
							Commercial	Industrial
Alabama	69.8	15.4	61.9	24.0	81.9	22.6	63.6	14.7
Alaska	57.3	NA	54.9	97.4	64.4	63.1	56.1	100.0
Arizona	85.0	33.2	84.6	23.5	85.4	19.8	79.5	36.6
Arkansas	NA	9.4	94.4	10.5	95.0	12.9	45.5	11.4
California	44.2	10.7	50.2	9.1	54.1	10.3	32.4	11.6
Colorado	NA	NA	93.1	23.5	93.0	21.1	85.2	0.2
Connecticut	68.9	55.9	84.0	67.1	87.1	86.4	61.4	54.1
Delaware	100.0	21.4	100.0	31.7	100.0	38.4	100.0	17.8
District of Columbia	51.4	—	54.2	—	72.9	—	37.5	—
Florida	96.3	4.1	97.8	10.4	97.2	13.1	95.1	3.2
Georgia	83.0	13.0	88.8	26.1	94.4	32.9	72.2	9.4
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	86.5	2.5	86.3	2.0	86.6	1.4	74.9	2.6
Illinois	47.8	8.1	54.9	11.7	53.6	12.4	40.5	8.2
Indiana	NA	NA	88.3	15.3	96.1	16.1	NA	NA
Iowa	81.0	9.9	88.4	8.0	87.9	7.6	76.2	7.2
Kansas	69.2	8.5	70.8	9.8	70.5	7.7	58.5	5.4
Kentucky	86.3	13.7	89.7	19.5	90.9	28.2	82.3	13.0
Louisiana	NA	NA	95.9	10.4	98.3	NA	NA	NA
Maine	100.0	90.5	100.0	91.6	100.0	91.0	100.0	86.8
Maryland	NA	NA	69.8	9.5	91.6	11.6	NA	NA
Massachusetts	NA	NA	61.8	20.3	77.2	26.2	47.6	26.5
Michigan	57.5	6.4	63.3	8.6	66.3	8.8	45.9	5.1
Minnesota	95.1	41.4	98.9	40.0	96.5	40.5	97.5	35.5
Mississippi	NA	NA	94.9	39.6	97.5	41.2	NA	NA
Missouri	78.2	17.4	79.6	21.4	82.1	23.8	65.7	12.3
Montana	NA	2.7	91.4	3.0	91.4	3.2	73.9	1.6
Nebraska	76.2	17.1	74.0	26.2	69.1	19.7	80.1	15.9
Nevada	71.8	3.8	71.4	1.8	74.5	1.6	63.7	27.4
New Hampshire	NA	NA	92.6	51.6	97.5	55.9	NA	NA
New Jersey	NA	NA	58.0	46.7	74.3	55.3	NA	NA
New Mexico	59.5	13.2	72.8	28.1	63.0	2.3	52.4	7.9
New York	NA	NA	64.1	8.2	NA	10.0	NA	NA
North Carolina	89.2	25.2	93.5	42.6	96.6	57.0	80.3	21.1
North Dakota	72.5	27.2	89.4	18.9	87.2	20.2	52.5	29.6
Ohio	NA	NA	65.0	5.5	71.3	7.0	NA	NA
Oklahoma	73.9	3.4	82.9	4.6	84.2	6.4	57.4	1.8
Oregon	NA	NA	98.5	16.6	98.3	18.7	98.4	12.2
Pennsylvania	NA	13.3	63.5	14.0	73.1	18.3	54.4	11.4
Rhode Island	NA	NA	82.8	18.5	92.6	17.4	49.2	34.6
South Carolina	97.8	86.9	98.8	86.9	99.0	85.4	96.4	87.5
South Dakota	84.0	31.1	82.8	21.6	83.0	24.8	95.7	33.9
Tennessee	NA	NA	91.7	38.5	94.3	48.3	68.2	14.9
Texas	53.6	14.3	60.2	17.8	NA	20.7	47.7	15.1
Utah	82.0	8.6	82.6	8.9	81.5	8.9	80.2	10.2
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	70.4	12.2	77.7	10.7	84.9	17.0	61.6	10.7
Washington	NA	NA	89.4	24.0	85.8	24.4	NA	NA
West Virginia	NA	NA	54.0	12.3	54.1	14.2	29.7	8.1
Wisconsin	69.1	18.9	81.3	27.1	91.7	36.9	67.7	16.7
Wyoming	NA	NA	82.2	2.6	91.3	3.1	82.5	2.0
Total	64.1	14.5	70.6	17.8	77.8	19.4	55.0	14.2

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1998							
	September		August		July		June	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	69.1	14.2	72.0	12.9	71.8	14.5	74.7	14.5
Alaska	54.9	NA	57.0	NA	56.0	96.5	53.6	100.0
Arizona	83.4	33.3	82.7	32.6	84.1	32.8	86.2	33.8
Arkansas	44.2	10.4	46.1	8.7	48.8	7.7	NA	9.0
California	28.4	9.3	24.6	8.2	31.4	9.5	52.9	11.2
Colorado	85.8	—	91.3	NA	NA	NA	91.8	NA
Connecticut	55.3	59.6	58.1	51.5	62.4	57.1	61.2	52.9
Delaware	100.0	17.5	100.0	11.3	100.0	17.8	100.0	19.3
District of Columbia	36.5	—	35.4	—	40.4	—	41.9	—
Florida	96.5	3.9	96.3	6.1	96.0	4.2	96.6	4.3
Georgia	71.1	14.4	68.9	7.0	68.9	5.1	79.0	15.1
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	80.3	2.5	83.1	3.5	83.9	2.7	85.3	1.8
Illinois	43.2	7.0	37.9	6.0	35.4	4.9	45.8	5.2
Indiana	NA	4.2						
Iowa	76.8	6.4	79.7	5.2	69.6	5.3	70.3	4.5
Kansas	55.4	13.8	59.9	10.4	58.8	13.4	54.2	10.7
Kentucky	81.6	12.0	78.9	11.6	76.4	15.2	82.6	13.8
Louisiana	68.4	8.8	69.5	7.5	69.7	6.9	NA	7.0
Maine	100.0	87.1	100.0	85.7	100.0	84.1	100.0	87.9
Maryland	NA	NA	31.1	6.2	29.0	2.5	33.3	NA
Massachusetts	NA	NA	51.3	18.1	48.4	16.8	46.3	NA
Michigan	41.1	5.0	35.9	3.8	38.1	4.4	40.8	4.8
Minnesota	98.3	78.1	98.1	36.9	97.2	34.8	98.2	40.7
Mississippi	NA	27.1	NA	NA	94.3	NA	94.9	NA
Missouri	69.2	12.7	43.6	12.2	65.6	16.4	69.4	13.0
Montana	68.2	0.9	73.4	1.2	69.1	0.7	75.3	4.4
Nebraska	75.1	40.8	81.5	10.4	65.6	5.7	66.3	13.5
Nevada	56.6	20.7	56.4	19.1	66.3	4.0	70.9	4.6
New Hampshire	91.9	21.5	NA	NA	89.1	34.9	NA	32.7
New Jersey	NA	NA	50.0	33.4	47.4	25.6	51.5	27.7
New Mexico	45.9	12.9	45.9	15.1	46.7	17.9	39.7	13.9
New York	NA	NA	45.7	NA	49.6	NA	47.4	6.9
North Carolina	82.3	18.0	83.8	21.3	83.3	26.4	82.5	24.3
North Dakota	18.9	27.9	67.7	18.9	80.8	22.9	82.1	24.3
Ohio	41.7	1.2	35.3	0.8	NA	NA	44.7	1.3
Oklahoma	57.9	1.8	56.4	1.8	55.4	2.1	63.6	2.2
Oregon	98.7	12.0	98.7	13.4	98.9	NA	98.9	14.9
Pennsylvania	57.4	12.1	NA	11.6	51.4	12.3	54.9	12.7
Rhode Island	49.3	33.7	100.0	34.2	48.5	31.2	53.3	33.4
South Carolina	96.7	88.3	96.8	88.1	97.4	87.5	97.4	88.2
South Dakota	73.5	20.8	74.8	17.1	75.4	22.5	72.8	24.9
Tennessee	66.7	19.9	63.0	21.3	63.7	20.3	66.6	23.3
Texas	36.5	15.8	34.2	14.7	48.8	12.1	63.8	15.2
Utah	77.6	9.2	71.6	8.7	70.7	7.5	75.6	9.1
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	57.6	8.5	50.8	13.2	69.4	8.4	66.8	9.3
Washington	NA							
West Virginia	28.9	NA	25.6	NA	7.6	NA	NA	NA
Wisconsin	35.9	15.4	48.0	12.3	45.1	12.6	52.4	15.5
Wyoming	83.8	2.5	91.8	NA	NA	NA	NA	2.3
Total	49.4	14.5	46.8	13.6	51.3	12.7	59.9	13.9

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1998							
	May		April		March		February	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	35.4	13.3	80.2	14.8	77.8	17.4	80.1	17.8
Alaska	55.9	100.0	57.4	100.0	57.6	100.0	60.0	100.0
Arizona	83.3	35.8	84.9	32.7	86.7	34.0	87.2	27.7
Arkansas	88.7	9.0	89.5	9.1	93.9	10.2	95.3	10.9
California	48.3	11.7	52.7	10.9	71.1	16.5	54.3	8.7
Colorado	95.0	1.0	95.8	0.8	96.0	1.2	95.2	1.2
Connecticut	76.3	55.7	62.3	61.9	71.2	59.4	78.2	57.8
Delaware	100.0	19.5	100.0	23.3	100.0	27.9	100.0	28.6
District of Columbia	47.7	—	52.5	—	60.1	—	59.0	—
Florida	96.7	3.5	96.8	4.5	96.2	4.4	96.3	4.0
Georgia	82.0	15.7	85.5	13.4	87.5	17.2	90.3	16.7
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	85.4	2.2	86.4	2.2	88.1	2.0	88.7	3.0
Illinois	34.8	6.8	44.3	9.1	55.3	10.6	50.4	9.8
Indiana	76.7	6.2	NA	NA	88.6	12.3	84.6	11.1
Iowa	87.3	5.4	82.8	19.9	72.1	22.8	88.7	7.1
Kansas	68.5	8.1	69.5	5.6	76.9	5.5	73.1	5.3
Kentucky	84.2	14.7	85.7	14.7	90.0	13.1	86.5	17.2
Louisiana	96.5	7.3	98.1	7.2	58.2	9.8	60.9	6.0
Maine	100.0	84.1	100.0	97.9	100.0	97.9	100.0	97.9
Maryland	29.7	9.0	42.9	1.6	50.9	5.1	54.7	3.7
Massachusetts	52.8	28.8	60.0	27.5	65.5	29.0	61.4	32.5
Michigan	42.2	5.9	58.3	9.6	64.3	12.1	65.2	12.6
Minnesota	98.5	35.1	96.1	38.9	96.2	48.8	93.3	37.4
Mississippi	93.6	NA	93.3	NA	89.6	NA	94.8	38.5
Missouri	75.7	14.0	82.0	17.4	83.3	21.5	85.4	24.0
Montana	NA	1.2	79.4	2.2	83.1	3.5	83.1	4.3
Nebraska	74.0	14.8	71.5	21.3	77.3	24.0	78.0	23.2
Nevada	71.9	4.8	73.2	5.8	75.9	7.1	79.8	15.3
New Hampshire	94.3	38.9	96.2	47.0	96.1	39.1	96.2	37.2
New Jersey	46.0	26.4	55.2	29.2	62.4	29.5	62.1	34.6
New Mexico	48.8	10.0	57.3	6.5	66.7	1.5	63.8	1.8
New York	NA	NA	58.1	10.1	NA	10.1	NA	NA
North Carolina	86.7	26.9	90.6	31.2	91.1	26.6	93.1	27.3
North Dakota	79.2	15.4	80.0	25.3	87.0	32.1	84.9	33.3
Ohio	41.4	1.5	53.9	2.7	60.1	3.2	60.2	4.7
Oklahoma	70.4	2.9	75.0	4.9	77.7	5.2	83.2	5.2
Oregon	98.8	15.0	NA	NA	NA	NA	99.2	15.3
Pennsylvania	59.4	13.2	NA	13.3	57.7	14.2	57.2	15.2
Rhode Island	58.6	NA	NA	41.2	64.7	49.9	71.6	38.5
South Carolina	98.2	87.7	98.4	86.0	98.2	84.9	98.4	85.4
South Dakota	65.9	15.8	93.7	56.2	85.6	37.9	85.7	45.9
Tennessee	77.4	23.9	75.8	29.3	93.1	28.1	87.8	25.5
Texas	55.9	14.1	59.8	14.5	61.3	15.2	71.6	15.5
Utah	73.7	8.9	82.5	7.9	81.2	8.6	89.1	8.5
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	70.0	13.0	70.9	11.2	73.4	19.2	76.7	14.6
Washington	NA							
West Virginia	29.0	NA	50.3	5.8	51.9	6.2	55.5	14.9
Wisconsin	53.8	15.1	72.9	19.3	77.6	23.4	80.3	23.8
Wyoming	89.8	1.8	92.1	3.4	87.4	NA	80.3	NA
Total	60.2	13.9	67.0	15.0	71.6	16.5	71.0	15.3

