

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

Highlights	1
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Appendices

A. Explanatory Notes	73
B. Data Sources	81
C. Statistical Considerations	87
D. Natural Gas Reports and Feature Articles	93
E. Technical Contacts	97
F. Natural Gas Electronic Products	99

Glossary	103
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Tables

1. Summary of Natural Gas Production in the United States, 1993-1999	7
2. Supply and Disposition of Dry Natural Gas in the United States, 1993-1999	8
3. Natural Gas Consumption in the United States, 1993-1999	10
4. Selected National Average Natural Gas Prices, 1993-1999	12
5. U.S. Natural Gas Imports, by Country, 1993-1999	14
6. U.S. Natural Gas Exports, by Country, 1993-1999	15
7. Marketed Production of Natural Gas, by State, 1993-1999	16
8. Gross Withdrawals and Marketed Production of Natural Gas by State, February 1999	19
9. Underground Natural Gas Storage - All Operators, 1993-1999	20
10. Underground Natural Gas Storage - by Season, 1996-1999	22
11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1994-1999	23
12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1994-1999	24
13. Net Withdrawals from Underground Storage, by State, 1997-1999	25
14. Activities of Underground Natural Gas Storage Operators, by State, April 1999	29

15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999	30
16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999.....	34
17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999.....	38
18. Natural Gas Deliveries to Electric Utility Consumers, by State, 1997-1999.....	42
19. Natural Gas Deliveries to All Consumers, by State, 1997-1999.....	46
20. Average City Gate Price, by State, 1997-1999.....	50
21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1997-1999.....	53
22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1997-1999	56
23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1997-1999	59
24. Average Price of Natural Gas Delivered to Electric Utility Consumers, by State, 1997-1999.....	62
25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999	65
A1. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data.....	73
C1. Standard Error for Natural Gas Deliveries and Price to Consumers by State, March 1999.....	92

Figures

1. Production and Consumption of Natural Gas in the United States, 1996-2000	9
2. Natural Gas Deliveries to Consumers in the United States, 1995-1999	11
3. Average Price of Natural Gas Delivered to Consumers in the United States, 1995-1999	13
4. Average Price of Natural Gas in the United States, 1995-1999	13
5. Underground Natural Gas Storage in the United States, 1996-1999	21
6. Percentage of Total Deliveries Represented by Onsystem Sales, 1995-1999	71

Highlights

Overview

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

Dry natural gas production during the first half of 1999 is estimated to be 115 billion cubic feet (1 percent) lower than in 1998, but net imports are 152 billion cubic feet (10 percent) higher than last year.

End-use consumption of natural gas during the first half of 1999 is estimated to be 279 billion cubic feet (3 percent) higher than in 1998.

Estimates for all natural gas price series for the first quarter of 1999 are below the first quarter averages for 1998 (from 5 to 16 percent lower).

Supply

Natural gas supplies through June 1999 have been adequate to meet the small increase seen in demand the first half of the year, although production is slightly lower than in 1998. Cumulative dry production for January through June 1999 is estimated to be 9,315 billion cubic feet (Table 1). This is somewhat lower than in each of the previous three years (Figure HI1), but higher than the 9,222 billion cubic feet produced in the first half of 1995. The average well-head price for January through March 1999 is estimated to be \$1.74 per thousand cubic feet, \$0.28

lower than during the same period of 1998. The daily rate of production during recent months has been closer to that of 1998 than it was early in the year. Production in June 1999 is estimated to be 51.7 billion cubic feet per day or 0.5 percent below that of June 1998. However, production in January 1999 was estimated to be 50.9 billion cubic feet per day, 3.3 percent lower than in January 1998.