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1998		1997					
	January		Total		December		November	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	76.7	19.4	64.7	24.6	80.9	27.9	69.1	26.4
Alaska	59.9	100.0	54.5	97.8	54.2	100.0	51.9	100.0
Arizona	86.9	32.3	84.6	25.1	85.2	33.0	83.2	31.2
Arkansas	95.5	10.5	94.2	10.5	95.9	10.4	90.4	11.2
California	58.1	11.0	50.7	8.9	52.9	9.3	49.4	7.4
Colorado	95.4	2.5	92.8	23.6	93.0	23.7	89.8	25.1
Connecticut	78.4	61.0	81.9	66.4	77.0	61.7	71.1	65.9
Delaware	100.0	26.4	100.0	31.0	100.0	28.1	100.0	28.0
District of Columbia	60.2	—	54.9	100.0	55.9	100.0	60.4	100.0
Florida	96.3	4.5	97.5	10.0	96.0	8.4	96.4	8.1
Georgia	88.7	16.5	89.1	26.7	91.6	32.7	88.6	27.6
Hawaii	100.0	—	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	90.0	2.5	86.1	2.0	86.6	2.0	83.2	1.8
Illinois	53.7	10.7	54.3	11.5	52.1	11.9	52.5	9.4
Indiana	85.7	11.2	89.8	16.0	94.1	15.4	96.0	22.6
Iowa	87.4	7.4	88.2	8.6	89.3	9.3	85.0	13.4
Kansas	71.5	5.1	70.7	9.5	73.3	7.5	66.0	9.9
Kentucky	90.0	12.3	90.0	19.2	91.3	17.6	89.9	18.7
Louisiana	74.1	5.4	95.9	10.1	96.5	7.9	95.1	9.3
Maine	100.0	97.9	100.0	91.4	100.0	88.7	100.0	91.4
Maryland	65.6	0.7	67.1	7.4	52.7	1.1	64.7	3.3
Massachusetts	64.3	30.3	62.6	20.2	68.5	19.2	62.9	21.0
Michigan	69.5	13.5	63.7	9.0	65.6	11.8	64.8	9.5
Minnesota	91.9	45.0	98.8	40.4	98.5	40.9	99.1	42.9
Mississippi	95.3	NA	94.8	39.6	95.0	41.1	94.0	38.0
Missouri	85.2	23.7	79.9	21.8	82.6	23.3	78.3	23.8
Montana	88.3	4.7	91.4	3.1	92.8	3.7	90.5	2.8
Nebraska	79.9	30.1	74.2	27.0	77.2	25.6	72.3	41.2
Nevada	77.3	7.2	71.4	1.8	72.7	2.1	67.9	1.6
New Hampshire	96.4	30.4	92.4	48.8	93.9	32.4	89.1	34.2
New Jersey	59.4	31.7	56.2	47.0	52.0	49.0	48.2	48.3
New Mexico	71.1	8.2	74.6	5.7	81.5	7.8	78.0	6.8
New York	NA	NA	64.7	8.5	67.8	10.3	65.7	10.0
North Carolina	93.4	27.6	94.4	45.5	95.7	35.7	99.4	81.7
North Dakota	89.1	36.1	88.9	18.5	84.4	15.3	90.5	17.7
Ohio	60.5	4.5	65.6	5.7	67.1	7.3	67.3	6.1
Oklahoma	81.1	6.3	81.8	4.7	81.8	5.4	71.4	4.3
Oregon	99.3	19.7	98.5	16.3	98.4	16.0	98.4	14.5
Pennsylvania	58.7	16.3	63.6	14.2	63.9	15.3	63.8	14.8
Rhode Island	64.5	39.7	80.5	17.5	64.0	11.4	80.7	13.5
South Carolina	98.1	85.8	98.8	86.9	98.0	84.7	100.0	89.1
South Dakota	86.5	45.2	83.3	24.1	86.0	34.2	84.0	37.4
Tennessee	NA	NA	92.2	38.3	92.9	35.3	95.0	39.8
Texas	68.3	12.3	61.4	17.3	68.3	14.6	63.7	14.1
Utah	85.7	7.8	83.3	8.9	86.1	8.2	83.1	9.5
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	74.4	18.7	77.9	13.0	71.3	19.4	90.2	28.8
Washington	NA	NA	84.1	23.5	93.4	19.3	54.5	24.0
West Virginia	56.0	6.3	54.6	12.2	58.9	11.7	53.4	12.7
Wisconsin	85.4	26.0	82.1	27.1	83.1	26.6	85.9	27.6
Wyoming	NA	1.5	84.2	2.5	96.2	2.7	88.2	1.8
Total	72.4	14.9	70.8	17.7	72.8	17.2	70.4	18.0

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

State	1997							
	October		September		August		July	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	51.0	24.5	40.8	24.3	31.8	24.7	29.1	25.5
Alaska	52.2	100.0	49.9	100.0	45.0	92.8	49.9	91.4
Arizona	81.1	30.2	83.9	29.5	78.7	29.3	79.8	30.5
Arkansas	92.6	9.7	91.3	8.3	91.8	7.3	90.3	8.5
California	41.9	6.1	41.0	8.6	41.7	7.2	45.8	7.3
Colorado	86.9	28.3	90.2	24.6	83.1	23.6	86.2	33.3
Connecticut	68.6	65.9	75.0	64.2	80.2	60.8	76.0	62.2
Delaware	100.0	29.9	100.0	27.7	100.0	28.4	100.0	28.4
District of Columbia	44.5	100.0	35.5	100.0	38.8	100.0	43.9	100.0
Florida	97.5	8.8	97.8	8.9	97.9	9.3	97.7	9.5
Georgia	85.6	30.8	82.9	15.5	81.9	26.1	81.0	27.6
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	76.4	1.5	82.5	1.7	82.9	1.4	83.2	2.0
Illinois	50.4	9.1	47.7	12.1	40.3	6.2	46.7	4.0
Indiana	93.9	16.1	87.2	10.3	86.8	9.5	85.4	11.0
Iowa	80.1	11.5	77.9	6.7	85.1	6.7	75.8	6.1
Kansas	73.6	9.9	57.3	10.9	52.2	11.9	54.0	9.2
Kentucky	89.9	19.5	84.9	16.3	80.3	14.4	84.0	15.4
Louisiana	94.7	9.9	94.3	9.0	95.1	9.9	95.2	9.9
Maine	100.0	88.4	100.0	86.7	100.0	87.6	100.0	100.0
Maryland	51.8	7.0	48.6	2.7	50.4	6.4	51.6	4.4
Massachusetts	48.7	16.8	43.8	16.6	41.3	13.6	46.0	14.4
Michigan	54.2	4.0	39.7	2.7	40.7	3.4	55.7	3.7
Minnesota	98.6	38.7	97.7	42.0	98.2	34.8	98.4	36.2
Mississippi	91.2	40.2	91.0	42.9	93.6	38.6	96.1	35.0
Missouri	68.6	19.7	68.3	22.6	68.4	17.0	68.3	18.4
Montana	88.1	2.3	85.7	1.9	87.5	1.9	90.5	1.7
Nebraska	50.0	22.2	63.2	26.5	69.2	18.6	67.6	41.2
Nevada	65.9	1.2	63.0	1.1	63.2	1.6	73.3	1.8
New Hampshire	85.7	44.2	87.2	49.6	88.1	47.0	87.0	50.6
New Jersey	47.0	42.8	47.2	43.6	47.8	57.0	44.8	42.1
New Mexico	67.0	4.6	63.3	7.0	63.7	8.8	63.9	8.9
New York	59.3	7.6	56.2	7.4	54.7	7.7	53.3	6.0
North Carolina	98.2	73.8	86.9	25.2	85.0	21.1	85.2	24.3
North Dakota	83.2	11.9	72.5	8.4	65.5	12.6	81.5	13.9
Ohio	55.1	2.7	50.5	2.2	49.3	2.9	47.5	2.9
Oklahoma	76.9	3.1	69.9	3.2	68.1	3.0	74.1	3.9
Oregon	97.5	14.1	98.0	12.1	98.3	11.4	98.3	13.3
Pennsylvania	50.1	12.6	57.8	12.1	58.4	12.4	55.8	10.9
Rhode Island	71.1	21.1	68.7	17.1	67.9	20.7	71.1	15.2
South Carolina	99.9	89.8	98.8	87.5	97.0	85.3	99.9	91.1
South Dakota	68.3	17.8	59.9	14.0	72.1	12.6	78.3	12.0
Tennessee	89.9	37.3	85.3	33.1	84.9	29.4	85.2	35.1
Texas	55.0	14.7	52.9	15.2	51.7	15.4	51.2	15.0
Utah	80.2	8.9	74.8	11.7	71.7	7.7	72.8	8.0
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	71.2	18.6	70.8	10.0	65.3	6.4	63.6	7.0
Washington	90.6	25.0	78.9	19.2	87.7	17.8	86.2	21.7
West Virginia	38.7	12.8	32.7	12.0	25.2	11.6	26.8	12.1
Wisconsin	69.3	24.3	62.9	21.3	55.4	19.6	67.9	18.8
Wyoming	87.9	2.7	87.2	3.1	84.9	2.7	43.9	2.8
Total	62.9	16.8	59.5	15.1	57.9	15.6	59.5	15.3