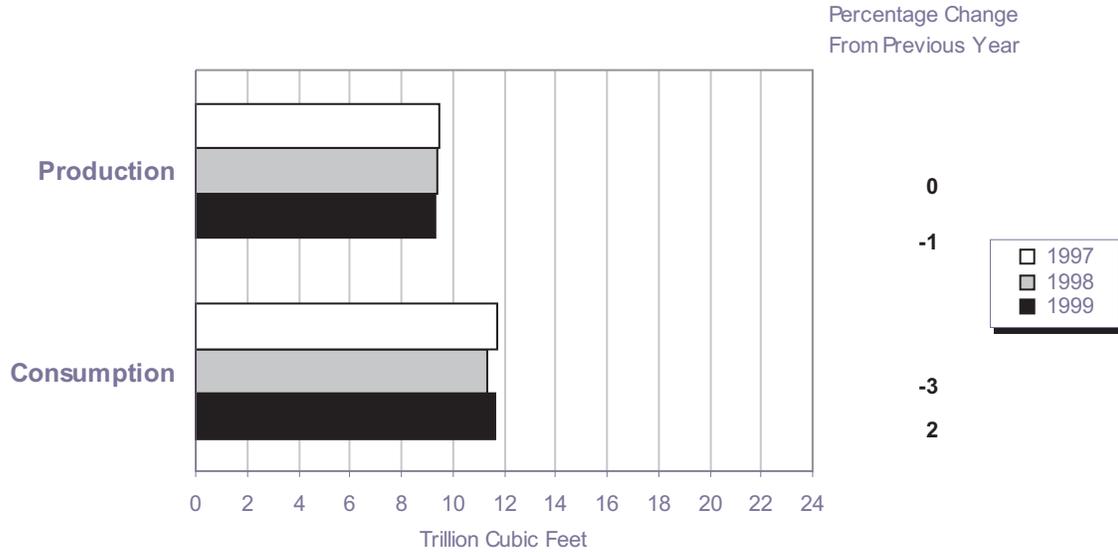
Cumulative net imports of natural gas, which come mostly via pipeline from Canada, are estimated to be 1,611 billion cubic feet during the first half of 1999. This is 152 billion cubic feet (10 percent) higher than during the first half of 1998 (Table 2). Net imports in each month of 1999 have averaged from 8.4 to 9.5 billion cubic feet per day, or from 7 to 13 percent higher than in 1998.

As of March 31, 1999, data on the amount of natural gas in underground storage facilities reflect an engineering adjustment that reclassified 47 billion cubic feet of working gas as base gas.¹ Thus reported levels of working gas for March and subsequent months are somewhat lower than they would have been without this adjustment. Net injections of natural gas into storage during the first 2 months of the refill season (April and May) were estimated to be well below the levels of last year, but net injections of 330 billion cubic feet estimated for June 1999 are 2 percent higher than in June 1998 (Table 10). The level of working gas at the end of June 1999 is estimated to be 2,169 billion cubic feet, 3 percent higher than in 1998 (Figure HI2).

Recent lower prices for both natural gas and crude oil have had an impact on drilling, which has implications for future discoveries and production. The

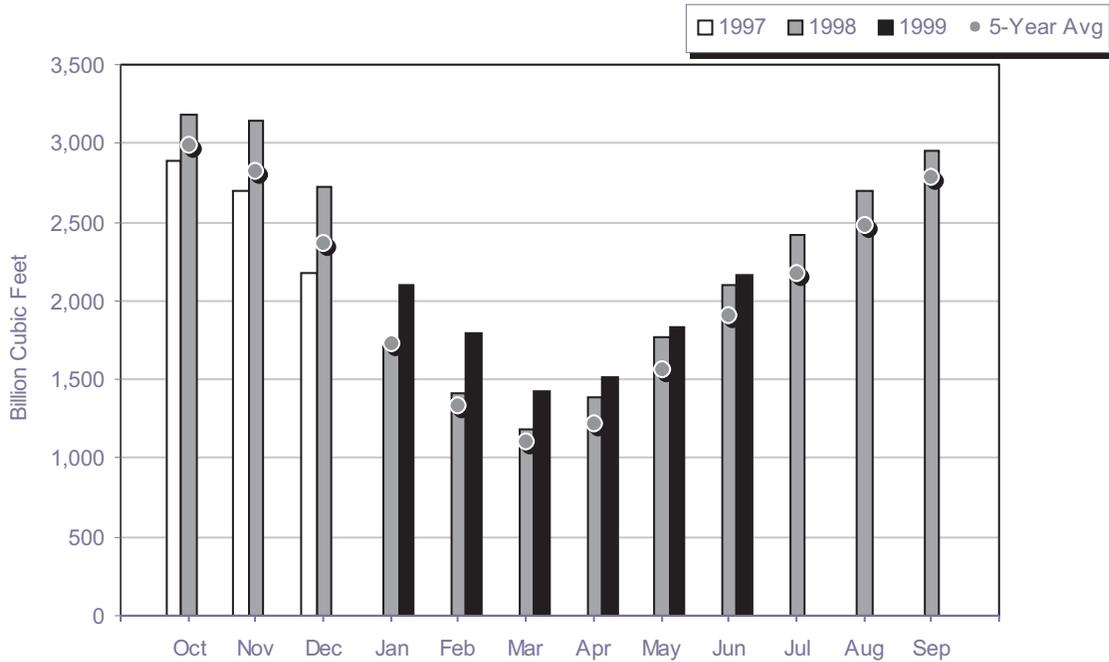
1 Energy Information Administration, "Highlights," *Natural Gas Monthly*, DOE/EIA-0130(99/05) (Washington, DC, May 1999).

Figure HI1. Natural Gas Production and Consumption, January-June, 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 1994 to 1998 while the January average is calculated from January levels for 1995 to 1999. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

Source: 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.

highest number of active drilling rigs in recent years was 943 in 1997.² The first 5 months of 1999 have seen an average of 532 active rigs, a drop of 44 percent over 2 years. Average crude oil prices fell more sharply than natural gas prices during this period, resulting in a shift in drilling from oil to gas. In 1997, the domestic first purchase price for crude oil was \$17.23 per barrel.³ The price fell 37 percent to \$10.88 in 1998 and is estimated to be \$10.60 in March 1999. For natural gas, the average wellhead price in 1997 was \$2.32 per thousand cubic feet. This price then fell “only” 16 percent to \$1.96 per thousand cubic feet in 1998 and is estimated to be \$1.70 in March 1999. On average in 1997, 60 percent of the active drilling rigs were directed toward natural gas. On average during the first 5 months of 1999, 77 percent of the rigs have been directed toward natural gas.

End-Use Consumption

End users have consumed 10,645 billion cubic feet of natural gas in the first half of 1999, according to preliminary estimates (Table 3). This is 279 billion cubic feet more than during the first half of 1998, a nearly 3-percent increase. Both residential and commercial consumption are more than 100 billion cubic feet higher than last year, while industrial consumption is 42 billion cubic feet lower (Figure HI3). Cumulative consumption by electric utilities is only available through March 1999. During the first quarter, electric utilities consumed an estimated 38 billion cubic feet more natural gas than in 1998.

During June 1999, residential users consumed an estimated 144 billion cubic feet of natural gas, 6 percent less than in June 1998. Commercial users consumed

an estimated 157 billion cubic feet, 10 percent more than in June 1998, and industrial users consumed 680 billion cubic feet, 4 percent more than last year. In March 1999, electric utilities consumed 206 billion cubic feet of natural gas, 6 percent more than in March 1998.

Prices

Estimates of natural gas prices for the first quarter of 1999 are below the 1998 levels for all price series (electric utility prices are available through February 1999). The estimated wellhead price for the first quarter is \$1.74 per thousand cubic feet, \$0.28 (14 percent) below that of 1998. Residential users paid an average \$6.09 per thousand cubic feet for natural gas during the first quarter of 1999, \$0.29 (5 percent) lower than in 1998, and commercial users paid an average \$5.11 per thousand cubic feet, \$0.41 (7 percent) lower than in 1998.⁴ In the industrial sector, the average price paid for natural gas in the first quarter of 1999 was \$2.96 per thousand cubic feet, \$0.57 (16 percent) lower than in 1998. Through February 1999, electric utilities paid an average \$2.26 per thousand cubic feet, \$0.32 (12 percent) less than in 1998.

Daily average spot and futures prices at the Henry Hub, like the average wellhead price, spent much of the first quarter below \$2.00 per million Btu.⁵ However, since April 1, 1999, both price series have been above \$2.00 and have generally been in the range of \$2.20 to \$2.45 per million Btu during June 1999 (Figure HI5). The June futures contract settled at \$2.266 per million Btu on May 26, 1999, its last day of trading. The July contract opened its last day of trading, June 28, 1999, at \$2.245 per million Btu.