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1996-1998 — Continued

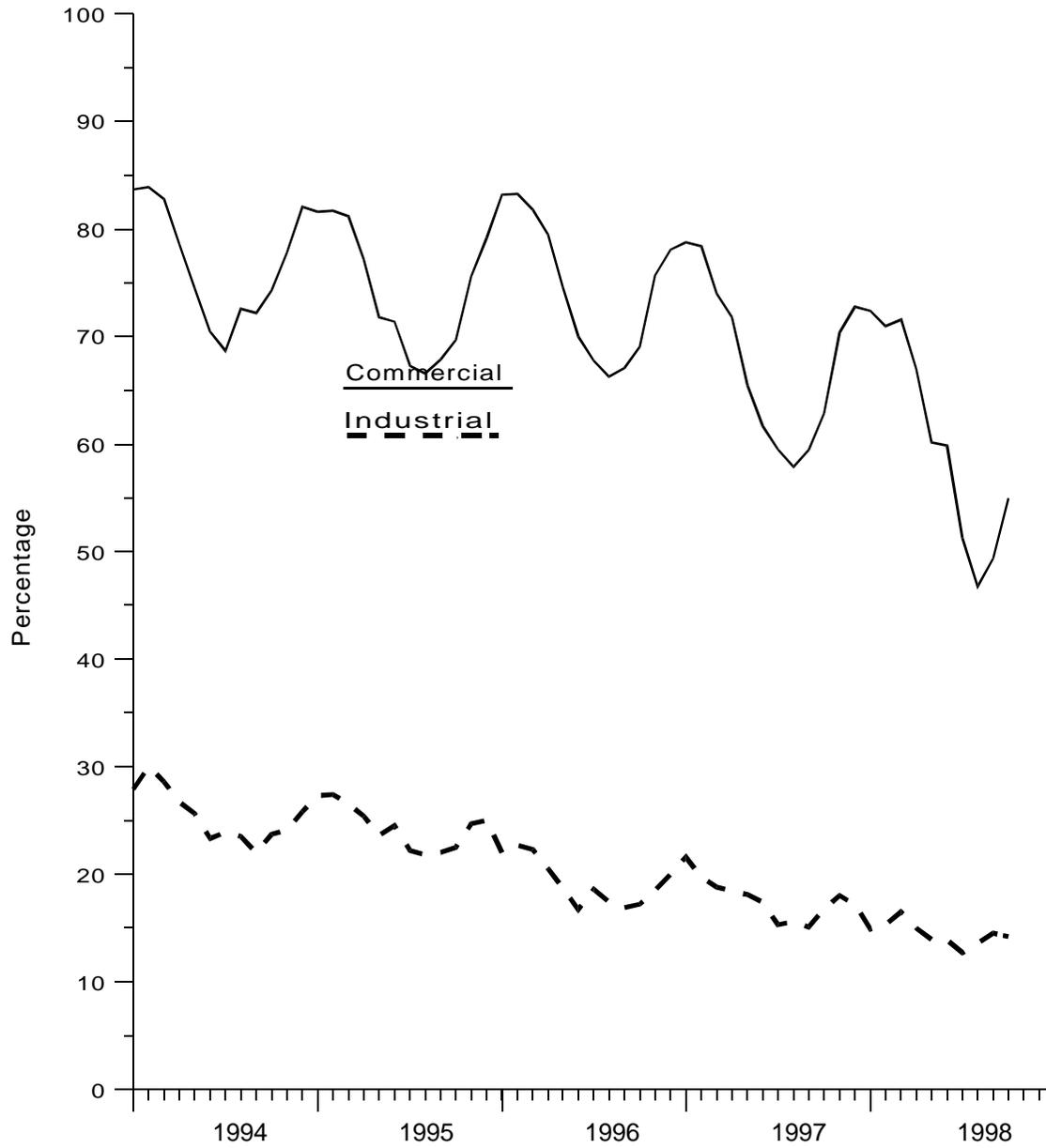
State	1997							
	June		May		April		March	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	57.7	23.1	63.4	23.9	66.9	22.8	81.7	23.3
Alaska	50.4	99.0	54.8	99.0	57.1	98.7	57.7	98.6
Arizona	82.7	18.2	86.1	17.5	83.9	19.6	86.5	19.5
Arkansas	91.1	9.8	91.8	11.2	93.8	10.8	95.2	11.9
California	48.7	8.4	50.3	12.4	52.8	10.0	54.8	10.3
Colorado	92.9	25.7	93.7	24.1	93.9	28.5	94.4	17.9
Connecticut	79.7	62.5	80.3	64.4	87.2	67.1	87.1	67.0
Delaware	100.0	29.1	100.0	35.4	100.0	36.8	100.0	33.7
District of Columbia	46.7	100.0	53.7	100.0	48.4	100.0	59.9	100.0
Florida	98.2	10.6	98.3	9.8	98.3	10.7	97.7	10.3
Georgia	84.3	22.5	85.4	21.5	88.5	25.5	90.0	24.9
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	83.3	2.3	86.5	2.5	86.1	2.1	87.8	2.1
Illinois	55.8	17.0	48.4	15.9	54.1	9.8	55.4	11.9
Indiana	59.4	11.3	58.0	11.7	91.1	12.9	93.4	15.4
Iowa	92.7	5.8	83.8	6.1	93.5	8.1	89.0	8.3
Kansas	65.4	8.2	67.1	9.4	72.6	9.4	67.1	9.5
Kentucky	88.6	16.8	86.3	19.4	89.0	18.5	90.3	19.1
Louisiana	95.2	10.4	95.3	11.2	95.5	9.5	96.6	10.4
Maine	100.0	87.4	100.0	90.3	100.0	90.5	100.0	91.0
Maryland	56.1	8.6	62.0	15.9	71.5	2.2	77.6	21.7
Massachusetts	48.5	21.6	69.9	19.3	74.1	25.0	72.8	21.8
Michigan	45.7	5.1	58.6	7.7	66.2	10.3	67.3	12.5
Minnesota	98.7	37.9	98.9	39.5	98.9	42.2	98.9	43.2
Mississippi	92.5	38.2	92.5	43.3	93.2	38.1	96.3	39.2
Missouri	71.3	19.0	76.9	24.2	80.7	17.0	83.8	26.5
Montana	88.8	2.2	90.3	2.1	91.2	4.5	92.0	4.0
Nebraska	68.6	20.6	67.0	25.8	77.5	21.8	74.2	25.4
Nevada	61.0	1.8	64.8	1.8	69.3	2.1	78.1	2.1
New Hampshire	90.7	53.3	91.6	58.5	92.0	61.7	94.0	53.1
New Jersey	50.1	41.4	45.7	43.3	55.9	49.6	58.4	45.7
New Mexico	54.0	3.9	68.1	5.3	66.9	1.4	77.3	1.9
New York	53.6	5.8	59.1	7.0	67.8	8.5	69.3	9.5
North Carolina	97.6	46.3	89.4	26.5	88.0	26.5	91.9	35.1
North Dakota	79.1	11.0	88.1	18.2	91.7	16.5	91.2	35.5
Ohio	50.2	2.8	58.9	4.6	65.7	4.7	70.1	7.9
Oklahoma	75.5	2.1	80.6	4.2	82.8	3.8	84.9	6.0
Oregon	98.1	16.7	98.5	17.3	98.5	20.4	98.8	21.0
Pennsylvania	56.4	13.1	50.1	13.2	66.2	14.1	65.8	15.5
Rhode Island	72.4	18.6	80.8	18.8	88.5	23.9	82.2	22.9
South Carolina	100.0	90.0	100.0	89.3	96.0	81.4	97.8	83.6
South Dakota	83.7	11.4	80.7	17.3	85.7	22.6	86.3	26.7
Tennessee	81.6	38.7	90.5	50.5	92.6	39.4	92.8	34.4
Texas	55.0	20.4	55.8	19.2	58.2	21.3	62.7	18.1
Utah	77.0	9.1	78.8	8.7	83.7	9.0	83.0	6.5
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	66.2	10.3	75.1	8.8	75.3	16.2	79.4	17.5
Washington	87.0	26.2	87.7	21.6	89.3	27.6	91.3	28.0
West Virginia	31.9	11.5	47.2	11.6	52.9	7.3	62.3	20.4
Wisconsin	60.6	18.4	77.4	26.1	83.3	24.4	88.5	32.7
Wyoming	67.8	2.5	87.1	2.4	76.0	2.6	84.6	2.5
Total	61.7	17.4	65.5	18.1	71.8	18.4	74.0	18.8

NA = Not Available.
 — = Not Applicable.

Notes: Volumes of natural gas reported for the commercial and industrial sectors in this publication include data for both sales and deliveries for the account of others. This table shows the percent of the total State volume that represents natural gas sales to the commercial and industrial sectors. This information may be helpful in evaluating commercial and industrial price data which are based on sales data only. See Appendix C, Statistical Considerations, for a discussion of the computation of natural gas prices.

Source: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

Figure 6. Percentage of Total Deliveries Represented by Onsystem Sales, 1994-1998



Sources: Energy Information Administration, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" and Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Table 26. Gas Home Customer-Weighted Heating Degree Days

Census Divisions	November 1 through November 30					December 1 through December 31				
	Normal ^a	1997	1998	Percent Change		Normal ^a	1997	1998	Percent Change	
				Normal to 1998	1997 to 1998				Normal to 1998	1997 to 1998
New England										
CT, ME, MA, NH, RI, VT	^R 693	^R 784	^R 711	2.6	-9.3	1,073	1,028	907	-15.5	-11.8
Middle Atlantic										
NJ, NY, PA	^R 646	^R 729	^R 618	-4.3	-15.2	1,010	948	818	-19.0	-13.7
East North Central										
IL, IN, MI, OH, WI	^R 730	^R 829	^R 642	-12.1	-22.6	1,142	1,052	957	-16.2	-9.0
West North Central										
IA, KS, MN, MO, ND, NE, SD	^R 788	^R 892	^R 673	-14.6	-24.6	1,235	1,090	1,084	-12.2	-0.6
South Atlantic										
DE, FL, GA, MD and DC, NC, SC, VA, WV	^R 421	^R 519	^R 391	-7.1	-24.7	696	708	576	-17.2	-18.6
East South Central										
AL, KY, MS, TN	^R 431	^R 546	^R 362	-16.0	-33.7	717	778	617	-13.9	-20.7
West South Central										
AR, LA, OK, TX	^R 280	^R 359	^R 190	-32.1	-47.1	534	590	502	-6.0	-14.9
Mountain										
AZ, CO, ID, MT, NV, NM, UT, WY	^R 715	^R 737	^R 651	-9.0	-11.7	1,006	1,039	1,008	0.2	-3.0
Pacific ^b										
CA, OR, WA	^R 341	^R 276	^R 382	12.0	38.4	519	504	577	11.2	14.5
U.S. Average ^b	^R 559	^R 621	^R 511	-8.6	-17.7	881	845	781	-11.4	-7.6

Census Divisions	Cumulative November 1 through December 30				
	Normal ^a	1997	1998	Percent Change	
				Normal to 1998	1997 to 1998
New England					
CT, ME, MA, NH, RI, VT	1,766	1,812	1,618	-8.4	-10.7
Middle Atlantic					
NJ, NY, PA	1,656	1,677	1,436	-13.3	-14.4
East North Central					
IL, IN, MI, OH, WI	1,872	1,881	1,599	-14.6	-15.0
West North Central					
IA, KS, MN, MO, ND, NE, SD	2,023	1,982	1,757	-13.1	-11.4
South Atlantic					
DE, FL, GA, MD and DC, NC, SC, VA, WV	1,117	1,227	967	-13.4	-21.2
East South Central					
AL, KY, MS, TN	1,148	1,324	979	-14.7	-26.1
West South Central					
AR, LA, OK, TX	814	949	692	-15.0	-27.1
Mountain					
AZ, CO, ID, MT, NV, NM, UT, WY	1,721	1,776	1,659	-3.6	-6.6
Pacific ^b					
CA, OR, WA	860	780	959	11.5	22.9
U.S. Average ^b	1,440	1,466	1,292	-10.3	-11.9

^a Normal is based on calculations of data from 1961 through 1990.

^b Excludes Alaska and Hawaii.

^R = Revised Data.

Note: See Appendix A, Explanatory Note 10 for discussion of Heating Degree-Days computations.

Sources: National Oceanic and Atmospheric Administration.

Appendix A

Explanatory Notes

The Energy Information Administration (EIA) publishes monthly data for the supply and disposition of natural gas in the United States in the *Natural Gas Monthly* (NGM). The information in this Appendix is provided to assist users in evaluating the monthly data. There is a brief description of what data are estimated and what data are taken from submitted reports, followed by ten technical notes that provide important information for individual data series.

The monthly data are preliminary when initially published. Data shown in this report for the most current months are taken from the EIA Short-Term Integrated Forecasting System (STIFS) model computations. Each month, EIA staff review the STIFS model estimates and adjust them, if necessary, based on their knowledge of new developments in the natural gas industry. Data for prior months are estimated or taken from submitted reports.

Table A1. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data

Components	Reporting Methodology
Supply and Disposition	
Marketed Production	Reported on Form EIA-895 and Estimated from Historical Data
Extraction Loss	Derived from Marketed Production
Dry Production	Marketed Production minus Extraction Loss
Withdrawals from Storage	Reported on Form EIA-191
Supplemental Gaseous Fuels	Derived from Supply Estimates and Coal Gasification Information
Imports	Estimated from National Energy Board of Canada Information and Liquefied Natural Gas Information
Additions to Storage	Reported on Form EIA-191
Exports	Estimated from Industry Trends and Liquefied Natural Gas Information
Current-Month Consumption	Estimated from Historical Month-to-Month Percent Changes
Consumption by Sector	
Lease and Plant Fuel	Derived from Marketed Production
Pipeline Fuel	Derived from Estimates for Lease and Plant Fuel and Deliveries to Consumers
Residential	Estimated from Reports to the Sample Survey Form EIA-857
Commercial	Estimated from Reports to the Sample Survey Form EIA-857
Industrial	Estimated from Reports to the Sample Survey Form EIA-857
Electric Utilities	Reported on Form EIA-759

For data that are not taken from STIFS computations, Table A1 below lists the methodologies for deriving the monthly data to be published.

The STIFS model contains a series of calculations that produce forecasts for all of the energy industry. It is driven primarily by three sets of inputs or assumptions: estimates of key macroeconomic variables, world oil price assumptions, and assumptions about the severity of weather. The natural gas estimates also reflect other key inputs or assumptions including gas wellhead prices, electric power generation by other energy sources, and U.S. gas import capacity. The macroeconomic variable estimates are produced by DRI/McGraw-Hill but are adjusted by EIA to reflect EIA assumptions about the world price of oil, energy product prices, and other assumptions which may affect the macroeconomic outlook. The EIA publishes forecasts for the energy industry each quarter in the *Short-Term Energy Outlook*.

For production, total supply and disposition, and storage data (Tables 1, 2, and 9), the most current two months shown are estimates produced from STIFS computations, and data that are two months or more prior to the date of publication are estimated or taken from submitted reports. For example, in the March issue of the NGM, February and March data are taken from the STIFS model computations while January and prior months data are estimated from available data sources or reported directly on EIA forms. For consumption data by sector (Table 3), the most current three months shown are estimates produced from STIFS computations while data that are three months prior to date of publication are taken from EIA forms.