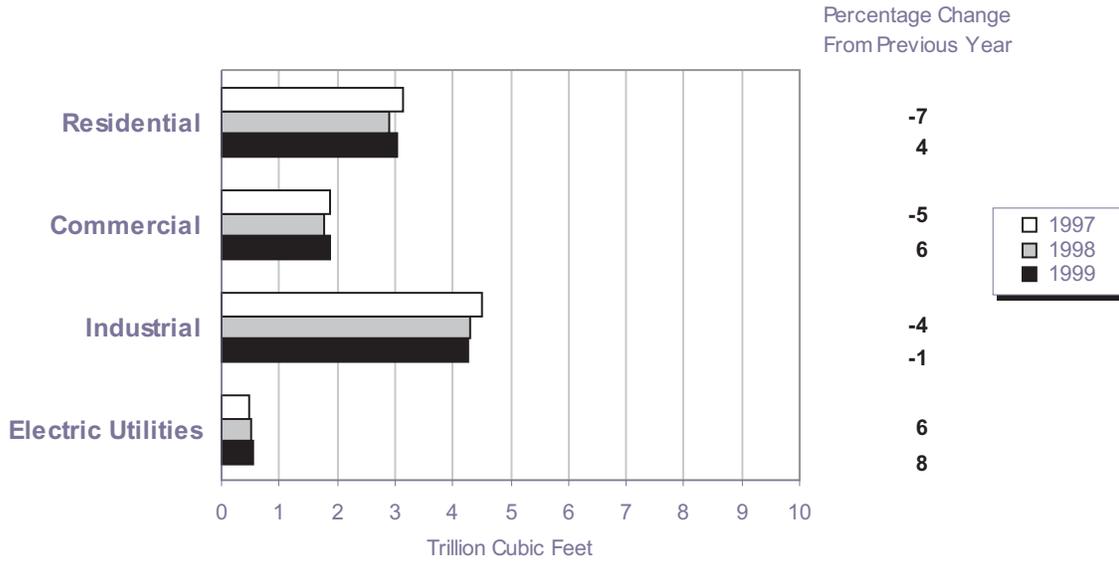
2 Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(99/06) (Washington, DC, June 1999), Table 5.1.

3 Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(99/06) (Washington, DC, June 1999), Table 9.1.

4 End-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 averaged 65 percent of commercial deliveries and only 15 percent of industrial deliveries (Table 4).

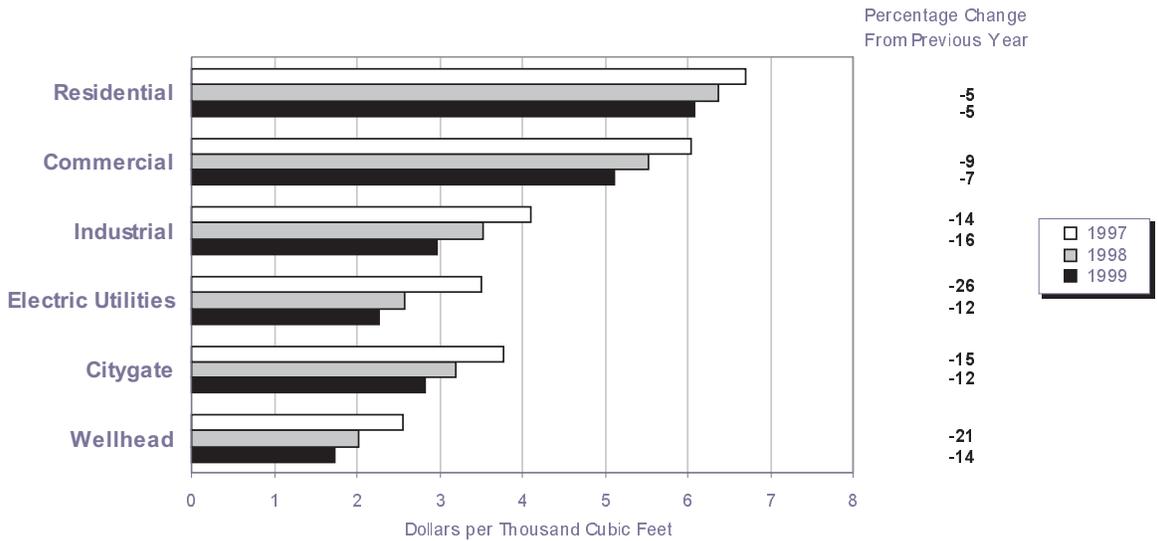
5 Prices in dollars per million Btu are roughly equivalent to prices in dollars per thousand cubic feet. Taking the price in dollars per million Btu and dividing by 1.03 will convert it to dollars per thousand cubic feet.

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



Note: Electric utilities reflect January-March deliveries.
Source: Table 3.

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-March, 1997-1999



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.