Note 1. Nonhydrocarbon Gases Removed

Annual Data

Data on nonhydrocarbon gases removed from marketed production—carbon dioxide, helium, hydrogen sulfide, and nitrogen—are reported by State agencies on the voluntary Form EIA-895. For 1995, of the 33 producing States, 22 reported data on nonhydrocarbon gases removed. The 22 States accounted for 60 percent of total 1995 gross withdrawals. Of the 22 States reporting nonhydrocarbon gases removed, 11 reported zero values: Alaska, Arizona, Arkansas, Colorado, Illinois, Maryland, Missouri, Nevada, New York, South Dakota, and Virginia. The ten States reporting

volumes greater than zero are Alabama, California, Florida, Kentucky, Mississippi, Nebraska, New Mexico, North Dakota, Texas, and Wyoming. In addition, Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 40 percent of gross withdrawals, did not report nonhydrocarbon gases removed separately. However, their gross withdrawal data excluded all or most of the nonhydrocarbon gases removed on leases. No estimates are made for States not reporting nonhydrocarbon gases removed.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Seven States report monthly data on nonhydrocarbon gases removed: Alabama, Arizona, Mississippi, New Mexico, North Dakota, Oregon and Texas. Monthly data for California, Colorado, Florida, and Wyoming are estimated based on annual data reported on Form EIA-895. Nonhydrocarbon gases as an annual percentage of gross withdrawals reported by each of the six States is applied to each State's monthly gross withdrawal data to produce an estimate of nonhydrocarbon gases removed.

Final Monthly Data

Beginning with report year 1990, States filing the Form EIA-627, "Annual Quantity and Value of Natural Gas Report," were asked to supply monthly breakdowns of all data previously reported on an annual basis. The sums of the reported figures were used to calculate monthly volumes. In 1997 the Form EIA-627 was discontinued. States were requested to file an annual schedule on the monthly Form EIA-895, "Monthly Quantity and Value of Natural Gas Report."

For States not supplying monthly data on the annual schedule of the EIA-895, final monthly data are calculated by proportionally allocating the differences between total annual data reported on the Form EIA-895 and the sum of monthly data (January-December).

Note 2. Supplemental Gaseous Fuels

Annual Data

Annual data are published from Form EIA-176.

Preliminary Monthly Data

All monthly data are considered preliminary until after the publication of the *Natural Gas Annual* for the year in which the report month falls. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the monthly sum of these three elements to compute a monthly supplemental gaseous fuels figure.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly data are estimated based on the revised annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. This ratio is applied to the revised monthly sum of these three elements to compute final monthly data.

Note 3. Production

Annual Data

Natural gas production data are collected from 33 gas-producing States on Form EIA-895 which includes gross withdrawals, vented and flared, repressuring, nonhydrocarbon gases removed, fuel used on leases, marketed production (wet), and extraction loss. The U.S. Minerals Management Service (MMS) also supplies data on the quantity and value of natural gas production on the Gulf of Mexico and Outer Continental Shelf. No adjustments are made to the data.

Estimated Monthly Data

State marketed production data for a particular month are estimated if data are unavailable at the time of publication. The data are estimated based on final monthly data reported on the Form EIA-895 for the previous year.

Estimates for total U.S. marketed production are based on final monthly data reported on the Form EIA-895 for the previous year. State estimates for nonhydrocarbon gas removed, gas used for repressuring,

and gas vented and flared are based on the ratio of the item to gross withdrawals as reported on the EIA-895. These ratios are applied to the month's estimates for gross withdrawals to calculate figures for nonhydrocarbon gases removed, gas used for repressuring, and gas vented and flared. Estimates for gross withdrawal data are calculated from final monthly data filed on Form EIA-895 for the previous year.

Preliminary Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual* for the year in which the report month falls. Preliminary monthly data are published from reports from the Form EIA-895 and the MMS. Volumetric data are converted, as necessary, to a standard 14.73 psia pressure base. Data are revised as Table 7 monthly data are updated.

Final Monthly Data

Final monthly data for 1993, 1994, and 1995 are the sums of monthly data reported on the annual Form EIA-627, "Annual Quantity and Value of Natural Gas Report." For prior years, the differences between each State's annual production data reported on the EIA-627 and the sum of its monthly IOGCC reports for the year were allocated proportionally to the monthly IOGCC data.

Note 4. Imports and Exports

Annual Data and Final Monthly Data

Annual and final monthly data are published from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, which requires data to be reported each quarter by month for the calendar year.

Preliminary Monthly Data - Imports

Preliminary monthly import data are based on data from the National Energy Board of Canada and responses to informal industry contacts and EIA estimates. Preliminary data are revised after the publication of the article "U.S. Imports and Exports of Natural Gas" for the calendar year.

Preliminary Monthly Data - Exports

Preliminary monthly export data are based on historical data from the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*, informal industry contacts, and information gathered from natural gas industry trade publications. Preliminary monthly data are revised after publication of "U.S. Imports and Exports of Natural Gas" for the calendar year in which the report month falls.

Note 5. Consumption

All Annual Data

All consumption data except electric utility data are from the Form EIA-857 and Form EIA-176. No adjustments are made to the data. Electric utility data are reported on Form EIA-759.

Monthly Data

All monthly data are considered preliminary until after publication of the *Natural Gas Annual*.

Total Consumption

Preliminary Monthly Data

The most current month estimate is calculated based on the arithmetic average change from the previous month for the previous 3 years. The following month this estimate is revised by summing the components (pipeline fuel, lease and plant fuel, and deliveries to consumers).

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly total consumption is obtained by summing its components.

Residential, Commercial, and Industrial Sector Consumption

Preliminary Monthly Data

Preliminary monthly residential, commercial, and industrial data are from Form EIA-857. See Appendix C,

"Statistical Considerations," for a detailed explanation of sample selection and estimation procedures.

Average Price of Deliveries to Consumers

Price data are representative of prices for gas sold and delivered to residential, commercial, and industrial consumers. These prices do not reflect average prices of natural gas transported to consumers for the account of third parties or "spot-market" prices.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are estimated by allocating annual consumption data from the Form EIA-176 to each month in proportion to monthly volumes reported in Form EIA-857.

Agricultural Use

Beginning with the reporting of 1996 annual data, the EIA changed the customer category used for reporting deliveries to consumers in the agricultural industry from commercial to industrial. In 1995 and earlier years, consumption of natural gas for agricultural use was classified as commercial use. Separate reports of the volumes affected are not available so the direct impact of this change is not known. Most natural gas consumed in agriculture is used to drive irrigation systems and to dry crops.

For the reporting of monthly data, the customer category will not be changed until 1998. In 1996, the monthly data reported under the old classification were adjusted to the annual data reported under the new classification. Monthly 1997 data will be adjusted in the same way as the 1996 data.

In comparing sectoral use over time, note that:

- There is an inherent shift in natural gas volumes from the commercial to industrial sectors due simply to changes in the reporting requirements. This break in series may indicate a spurious increase in industrial consumption with a corresponding decrease in the commercial sector.
- The sum of natural gas volumes consumed by the commercial and industrial sectors will not be changed by this modification of the instructions.

Electric Utility Sector Consumption

All Monthly Data

Monthly data published are from Form EIA-759.

Pipeline Fuel Consumption

Preliminary Monthly Data

Preliminary data are estimated based on the pipeline fuel consumption as an annual percentage of total consumption from the previous year's Form EIA-176. This percentage is applied to each month's total consumption figure to compute the monthly estimate.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are based on the revised annual ratio of pipeline fuel consumption to total consumption from the Form EIA-176. This ratio is applied to each month's revised total consumption figure to compute final monthly pipeline fuel consumption estimates.

Lease and Plant Fuel Consumption

Preliminary Monthly Data

Preliminary monthly data are estimated based on lease and plant fuel consumption as an annual percentage of marketed production. This percentage is applied to each month's marketed production figure to compute estimated lease and plant fuel consumption.

Final Monthly Data

Monthly data are revised after publication of the *Natural Gas Annual*. Final monthly plant fuel data are based on a revised annual ratio of lease and plant fuel consumption to marketed production from Form EIA-176. This ratio is applied to each month's revised marketed production figure to compute final monthly plant fuel consumption estimates. Final monthly lease data are collected on the Form EIA-627 and estimates from the Form EIA-176. See the *Natural Gas Annual* for a complete discussion of this process.

Note 6. Extraction Loss

Annual Data

Extraction loss data are calculated from filings of Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." For a fuller discussion, see the *Natural Gas Annual*.

Preliminary Monthly Data

Preliminary data are estimated based on extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Final Monthly Data

Monthly data are revised after the publication of the *Natural Gas Annual*. Final monthly data are estimated by allocating annual extraction loss data to each month based on its total natural gas marketed production.

Note 7. Natural Gas Storage

Underground Natural Gas Storage

All monthly data concerning underground storage are published from the EIA-191. A new EIA-191 became effective in January 1994. Injection and withdrawal data from the EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the *Natural Gas Annual*.

Underground and Liquefied Natural Gas Storage

The final monthly and annual storage and withdrawal data for 1991 through 1995 shown in Table 2 include both underground and liquefied natural gas (LNG) storage. Underground storage data are obtained from the EIA-191 and EIA-176 surveys in the manner described earlier. Annual data on LNG additions and withdrawals are taken from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying it to annual LNG data.

Types of Underground Storage Facilities

There are three principal types of underground storage facilities in operation in the United States today: salt caverns (caverns hollowed out in salt "bed" or "dome" formations), depleted fields (depleted reservoirs in oil and/or gas fields), and aquifer reservoirs (water-only reservoirs conditioned to hold natural gas). A storage facility's daily deliverability or withdrawal capability

is the amount of gas that can be withdrawn from it in a 24-hour period. Salt cavern storage facilities generally have high deliverability because all of the working gas in a given facility can be withdrawn in a relatively short period of time. (A typical salt cavern cycle is 10 days to deplete working gas, and 20 days to refill working gas.) By contrast, depleted field and aquifer reservoirs are designed and operated to withdraw all working gas over the course of an entire heating season (about 150 days). Further, while both traditional and salt cavern facilities can be switched from withdrawal to injection operations during the heating season, this is usually more quickly and easily done in salt cavern facilities, reflecting their greater operational flexibility.

Note 8. Average Wellhead Value

Annual Data

Form EIA-895 requests State agencies to report the quantity and value of marketed production. When complete data are unavailable, the form instructs the State agency to report the available value and the quantity of marketed production associated with this value. A number of States reported volumes of production and associated values for other than marketed production. In addition, information for several States which were unable to provide data was obtained from Form EIA-176. It should be noted that Form EIA-176 reports a fraction of State production. The imputed value of marketed production in each State is calculated by dividing the State's reported value by its associated production. This unit price is then applied to the quantity of the State's marketed production to derive the imputed value of marketed production.

Preliminary Monthly Data

A preliminary estimate of the U.S. gas price is made each month based on the change in the production-weighted gas price from five States: Kansas, Mississippi, New Mexico, Oklahoma, and Texas. Gas prices for these five States are used because both their gas production and value represent a substantial sample of the U.S. gas production and value (roughly 50 percent), and their prices are readily available and provide a consistent series. The latest preliminary U.S. gas price estimate is calculated by multiplying the preliminary U.S. gas price estimate for the prior month by the ratio of the five States' gas price for the latest month to that

of the prior month. This estimate replaces the initial gas price estimate.

Final Monthly Data

Preliminary monthly gas price data for Kansas, Mississippi, New Mexico, Oklahoma, and Texas are replaced by final monthly data that are adjusted to match the annual prices published in the *Natural Gas Annual* for each State. A revised set of the monthly U.S. gas price estimates are derived based on the monthly change in the production-weighted prices for these five States and adjusted to match the U.S. gas price published in the *Natural Gas Annual*.

Note 9. Balancing Item

The "balancing item" category represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems.

Reporting problems include differences due to the net result of conversions of flow data metered at varying temperatures and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycles and calendar periods; and imbalances resulting from the merger of data reporting systems, which vary in scope, format, definitions, and type of respondents.

Annual Data

Annual data are from the *Natural Gas Annual*. For an explanation of the methodology involved in calculating annual "balancing item" data, see the *Natural Gas Annual*.

Preliminary Monthly Data

Preliminary monthly data in the "balancing item" category are calculated by subtracting dry gas production, withdrawals from storage, supplemental gaseous fuels, and imports from total supply/disposition.

Note 10. Heating Degree-Days

Heating degree-days are relative measurements of outdoor air temperature. Heating degree-days are deviations of the mean daily temperature below 65 degrees Fahrenheit. A weather station recording a mean daily temperature of 40 degrees Fahrenheit would report 25 heating degree-days. There are several degree-day data bases maintained by the National Oceanic and Atmospheric Administration. The information pub-

lished in the Natural Gas Monthly is developed by the National Weather Service Climate Analysis Center, Camp Springs, Maryland.

The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations around the country. The temperature information recorded at these weather stations is used to calculate Statewide degree-day averages weighted by gas home customers. The State figures are then aggregated into Census Divisions and into the national average.

Appendix B

Data Sources

The data in this publication are taken from survey reports authorized by the U.S. Department of Energy (DOE), Energy Information Administration (EIA) and by the Federal Energy Regulatory Commission (FERC). The EIA is the independent statistical and analytical agency within the DOE. The FERC is an independent regulatory commission within the DOE which has jurisdiction primarily in the regulation of electric utilities and the interstate natural gas industry. The EIA conducts and processes some of the surveys authorized by the FERC. Data are collected from two annual surveys and four monthly surveys.

The annual reports are the Form EIA-176, a mandatory survey of all companies that deliver natural gas to consumers or that transport gas across State lines, and the Form EIA-627, a voluntary survey completed by energy or conservation agencies in the gas-producing States.

The monthly reports include two surveys of the natural gas industry and two surveys of the electric utility industry. The natural gas industry survey is the Form EIA-191 filed by companies that operate underground storage facilities, and the Form EIA-857 filed by a sample of companies that deliver natural gas to consumers. The electric utility industry surveys are the Form EIA-759 filed by all generating electric utilities and the Form FERC-423 filed by fossil fueled plants. Responses to these four monthly surveys are mandatory.

A description of the survey respondents, reporting requirements, and processing and editing of the data is given on the following pages for each of the surveys.

Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"

Survey Design

The original version of Form EIA-176 was approved in 1980 with a mandatory response requirement. Prior to 1980, published data were based on voluntary responses to Bureau of Mines, U.S. Department of the Interior predecessor Forms BOM-6-1340-A and BOM-6-1341-A of the same title.

In 1982, the scope of the revised EIA-176 survey was expanded to collect the number of electric utility consumers in each State, volumes of gas transported to industrial and electric utility consumers, detailed information on volumes transported across State borders by the respondent for others and for the responding company, and detailed information on other disposition. These changes were incorporated to provide more complete survey information with a minimal change in respondent burden. The 1982 version of the Form EIA-176 continues to be the basis for the current version of this form.

In 1988, the Form EIA-176 was revised to include data collection for deliveries of natural gas to commercial and industrial consumers for the account of others. A short version of Form EIA-176 was also approved in 1988. Companies engaged in purchase and delivery activities but not in transportation and storage activities may file the short form. Usually, these companies are municipals handling small volumes of gas.

In 1990, the Form EIA-176 was revised to include more detailed information for gas withdrawn from storage facilities, gas added to storage facilities, deliveries of company-owned natural gas and natural gas transported for the account of others. The revised form was approved for use beginning with report year 1990.

Upon the Office of Management and Budget's approval in 1993, the Form EIA-176 was again revised. All deliveries to consumers are now categorized as firm or interruptible. Commercial and industrial consumers are further categorized as nonutility power producers or as those excluding nonutility power producers.

Data reported on this form are no longer considered proprietary. Response to the form continues to be mandatory.

Survey Universe and Response Statistics

The Form EIA-176 is mailed to all identified interstate and intrastate natural gas pipeline companies, investor and municipally owned natural gas distributors, underground natural gas storage operators, synthetic natural gas plant operators, and field, well, or processing plant operators that deliver natural gas directly to consumers (including their own industrial facilities) and/or that transport gas to, across, or from a State border through field or gathering facilities.

Each company and its parent company or subsidiaries were required to file if they met the survey specifications. The original mailing in 1996 for report year 1995 totaled 1,991 questionnaire packages. To this original mailing, 11 names were added and 61 were deleted as a result of the survey processing. Additions were the result of comparisons of the mailing list to other survey mailing lists. Deletions resulted from post office returns and determinations that companies were out of business, sold, or not within the scope of the survey. After all updates, the survey universe was 1,941 responses from approximately 1,800 companies.

Following the original mailing, second request mailing, and nonrespondents followup, 1,911 responses were entered into the data base, and there were 30 nonrespondents.

Summary of Form EIA-176 Data Reporting Requirements

The EIA-176 is a multiline schedule for reporting all supplies of natural gas and supplemental gaseous fuels

and their disposition within the State indicated. Respondents file completed forms with EIA in Washington, DC. Data for the report year are due by April 1 of the following year. Extensions of the filing deadline for up to 45 days are granted to any respondent on request.

All natural gas and supplemental gaseous fuels volumes are reported on a physical custody basis in thousand cubic feet (Mcf), and dollar values are reported to the nearest whole dollar. All volumes are reported at 14.73 pounds per square inch absolute pressure (psia) and 60 degrees Fahrenheit.

Routine Form EIA-176 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-176. The edits performed include validity, arithmetic, and analytical checks.

The incoming forms are reviewed prior to keying. This prescan determines if the respondent identification (ID) number and the company name and address are correct, if the data on the form appear complete and reasonable, and if the certifying information is complete.

Manual checks on the data are also made. Each form is prescanned to determine that data were reported on the correct lines. The flow of gas through interstate pipelines is checked at the company level to ensure that each delivery from a State is matched with a corresponding receipt in an adjoining State.

After the data are keyed, computer edit procedures are performed. Edit programs verify the report year, State code, and arithmetic totals. Further tests are made to ensure that all necessary data elements are present and that the data are reasonable and internally consistent. The computerized edit system produces error listings with messages for each failed edit test. When problems occur, respondents are contacted by telephone and required to file amended forms with corrected data.

Other EIA Publications Referencing Form EIA-176

Data from Form EIA-176 are also published in the *Natural Gas Annual*.

Form EIA-895, "Monthly Quantity of Natural Gas Report"

Survey Design

In 1996, an annual schedule was added to the Form EIA-895 to replace the Form EIA-627. Data collection on the Form EIA-895 began in January 1995. This form was designed to replace the Interstate Oil and Gas Compact Commission (IOGCC) form, "Monthly Report of Natural Gas Production." In 1994, the IOGCC decided to discontinue collection of their form. All gas producing States are requested to report on the Form EIA-895; a voluntary report. Data are reported by State agencies. The form was designed to provide a standard reporting system, to the extent possible, for the natural gas data reported by the States. Data are not considered proprietary.

Beginning with 1980, natural gas production data previously obtained on an informal basis from State conservation agencies were collected on Form EIA-627. This form was designed by EIA to collect annual natural gas production data from the appropriate State agencies under a standard data reporting system within the limits imposed by the diversity of data collection systems of the various producing States. The form was redesigned in 1990 to collect monthly breakdowns of all annual data elements. Data are not considered proprietary. It was also designed to avoid duplication of effort in collecting production and value data by producing States and to avoid an unnecessary respondent burden on gas and oil well operators. In 1993, value and associated volume of marketed production by month was added to the EIA-627. In 1996, the Form EIA-627 was discontinued. The information is collected on an annual schedule on the Form EIA-895.

Survey Universe and Response Statistics

Form EIA-895 is mailed to energy or conservation agencies in all 33 natural gas producing States. All producing States participate voluntarily in the EIA-895 survey by filing the completed form or by responding to telephone contacts.

Reports on State production are due 20 days after the end of the report month. (In most cases, the data are not available to the States until after this time period.

Therefore, States are requested to send the report within 80 days after the end of the report month.) The annual schedule of the Form EIA-895 is due with the December data report.

Summary of Data Requirements

The Form EIA-895 monthly schedule consists of nine questions on one page, and requires volumetric information on gross production (gas and oil wells individually), gas used for repressuring, gas vented and flared, nonhydrocarbon gases removed, natural gas used as fuel on leases, marketed production, value based marketed production and the value in dollar amount of the marketed production.

Form EIA-895 annual schedule collects data on the monthly and annual production volume of natural gas (including gross withdrawals from both gas and oil wells); volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on leases; marketed production; the value of marketed production; and the number of producing gas wells.

Respondents are asked to report all volumes in thousand cubic feet at the State's standard pressure base and at 60 degrees Fahrenheit. All dollar values are reported in thousands.

Routine Form EIA-895 Edit Checks

Each filing of Form EIA-895 is manually checked for reasonableness and mathematical accuracy. Information on the forms is compared to totals of monthly data reported. Volumes are converted, as necessary, to a standard 14.73 psia pressure base. Reasonableness of data is assessed by comparing reported data to the previous year's data. State agencies are contacted by telephone to correct errors. Amended filings or resubmissions are not a requirement, since participation in the survey is voluntary.

Other EIA Publications Referencing Form EIA-895

Data from Form EIA-895 are also published in the EIA publication, *Natural Gas Annual*.

EIA-191 Survey, "Underground Natural Gas Storage Report"

Survey Design

The Form EIA-191, "Underground Natural Gas Storage Report," was revised effective January 1994. Among the changes from the form used from 1991 through 1993 are a distinction between a monthly and annual survey. Prior to 1991, data on the storage of natural gas were collected on a survey jointly implemented in 1975 by the Federal Power Commission (FPC), the Federal Energy Administration (FEA), and the Bureau of Mines (BOM) as the FPC-8/ FEA-G-318 system. The data received on both the FPC-8 and FEA-G-318 were computerized and aggregated by FPC. The form was previously revised in 1991 to include storage data by State, field, and reservoir.

At the beginning of 1979, the EIA assumed responsibility for the collection, processing, and publication of the data gathered in the survey. Form FEA-G-318 was renewed on July 1, 1979, as Form EIA-191 and the survey was retitled the FPC-8/EIA-191 Survey (Figure D4 shows the EIA-191). Form FPC-8 was renewed in December 1985 and the survey retitled FERC-8/EIA-191 Survey. The forms were not merged because of FERC's stated desire to maintain the separate identity of the FERC-8 for administrative reasons. In September 1995, the FERC discontinued the reporting requirements of Form FERC-8. FERC jurisdictional firms will continue to file Form EIA-191.

Survey Universe and Response Statistics

The 103 companies that operate underground facilities will file the Form EIA-191. Of these companies, 42 are subject to the jurisdiction of FERC and are required to report data on Form EIA-191.

The response rate as of the filing deadline is approximately 20 percent. Data from the remaining 80 percent of respondents are received in writing and/or by telephone within 3 to 4 days after the filing deadline. All data supplied by telephone are subsequently filed in writing, generally within 15 days of the filing deadline. The final response rate is 100 percent.

Summary of EIA-191 Data Reporting Requirements

The EIA-191 monthly schedule contains current month and prior month's data on the total quantities of gas in storage, injections and withdrawals, the location (including State and county, field, reservoir) and peak day

withdrawals during the reporting period. Prior month's data are required only when data are revised. Information on co-owners of storage fields has been eliminated. The annual schedule contains type of facility, storage field capacity, maximum deliverability and pipelines to which each field is connected. The annual schedule is filed with the January submission.

Collection of the survey is on a custody basis. Information requested must be provided within 20 days after the first day of each month. Twelve reports are required per calendar year. Respondents are required to indicate whether the data reported are actual or estimated. For most of the estimated filings, the actual data or necessary revisions are reflected in the prior month section of the monthly form. Actual data on natural gas injections and withdrawals from underground storage are based on metered quantities. Data on quantities of gas in storage and on storage capacity represent, in part, reservoir engineering evaluations. All volumes are reported at 14.73 psia and 60 degrees Fahrenheit.

Routine Form EIA-191 Edit Checks

Data received on Form EIA-191 are entered into the survey processing system. The survey's five principal data elements (total, base, working gas in storage, injections, and withdrawals) receive a preliminary visual edit to eliminate and correct obvious errors or omissions. Respondents are required to refile reports containing any inconsistencies or errors.

Other EIA Publications Referencing Form EIA-191

The EIA publication *Monthly Energy Review* and *Winter Fuels Report* contain data from the EIA-191 survey.

"Quarterly Natural Gas Import and Export Sales and Price Report"

Survey Design

The collection of data covering natural gas imports and exports was begun in 1973 by the Federal Power Commission (FPC). On October 1977, FPC ceased to exist and its data collection functions were transferred to the Federal Energy Regulatory Commission (FERC) within the Department of Energy (DOE). From 1979 to 1994, the Energy Information Administration (EIA) has had the responsibility for collecting Form FPC-14, "Annual Report for Importers and Exporters of Natural

Gas." Data are not considered proprietary. The Form FPC-14 was discontinued in 1995.