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



Note: The future 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 2,116	^E 332	^E 46	^E 22	^E 1,717	^E 83	^E 1,633
February	^E 1,901	^E 294	^E 42	^E 18	^E 1,547	^E 75	^E 1,472
March	^E 2,083	^E 321	^E 45	^E 21	^E 1,696	^E 82	^E 1,613
April	^E 2,003	^E 306	^E 44	^E 21	^E 1,632	^E 79	^E 1,553
May	^E 2,063	^E 318	^E 43	^E 20	^E 1,682	^E 82	^E 1,600
June	^E 1,998	^E 294	^E 44	^E 22	^E 1,637	^E 79	^E 1,558
July	^E 2,028	^E 295	^E 45	^E 24	^E 1,665	^E 81	^E 1,584
August	^E 2,042	^E 292	^E 46	^E 24	^E 1,681	^E 82	^E 1,600
September	^E 2,012	^E 314	^E 44	^E 23	^E 1,631	^E 79	^E 1,552
October	^E 2,094	^E 351	^E 44	^E 23	^E 1,677	^E 81	^E 1,595
November	^E 2,022	^E 339	^E 45	^E 24	^E 1,615	^E 78	^E 1,536
December	^E 2,103	^E 361	^E 44	^E 23	^E 1,674	^E 81	^E 1,593
Total	^E24,464	^E3,816	^E532	^E263	^E19,853	^E963	^E18,890
1999							
January	^{RE} 2,055	^E 330	^E 44	^E 23	^{RE} 1,659	^{RE} 80	^{RE} 1,579
February	^{RE} 1,863	^{RE} 290	^E 41	^E 21	^{RE} 1,511	^{RE} 73	^{RE} 1,438
March	^{RE} 2,085	^{RE} 330	^{RE} 45	^E 23	^E 1,687	^E 82	^E 1,605
April	^E 2,008	^E 318	^E 44	^E 22	^E 1,625	^E 79	^E 1,546
May(STIFS)	NA	NA	NA	NA	^E 1,678	^E 81	^E 1,596
June(STIFS)	NA	NA	NA	NA	^E 1,629	^E 79	^E 1,550
1999 YTD	NA	NA	NA	NA	^E9,789	^E475	^E9,315
1998 YTD	^E12,163	^E1,865	^E264	^E124	^E9,910	^E481	^E9,430
1997 YTD	12,085	1,732	292	131	9,930	482	9,448

^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: 1993-1997: Energy Information Administration (EIA), *Natural Gas Annual 1997*. January 1998 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 1,633	^E 12	267	466	^R 36	^R 2,414
February	^E 1,472	^E 10	237	300	^R 92	^R 2,110
March	^E 1,613	^E 11	244	242	^R 22	2,132
April	^E 1,553	^E 9	235	-199	^R 122	^R 1,720
May	^E 1,600	^E 8	240	-393	^R 64	^R 1,519
June	^E 1,558	^E 7	236	-323	^R 2	^R 1,481
July	^E 1,584	^E 9	251	-314	^R 55	^R 1,585
August	^E 1,600	^E 9	244	-283	^R 12	^R 1,580
September	^E 1,552	^E 9	255	-227	^R -122	^R 1,468
October	^E 1,595	^E 10	257	-255	^R -119	^R 1,488
November	^E 1,536	^E 11	243	34	^R -110	^R 1,715
December	^E 1,593	^E 12	267	435	^R -165	^R 2,142
Total	^E18,890	^E117	2,977	-518	^R-112	^R21,354
1999						
January	^{RE} 1,579	^E 13	^E 293	623	^R 16	^R 2,523
February	^{RE} 1,438	^{RE} 10	^E 260	333	^R 70	^R 2,111
March	^E 1,605	^E 11	^{RE} 276	297	^R -55	2,134
April	^E 1,546	^E 10	^E 261	-91	65	^E 1,791
May(STIFS)	^E 1,596	^E 9	^{RE} 268	^E -325	^{RE} 25	^E 1,574
June(STIFS)	^E 1,550	^E 9	^E 253	^E -330	^E 20	^E 1,502
1999 YTD	^E9,315	^E62	^E1,611	^E507	^E141	^E11,635
1998 YTD	^E9,430	^E57	1,459	93	337	11,376
1997 YTD	9,448	53	1,414	468	342	11,726

^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 1992 through 1997 include underground storage and liquefied natural gas storage. Data for January 1998 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.