Beginning in 1995, import and export data are taken from the "Quarterly Natural Gas Import and Export Sales and Price Report." This report is prepared by the Office of Fossil Energy, U.S. Department of Energy, based on information submitted by all firms having authorization to import or export natural gas.

Survey Universe and Response Statistics

All companies are required, as a condition of their authorizations to import or export natural gas, to file quarterly reports with the Office of Fossil Energy. These data are collected as part of its regulatory responsibilities. The data are reported at a monthly level of detail. Data reported on the Form FPC-14 represented physical movements of natural gas. Data collected by the Office of Fossil Energy are reported on an equity (sales) basis. For 1994 and earlier years, comparisons of the data from the two sources may show differences because reporting requirements were different.

Prior to 1995, the Form FPC-14 was filed annually by each organization or individual having authority to import and export natural gas regardless of whether any activity took place during the reporting year. Authorizations to import and export was originally granted by the FPC. In 1977, the authority to grant authorizations transferred to the Economic Regulatory Administration (ERA). It now resides with the Office of Fossil Energy, U.S. Department of Energy.

Routine Edit Checks

Respondents are required to certify the accuracy of all data reported. The data are checked for reasonableness and accuracy. If errors are found, the companies are required to file corrected data. The data are compared with data reported by the National Energy Board of Canada and are published quarterly. All natural gas volumes in this report are expressed at a pressure base of 14.73 pounds per square inch absolute and temperature of 60 degrees Fahrenheit, except as noted. All import and export prices are in U.S. dollars and, except for LNG exports, are those paid at the U.S. border. LNG export prices are those paid at the point of sale and delivery in Yokohama, Japan.

Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"

Survey Design

The original Form EIA-857 was approved for use in December 1984. Response to the Form EIA-857 is mandatory on a monthly basis. Data collected on the Form EIA-857 cover the 50 States and the District of Columbia and include both price and volume data. Data are considered proprietary.

Survey Universe and Response Statistics

A sample of 382 natural gas companies, including interstate pipelines, intrastate pipelines, and local distribution companies, report to the survey. The sample was selected independently for each of the 50 States and the District of Columbia from a frame consisting of all respondents to Form EIA-176 who reported deliveries of natural gas to consumers in the residential, commercial, or industrial sectors. Each selected company is required to complete and file the Form EIA-857 on a monthly basis. Initial response statistics on a monthly basis are as follows: responses received by due date, approximately 50 percent, and responses received after follow-up, 100 percent. Virtually all are received in time for incorporation in the current month's processing cycle. When a response is extremely late, and the company represents less than 25 percent of the natural gas volumes delivered by all sampled companies in the State, values are imputed as described in Appendix C. When the company's submission is eventually received, the submitted data are used for future processing and revisions.

The Form EIA-857 is a monthly sample survey of firms delivering natural gas to consumers. It provides data that are used to estimate monthly sales of natural gas (volume and price) by State and monthly deliveries of natural gas on behalf of others (volume) by State to three consumer sectors - residential, commercial, and industrial. (Monthly deliveries and prices of natural gas to electric utilities are reported on the Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and the Form EIA-759, "Monthly Power Plant Report.") See Appendix C for a discussion of the sample design and estimation procedures.

Summary of Form EIA-857 Data Reporting Requirements

Data collected monthly on the Form EIA-857 on a State level include the volume and cost of purchased gas, the volume and cost of natural gas consumed by sector (residential, commercial, and industrial), and the average heat content of all gas consumed. Respondents file completed forms with EIA in Washington, DC on or before the 30th day after the end of the report month.

All natural gas volumes are reported in thousand cubic feet at 14.73 psia at 60 degrees Fahrenheit and dollar values are reported to the nearest whole dollar.

Routine Form EIA-857 Edit Checks

A series of manual and computerized edit checks are used to screen the Form EIA-857. The edits performed include validity and analytical checks.

Appendix C

Statistical Considerations

The monthly sales (volume and price) and monthly deliveries (volume) of natural gas to residential, commercial and industrial consumers presented in this report by State are estimated from data reported on the Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers." (See Appendix B for a description of this Form.) These estimations must be made from the reported data since the Form EIA-857 is a sample survey. A description of the sample design and the estimation procedures is given below.

Sample Design

The Form EIA-857 is a monthly sample survey of companies delivering natural gas to consumers. It includes inter- and intrastate companies, and producers, as well as local distribution companies. The survey provides data that are used each month to estimate the volume of natural gas delivered and the price for onsystem sales of natural gas by State to three consumer sectors--residential, commercial, and industrial. Monthly deliveries and prices of natural gas to electric utilities are reported on the Form EIA-759, "Monthly Power Plant Report," and the Form FERC-423, "Monthly Report of Costs and Quality of Fuels for Electric Plants."

Sample Universe. The sample currently in use was selected from a universe of 1,538 companies. These companies were respondents to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for reporting year 1995 who reported sales or deliveries to consumers in the residential, commercial or industrial sectors. (See Appendix B for a description of the Form EIA-176.)

Sampling Plan. The goal was a sample that would provide estimates of monthly natural gas consumption by the three consuming sectors within each State and the District of Columbia. A stratified sample using a single stage and systematic selection with probability

proportional to size was designed. The measure of size was the volume of natural gas physically delivered in the State to the three consuming sectors by the company in 1995. There were two strata--companies selected with certainty and companies selected under the systematic probability proportional to size design.

Initial calculations showed that a 25 percent sample of companies would yield reasonably accurate estimates. The sample was selected independently in each State, resulting in a national total of 387 respondent companies. Unlike previous years, no mergers or acquisitions were uncovered as a result of the initial mail-out. Therefore there was no need for either substitution of respondent companies or a reduction in the total number of respondents.

Certainty Stratum. Since estimates were needed for each of the 50 States and the District of Columbia, the strata were established independently within each State. In 16 States and the District of Columbia where sampling was not feasible due to small numbers of companies and/or small volumes of gas deliveries, all companies were selected. The 16 States were: Alaska, Connecticut, Delaware, Hawaii, Idaho, Maine, North Dakota, New Hampshire, New Jersey, Nevada, Oregon, Rhode Island, South Dakota, Utah, Vermont, and Washington.

For each of the remaining States, the total volumes of industrial sales and deliveries and of the combined residential/commercial sales and deliveries were determined. Companies with natural gas deliveries to the industrial sector or to the combined residential/commercial sector above a certain level were selected with certainty. Since a few large companies often account for most of the natural gas delivered within a State, this ensures those companies' inclusion in the sample. The formula for determining certainty was applied independently in the two consumer sectors--the industrial and the combined residential/commercial. These selected companies, together with the companies in the jurisdictions discussed where sampling was not feasible, formed the certainty stratum.

All companies with natural gas deliveries in sector j greater than the cut-off value (C_j) were included in the certainty stratum. The formula for C_j was:

$$C_j = \frac{X_j}{2n} \quad (1)$$

where:

C_j = cutoff value for consumer sector j,

n = target sample size to be selected for the State, 25 percent of the companies in the State,

X_{ij} = the annual volume of natural gas deliveries by company i to customers in consumer sector j,

X_i = the sum within State of annual gas volumes for company i,

X_j = the sum within State of annual gas volumes in consumer sector j,

$X_{..}$ = the sum within State of annual gas volumes in all consumer sectors.

Noncertainty Stratum. All other companies formed the noncertainty stratum. They were systematically sampled with probability proportional to size. The measure of size for each company was the total volume of gas sales to all consumer sectors (X_i). The number of companies to be selected from the noncertainty stratum was calculated for each State, with a minimum of 2.

The formula for selecting the number of noncertainty stratum companies was:

$$m = n \frac{X_2}{X_{..}} \quad (2)$$

where:

m = the sample size for the noncertainty stratum within a State,

X_2 = the sum within State of the X_i for all companies in the noncertainty stratum.

Companies were listed in ascending order according to their measure of size and then a cumulative measure of size in the stratum was calculated for each company. The cumulative measure of size was the sum of the measures of size for that company and all preceding companies on the list. An interval of width I for selecting the companies systematically was calculated using ($I = \frac{X_2}{m}$). A uniform random number R was selected between zero and I. The first sampled company was

the first company on the list to have a cumulative measure of size greater than R. The second company selected was the first company on the list to have a cumulative measure of size greater than $R + I$. $R + I$ was increased again by I to determine the third company to be selected. This procedure was repeated until the entire sample was drawn.

Subgroups. In eight States, the noncertainty stratum was divided into subgroups to ensure that gas in each consumer sector could be estimated. The systematic sample with probability proportional to size design described above was applied independently in each subgroup. The methods for determining the subgroup sample size and calculating the subgroup interval for sample selection were the same as the methods described above for the noncertainty stratum, except that X_2 was the sum within State of the X_i for only those companies in the subgroup.

These subgroups were defined only for the purpose of sample selection. They are:

California: companies handling only industrial gas and all other companies.

Iowa: companies handling industrial gas and companies delivering only to residential or commercial customers.

Louisiana: companies handling only industrial gas and all other companies, with the latter being further subdivided according to size. The larger group is comprised of all companies with total deliveries of at least 200 million cubic feet while the smaller group consists of companies with less than that volume of delivered gas (three subgroups).

Oklahoma: Companies delivering less than 500 million cubic feet of gas and those delivering more than that volume.

Texas: companies handling only residential/commercial gas, companies handling only industrial gas, and all other companies (three subgroups).

Estimation Procedures

Estimates of Volumes. A ratio estimator is applied to the volumes reported in each State by the sampled companies to estimate the total gas sales and deliveries for the State. Ratio estimators are calculated for each consumer sector—residential, commercial, and industrial—in each State where companies are sampled. The following annual data are taken from the most recent 1995 submissions of Form EIA-176:

The formula for calculating the ratio estimator (E_{vj}) for the volume of gas in consumer sector j is:

$$E_{vj} = \frac{Y_j}{Y'_j} \quad (3)$$

where:

Y_j = the sum within State of annual gas volumes in consumer sector j for all companies,

Y'_j = the sum within State of annual gas volumes in consumer sector j for those companies in the sample.

The ratio estimator is applied as follows:

$$V_j = y_j \times E_{vj} \quad (4)$$

where:

V_j = the State estimate of monthly gas volumes in consumer sector j,

y_j = the sum within State of reported monthly gas volumes in consumer sector j.

Computation of Natural Gas Prices. The natural gas volumes that are included in the computation of prices represent only those volumes associated with natural gas sales.

The price of natural gas for a State within a sector is calculated as follows:

$$P_j = \frac{R_j}{V'_j}$$

where:

P_j = the average price for gas sales within the State in consumer sector j,

R_j = the reported revenue from natural gas sales within the State in consumer sector j,

V_j = the reported volume of natural gas sales within the State in consumer sector j.

All average prices are weighted by their corresponding sales volume estimates when national average prices are computed.

The monthly average prices of natural gas are based on sales data only. Volumes of gas delivered for the account of others to these consumer sectors are not included in the State or national average prices.

Table 25 shows the percent of the total State volume that represents volumes from natural gas sales to the commercial and industrial sectors. This table may be helpful in evaluating commercial and industrial price data. Virtually all natural gas deliveries to the residential sector represent onsystem sales volumes only.

See the section on consumer price calculations in this Appendix for further price information.

Estimation for Nonrespondents. A volume for each consumer category is imputed for companies that fail to respond. The imputation is based on the previous month's value reported by the non-responding company and the change from the previous month to the current month in volumes reported by other companies in the State. The imputed volumes are included in the State totals. To estimate prices for non-respondents, the unit price (dollars per thousand cubic feet) reported by the company in the previous month is used.

The formula for imputing volumes of gas sales for nonrespondents was:

$$F_t = F_{t-1} \times \frac{y_{jt}}{y_{jt-1}} \quad (5)$$

where:

F_t = imputed gas volume for current month t,

F_{t-1} = gas volume for the company for the previous month,

y_{jt} = gas volume reported by companies in the State stratum for report month t,

y_{jt-1} = gas volume in the previous month for companies in the State stratum that reported in month t.

Final Revisions

Adjusting Monthly Data to Annual Data. After the annual data reported on the Form EIA-176 have been submitted, edited, and prepared for publication in the *Natural Gas Annual*, revisions are made to monthly data. The revisions are made to the volumes and prices of natural gas delivered to consumers that have appeared in the *Natural Gas Monthly* to match them to the annual values appearing in the *Natural Gas Annual*.

The revised monthly estimates allocate the difference between the sum of monthly estimates and the annual reports according to the distribution of the estimated values across the months.

Before the final revisions are made, changes or additions to submitted data received after publication of the monthly estimate and not sufficiently large to require a revision to be published in the *Natural Gas Monthly*, are used to derive an updated estimate of monthly consumption and revenues for each State's residential, commercial, or industrial natural gas consumption.

For each State, two numbers are revised, the estimated consumption and the estimated price per thousand cubic feet.

The formula for revising the estimated consumption is:

$$V_{jm}^* = V_{jm} + \left[(V_{ja} - V'_{jm}) \left(\frac{V_{jm}}{V'_{jm}} \right) \right] \quad (6)$$

where:

V_{jm}^* = the final volume estimate for month m in consumer sector j,

V_{jm} = the estimated volume for month m in consumer sector j,

V_{ja} = the volume for the year reported on Form EIA-176,

V'_{jm} = The annual sum of estimated monthly volumes.

The price is calculated as described above in the Estimation Procedures section, using the final revised consumption estimate and a revised revenue estimate. The formula for revising the estimated revenue is:

$$R_{jm}^* = R_{jm} + \left[(R_{ja} - R'_{jm}) \left(\frac{R_{jm}}{R'_{jm}} \right) \right] \quad (7)$$

where:

R_{jm}^* = the final revenue estimate for month m in consumer sector j,

R_{jm} = the estimated revenue for month m in consumer sector j,

R_{ja} = the revenue for the year reported on Form EIA-176,

R'_{jm} = The annual sum of estimated monthly revenues. Revision of Volumes and Prices for Deliveries to Electric Utilities. Revisions to monthly electric utilities data are published throughout the year as they become available.

Reliability of Monthly Data

The monthly data published in this report are subject to two sources of error - nonsampling error and sampling error. Nonsampling errors occur in the collection

and processing of the data. See the discussion of the Form EIA-857 in Appendix B for a description of non-sampling errors for monthly data.

Sampling error may be defined as the difference between the results obtained from a sample and the results that a complete enumeration would provide. The standard error statistic is a measurement of sampling error.

Standard Errors. A standard error of an estimate is a statistical measure that indicates how the estimate from the sample compares to the result from a complete enumeration. Standard errors are calculated based on statistical theory that refers to all possible samples of the same size and design.

The standard errors for monthly natural gas volume estimates by State are given in Table C1. Ninety-five percent of the time, the volume that would have been obtained from a complete enumeration will lie in the range between the estimated volume minus two standard errors and the estimated volume plus two standard errors.

The standard error of the natural gas volume estimate is the square root of the variance of the estimate. The formula for calculating the variance of the volume estimate is:

$$V(\hat{Y}) = \sum_{h=1}^H \left[N_h^2 \frac{(1 - \frac{n_h}{N_h})}{n_h(n_h - 1)} \left(\sum_{i=1}^{n_h} (y_i - Tx_i)^2 \right) \right] \quad (8)$$

where:

H = the total number of strata

N_h = the total number of companies in stratum h

n_h = the sample size in stratum h

y_i = the reported monthly volume for company i

x_i = the reported annual volume for company i

T = the ratio of the sum of the reported monthly volumes for sample companies to the sum of the reported annual volumes for the sample companies.

Table C-1. Standard Error for Natural Gas Deliveries and Price to Consumers by State, October 1998

State	Volume Million Cubic Feet				Price Dollars per Thousand Cubic Feet		
	Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial
Alabama	125	101	2,890	2,895	0.99	0.38	0.97
Alaska	0	0	NA	NA	—	—	NA
Arizona	11	83	0	84	0.17	0.04	—
Arkansas	0	0	0	0	—	—	—
California	166	374	4,688	4,705	0.07	0.07	0.23
Colorado	2,576	1,916	908	3,336	3.78	0.46	1.97
Connecticut	0	0	0	0	—	—	—
Delaware	0	0	0	0	—	—	—
District of Columbia	0	0	0	0	—	—	—
Florida	167	401	1,411	1,477	3.84	1.06	0.14
Georgia	175	145	3,289	3,297	0.08	0.21	1.07
Hawaii	0	0	0	0	—	—	—
Idaho	0	0	0	0	—	—	—
Illinois	889	551	2,352	2,574	0.09	0.24	0.30
Indiana	NA	NA	NA	NA	NA	NA	NA
Iowa	138	695	85	713	0.24	0.15	0.18
Kansas	3,623	5,267	9,376	11,348	2.96	1.07	5.52
Kentucky	411	1,453	487	1,586	1.66	5.94	4.08
Louisiana	NA	NA	NA	NA	NA	NA	NA
Maine	0	0	0	0	—	—	—
Maryland	NA	NA	NA	NA	NA	NA	NA
Massachusetts	217	199	832	883	0.25	0.14	0.39
Michigan	0	0	0	0	—	—	—
Minnesota	416	528	2,047	2,155	0.19	0.15	0.32
Mississippi	NA	NA	NA	NA	NA	NA	NA
Missouri	268	205	858	922	0.13	1.13	2.53
Montana	11	10	0	15	0.01	0.03	—
Nebraska	28	82	715	720	0.17	0.33	0.80
Nevada	0	0	0	0	—	—	—
New Hampshire	NA	NA	NA	NA	NA	NA	NA
New Jersey	NA	NA	NA	NA	NA	NA	NA
New Mexico	112	119	655	675	0.15	0.59	—
New York	NA	NA	NA	NA	NA	NA	NA
North Carolina	77	119	277	311	0.01	0.04	0.11
North Dakota	0	0	0	0	—	—	—
Ohio	NA	NA	NA	NA	NA	NA	NA
Oklahoma	297	216	665	760	0.57	0.20	2.20
Oregon	0	0	0	0	—	—	—
Pennsylvania	32	235	727	764	0.30	0.19	0.10
Rhode Island	0	0	0	0	—	—	—
South Carolina	137	125	515	548	0.95	0.36	0.16
South Dakota	0	0	0	0	—	—	—
Tennessee	727	1,177	2,022	2,450	4.00	3.87	2.21
Texas	56	2,121	NA	NA	0.05	0.65	NA
Utah	0	0	0	0	—	—	—
Vermont	0	0	0	0	—	—	—
Virginia	115	326	198	398	0.72	0.38	0.09
Washington	NA	NA	NA	NA	NA	NA	NA
West Virginia	1,324	707	110	1,505	2.13	8.88	2.37
Wisconsin	501	912	350	1,098	0.35	0.22	0.21
Wyoming	55	71	59	107	0.18	0.35	1.10
Total	5,057	6,976	17,694	19,681	0.15	0.16	0.22

NA = Not Available.

— = Not Applicable.

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

Appendix D

Natural Gas Reports and Feature Articles

Reports Dealing Principally with Natural Gas and/or Natural Gas Liquids

- *Natural Gas Annual 1995*, DOE/EIA-0131(95), November 1996.
- *Natural Gas Annual 1993 Supplement: Company Profiles*, DOE/EIA-0131(93/S), February 1995.
- *Natural Gas 1996 Issues and Trends*, DOE 0560(96), December 1996.

Other Reports Covering Natural Gas, Natural Gas Liquids, and Other Energy Sources

- *Monthly Energy Review*, DOE/EIA-0035. Published monthly. Provides national aggregate data for natural gas, natural gas liquids, and other energy sources.
- *Short-Term Energy Outlook*, DOE/EIA-0202. Published quarterly. Provides forecasts for next six quarters for natural gas and other energy sources.
- *Natural Gas 1995: Issues and Trends*, DOE/EIA-0560(95), November 1995.
- *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves - 1995 Annual Report*, DOE/EIA-0216(95)/Advance Summary, October 1996.
- *Annual Energy Review 1995*, DOE/ EIA-0384(95), July 1996. Published annually.
- *Annual Report to Congress 1995 DOE/ EIA-01733(95)*, July 1996. Published annually.
- *Annual Energy Outlook 1996*, DOE/ EIA-0383(96), January 1996. Published annually.

Selected One-Time Natural Gas and Related Reports

- *The Value of Underground Storage in Today's Natural Gas Industry*, DOE/EIA-0591, March 1995.
- *Natural Gas Productive Capacity for the Lower 48 States, 1980 through 1995*, DOE/EIA-0542(95), July 1994.
- *Largest U.S. Oil and Gas Fields*, DOE/EIA-TR-0567, August 1993.
- *Energy Policy Act Transportation Rate Study*, DOE/EIA-0571, October 1993.
- *Energy Policy Act Transportation Study: Interim Report of Natural Gas Flows and Rates*, DOE/EIA-0602, October 1995.

Selected and Recurring Natural Gas and Related Data Reference Reports

- *Directory of Energy Data Collection Forms*, DOE/EIA-0249(95), January 1996.
- *Oil and Gas Field Code Master List, 1995*, EIA-0370(95), December 1996.

Feature Articles

June 1996

Natural Gas Industry Restructuring and Data Collection

(Discusses how restructuring of the natural gas industry has impacted the natural gas data collection efforts.)

July 1996

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

November 1996

U.S. Natural Gas Imports and Exports - 1995

(Contains final 1995 data on all U.S. imports and exports of natural gas.)

December 1996

Crosswell Seismology -- A View from Aside

(Discusses crosswell seismology and its geologic and economic implications for the domestic oil and gas industry.)

May 1997

Restructuring Energy Industries: Lessons from Natural Gas

(Compares and contrasts the natural gas and electric power industries.)

July 1997

Intricate Puzzle of Oil and Gas "Reserves Growth"

(Discusses the factors that affect ultimate recovery estimates of a field or reservoir.)

August 1997

Natural gas Residential Pricing Developments During the 1996-97 Winter

(Discusses key factors that affect pricing patterns, highlights the effects of weather, utilization patterns of natural gas storage, and pricing mechanisms used in natural gas markets.)

December 1997

Recent Trends in Natural Gas Spot Prices

(Focuses primarily on conditions and developments in the East Consuming Region and their connection to prices at the Henry Hub in the Producing Region.)

March 1998

EIA Corrects Errors in EIA's Drilling Activity Estimates Series

(Discusses and corrects errors in EIA's monthly and annual estimates of oil and gas drilling activity.)

Special Focuses

January 1997

Natural Gas Productive Capacity

(Analyzes monthly natural gas wellhead productive capacity in the lower 48 States from 1985 and 1996 and project this capacity for 1996 and 1997.)

Outlook for Natural Gas Through 2015

(Presents an outlook for natural gas through 2015.)

August 1997

Worldwide Natural Gas Supply and Demand And the Outlook For Global LNG Trade

(Focuses on natural gas into the next century with emphasis on world natural gas supply and demand to 2015.)

September 1997

Advance Summary: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1996 Annual Report - Advance Summary

(Focuses on proved reserves of domestic crude oil, natural gas, and natural gas liquids.)

May 1998

Deliverability on the Interstate Natural Gas Pipeline System

(Examines the capability of the interstate pipeline network to move gas to various U.S. markets and discusses changes occurring since 1990.)

Special Reports

March 1997

Natural Gas Analysis and Geographic Information Systems

(Explores how geographic information system techniques and methodologies are being used by the Energy Information Administration.)

April 1997

Natural Gas Pipeline and System Expansions

(Examines recent expansions to the North American natural gas

Natural Gas 1996: Highlights

(Reviews data for 1996 based on Energy Information Administration surveys.) pipeline network.)

July 1997

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

August 1997

U.S. Natural Gas Imports and Exports - 1996

(Contains final 1996 data on all U.S. imports and exports of natural gas.)

September 1997

U.S. Underground Storage of Natural Gas in 1997: Existing and Proposed

(Examines recent and proposed expansions of underground natural gas storage capacity and deliverability in the United States as of September 1, 1997.)

October 1997

Comparison of Natural Gas Storage Estimates from the EIA and AGA

(Compares EIA and AGA estimates from January 1994 through July 1997.)

April 1998

Natural Gas 1997: A Preliminary Summary

(Reviews data for 1997 based on Energy Information Administration surveys.)

July 1998

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

August 1998

U.S. Natural Gas Imports and Exports - 1997

(Contains final 1997 data on all U.S. imports and exports of natural gas.)

Appendix E

Technical Contacts

Section	Tables	Principal Data Sources	Technical Contact
Summary Statistics: Natural Gas Production	1, 2, 3	Monthly: EIA-895, "Monthly Quantity of Natural Gas Report" Annual:	Sharon Belcher (202) 586-6119
Extraction Loss	1	Monthly: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
		Monthly: EIA computations Annual: Form EIA-816, "Monthly Natural Gas Liquids Report" and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production"	Margo Natof (202) 586-6303
Supplemental Gaseous Fuels	2	Monthly: EIA computations Annual: Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"	Margo Natof (202) 586-6303
Imports and Exports	2	Monthly: EIA computations Annual: Office of Fossil Energy, U.S. Department of Energy, "Natural Gas Import and Exports"	Linda Cook (202) 586-6306
Price: City Gate, Residential, Commercial, and Industrial	4	Monthly: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
Wellhead	4	Monthly: EIA computations Annual: Form EIA-895, "Monthly Quantity and Value of Natural Gas Report"	Sylvia Norris (202) 586-6106
Electric Utility	4	Monthly: Form FPC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202) 586-4790
Summary of Natural Gas Imports and Exports	5,6	Monthly: Quaterly Natural Gas Import and and Export Sales and Price Report	Linda Cook (202) 586-6306
Producer Related Activities: Natural Gas Production	7,8	Monthly: EIA-895, "Monthly Quantity of Natural Gas Report"	Sharon Belcher (202) 586-6119

Underground Storage:	9, 10, 11 12, 13, 14	Monthly:	Forms FERC-8 and EIA-191, "Underground Gas Storage Report"	Carol Jones (202) 586-6168
Distribution and Consumption:				
Deliveries to:				
Residential,	15	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
Commercial,	16			
Industrial,	17			
Electric Utility,	18		Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants"	
All Consumers	19			
Average Price to:				
City Gate,	20	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
Residential,	21			
Commercial,	22			
Industrial,	23		Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants"	
Electric Utility	24			
Onsystem Sales	25	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
Heating Degree Days	26	Seasonal:	National Oceanic and Atmospheric Administration	Patricia Wells (202) 586-6077
Highlights				Mary Carlson (202) 586-4749

Appendix F

Natural Gas Electronic Products

In addition to printed publications, the Energy Information Administration distributes information concerning the natural gas industry in a variety of electronic formats through several media. Two main types of products are available electronically: *viewable documents* that may be read or printed; and *post-processable files* that may be directly used as input to a computer application without additional keying and checking of data.

Viewable documents represent complete or selected sections of publications including text, tables and graphs. They may be as specific as single tables or as general as an entire publication. Post-processable documents on the other hand are either macro-level rep-

resentations of information in published tables or micro-level respondent information representing responses on a specific nonconfidential survey.

The media used to distribute these electronic publications include: (1) The Energy Information Administration's Internet site (<http://www.eia.doe.gov> or <ftp://ftp.eia.doe.gov>); (2) Dial-in access through the Energy Information Administration's EPUB electronic bulletin board or through the Economic Bulletin Board of the Department of Commerce and the COGIS system; (3) The Energy Information Administration's quarterly CD-ROM(Info-Disk); (4) The Energy Information Administration's Fax on Demand System; and (5) diskettes.

	Internet	Dial-In	Infodisk	E-Mail	Diskette
ANNUAL PUBLICATIONS					
Natural Gas Annual, 1997 Provides information on supply and disposition of natural gas in the United States. Information is provided nationally, regionally, and by State for 1997.	V P		V P		P
Historical Natural Gas Annual, 1930 through 1997 Contains historical information about supply and disposition of natural gas at the national, regional, and State level, as well as prices at selected points in the flow of gas from wellhead to burnertip.	P		P		P
Natural Gas 1996: Issues and Trends Examines how industry restructuring continues to expand choices, and challenges, for industry, participants, and natural gas customers.	V		V		
Natural Gas 1995: Issues and Trends Addresses current issues affecting the natural gas industry and markets, and analyzes trends in the most recent natural gas data.	V		V		
Natural Gas 1994: Issues and Trends Provides an overview of the natural gas industry in 1993 and early 1994, focusing on the overall ability to deliver gas under the new regulatory mandates of the Federal Energy Regulatory Commission's Order 636.	V		V		
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report, 1996 1996 national and State estimates of reserves, reserve changes, and production, plus industry highlights.	V		V		

V = Viewable

P = Post-Processable

E = Automatic E-Mail Updates

	Internet	Dial-In	Infodisk	E-Mail	Diskette
Natural Gas Productive Capacity for the Lower 48 States 1986-1998 Analysis of monthly natural gas wellhead productive capacity.	V		V		
MONTHLY PUBLICATIONS					
Natural Gas Monthly, from the previous 12 months Entire Publication in viewable format.	V		V		
OTHER PUBLICATIONS					
Natural Gas Weekly Market Update Analysis of current price, supply and storage data along with a two week snapshot of the weather in four distinct metropolitan areas.	V				
Deliverability on the Interstate Natural Pipeline System This publication chronicles and analyzes pipeline growth from the perspective of the natural gas shipper and pipeline transporter.	V				
Natural Gas 1997: Preliminary Highlights This Special Focus, which was featured in the April 1998 issue of the <i>Natural Gas Monthly</i> , presents events that affected the natural gas industry during 1997.	V	P			
Energy Policy Act Transportation Study: Interim Report on Natural Gas Flow and Rates (EPACT) Analysis of natural gas transportation rates and distribution patterns for the period 1988 through 1994.	V		V		
Oil Production Capacity Extension Cost for the Persian Gulf Quantifies the cost of expanding oil production capacity for the Persian Gulf based on geologic plays and fields rather than country-level economics. Development costs and volumes are estimated for the next 15 years.	V		V		
Costs and Indices for Domestic Oil and Gas Fields Equipment and Production Operations 1993-1996 Cost of equipment and operation of oil and gas wells in the lower 48 States.	V		V		
Drilling Sideways- A Review of Horizontal Well Technology and the Domestic Application Salient aspects of current and near-future horizontal drilling and completion technology.	V		V		
International Oil and Gas Exploration and Development Compilation of country-level data and assessment of regional trends relating to upstream aspects of global oil and gas supply.	V		V		
Oil and Gas Field Code Master List Comprehensive listing of U.S. oil and gas field names as of October 1997.	V		V		
Oil and Gas Resources of the Fergana Basin (Uzbekistan, Tadjikistan, and Kyrgyzstan) Reservoir level assessments of oil and gas ultimate recovery in the former Soviet Union area.	V		V		

V = Viewable P = Post-Processable E = Automatic E-Mail Updates

	Internet	Dial-In	InfoDisk	E-Mail	Diskette
The Value of Underground Storage in Today's Natural Gas Industry. Explores the significant and changing role of storage in the industry.	V		V		
U.S. Oil and Gas Development in the Early 1900's Analyses of the growing prominence of smaller energy companies in U.S. oil and gas production	V		V		
ANNUAL DATA					
Natural Gas Supply and Disposition, by State 1997	V P	V P			
Natural Gas Summary, United States by Year 1990-1997	V P	V P			
Natural Gas Annual 1997 data Self-extracting file containing data (in comma-delimited format) that appear in the tables in the 1997 <i>Natural Gas Annual</i> .	P		P		P
Historical Natural Gas Annual 1997 data Self-extracting file containing historical information (in comma-delimited format) found in the tables in Volume 2 of the 1997 <i>Natural Gas Annual</i> . Annual historical data at the national level are presented for 1930-1997. Annual information by State and region is presented for 1967-1997.	P		P		P
1997 Data reported on Form EIA-176 A self-extracting compressed file containing data reported on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for 1997.	P				P
1996 Data reported on Form EIA-176 A self-extracting compressed file containing data reported on Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for 1996.	P				P
Data archive of historical reserves estimates for U.S. Crude Oil, Natural Gas, and Natural Gas Liquids National, State, and State subregion data published in the reserves balance tables of <i>U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves</i> from 1977 forward.	P				P
MONTHLY DATA					
Natural Gas Production, United States by Month 1989-forward	P	P			
Natural Gas Supply and Disposition 1989-forward	P	P		E	
Natural Gas Imports and Exports 1989-forward	P	P			
Natural Gas Underground Storage: United States Total by Month 1989-forward	P	P		E	
Natural Gas Prices: United States Total by Month 1989-forward	P	P		E	
Natural Gas Consumption by Sector: United States Total by Month 1989-forward	P	P		E	
SELF-EXTRACTING COMPRESSED DATA FILE ARCHIVES					
Natural Gas Consumption and Prices, for most recent 2-3 years	P	P			
Natural Gas Consumption and Prices, for 1984-1995	P	P			

V = Viewable

P = Post-Processable

E = Automatic E-Mail Updates

Glossary

Balancing Item: Represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. These differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems which vary in scope, format, definitions, and type of respondents.

Base (Cushion) Gas: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

British Thermal Unit (Btu): The heat required to raise the temperature of one pound of water by one degree Fahrenheit at or near 39.2 degrees Fahrenheit.

City-gate: A point or measuring station at which a gas distribution company receives gas from a pipeline company or transmission system.

Commercial Consumption: Gas used by nonmanufacturing organizations such as hotels, restaurants, retail stores, laundries, and other service enterprises, and gas used by local, State, and Federal agencies engaged in nonmanufacturing activities.

Depletion: The loss in service value incurred in connection with the exhaustion of the natural gas reserves in the course of service.

Depreciation: The loss in service value not restored by current maintenance, incurred in connection with the consumption or respective retirement of a gas plant in the course of service from causes that are known to be in current operation and against which the utility is not protected by insurance; for example, wear and tear, decay, obsolescence, changes in demand and requirements of public authorities, and the exhaustion of natural resources.

Dry Natural Gas Production: Marketed production less extraction loss.

Electric Utility Consumption: Gas used as fuel in electric utility plants.

Exports: Natural gas deliveries out of the continental United States and Alaska to foreign countries.

Extraction Loss: The reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Flared: The volume of gas burned in flares on the base site or at gas processing plants.

Gross Withdrawals: Full well stream volume, including all natural gas plant liquid and nonhydrocarbon gases, but excluding lease condensate. Also includes amounts delivered as royalty payments or consumed in field operations.

Imports: Natural gas received in the Continental United States (including Alaska) from a foreign country.

Independent Producers: Any person who is engaged in the production or gathering of natural gas and who sells natural gas in interstate commerce for resale but who is not engaged in the transportation of natural gas (other than gathering) by pipeline in interstate commerce.

Industrial Consumption: Natural gas used by manufacturing and mining establishments for heat, power, and chemical feedstock.

Interstate Companies: Natural gas pipeline companies subject to FERC jurisdiction.

Intransit Deliveries: Redeliveries to a foreign country of foreign gas received for transportation across U.S. territory and deliveries of U.S. gas to a foreign country for transportation across its territory and redelivery to the United States.

Intransit Receipts: Receipts of foreign gas for transportation across U.S. territory and redelivery to a foreign country and redeliveries to the United States of U.S. gas transported across foreign territory.

Intrastate Companies: Companies not subject to FERC jurisdiction.

Lease and Plant Fuel: Natural gas used in well, field, lease operations and as fuel in natural gas processing plants.

Liquefied Natural Gas (LNG): Natural gas that has been liquefied by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure.

Marketed Production: Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations. See Explanatory Note 1 for discussion of coverage of data concerning nonhydrocarbon gases removed.

Native Gas: Gas in place at the time that a reservoir was converted to use as an underground storage reservoir as in contrast to injected gas volumes.

Natural Gas: A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or solution with oil in natural underground reservoirs at reservoir conditions.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Onsystem Sales: Sales to customers where the delivery point is a point on, or directly interconnected with, a transportation, storage, and/or distribution system operated by the reporting company.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Repressuring: The injection of gas into oil or gas formations to effect greater ultimate recovery.

Residential Consumption: Gas used in private dwellings, including apartments, for heating, cooking, water heating, and other household uses.

Salt Cavern Storage Field: A storage facility that is a cavern hollowed out in either a salt "bed" or "dome" formation.

Storage Additions: The volume of gas injected or otherwise added to underground natural gas or liquefied natural gas storage during the applicable reporting period.

Storage Withdrawals: Total volume of gas withdrawn from underground storage or liquefied natural gas storage during the applicable reporting period.

Supplemental Gaseous Fuels Supplies: Synthetic natural gas, propane-air, refinery gas, biomass gas, air injected for stabilization of heating content, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): A manufactured product chemically similar in most respects to natural gas, that results from the conversion or reforming of petroleum hydrocarbons and may easily be substituted for or interchanged with pipeline quality natural gas.

Therm: One-hundred thousand British thermal units.

Underground Gas Storage Reservoir Capacity: Interstate company reservoir capacities are those certificated by FERC. Independent producer and intrastate company reservoir capacities are reported as developed capacity.

Vented Gas: Gas released into the air on the base site or at processing plants.

Wellhead Price: Represents the wellhead sales price, including charges for natural gas plant liquids subsequently removed from the gas, gathering and compression charges, and State production, severance, and/or similar charges.

Working (Top Storage) Gas: The volume of gas in an underground storage reservoir above the designed level of the base. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.