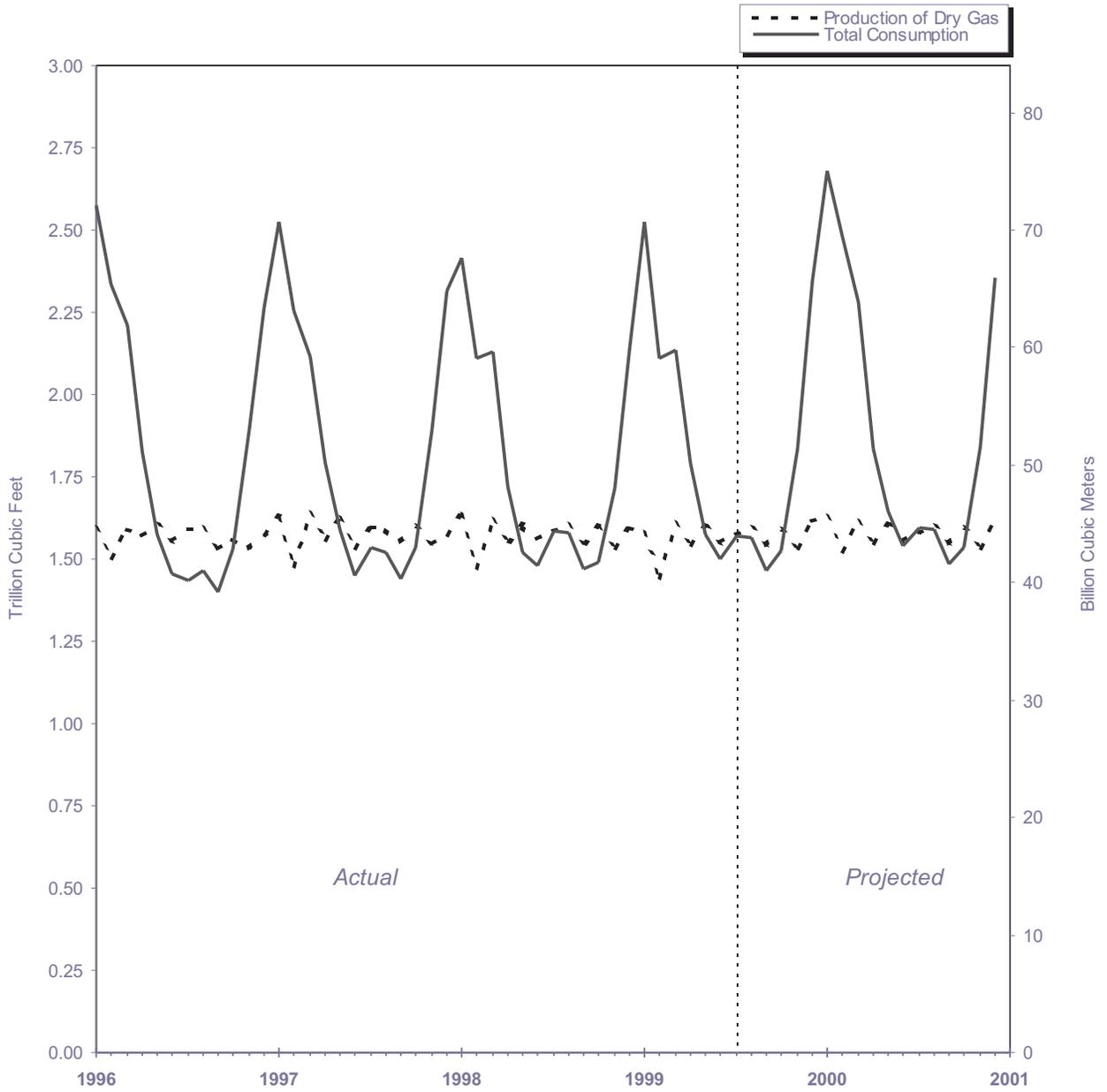
^E Estimated Data.

^{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: 1993-1997: Energy Information Administration (EIA), *Natural Gas Annual 1997*. 1997: EIA-895, "Monthly Quantity of Natural Gas Report," Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form EIA-191, "Monthly Underground Gas Storage Report," and Office of Fossil Energy, U.S. Department of Energy, Natural Gas Imports and Exports and EIA computations. January 1998 through current month: EIA, Form EIA-895, Form EIA-857, Form EIA-191, EIA computations, and estimates, Short-Term Integrated Forecasting System (STIFS) computations, and Office of Fossil 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: 1996 through the current month: Table 2. Projected data: Energy Information Administration, *Short-Term Energy Outlook*

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 107	^R 83	^R 808	^R 448	^R 796	171	^R 2,224	^R 2,414
February	^E 97	72	685	^R 390	^R 732	134	^R 1,941	^R 2,110
March	^E 106	73	641	^R 369	^R 749	194	^R 1,953	2,132
April	^E 102	59	408	257	^R 704	190	^R 1,559	^R 1,720
May	^E 105	52	221	177	^R 674	290	^R 1,362	^R 1,519
June	^E 103	51	153	^R 143	^R 653	379	^R 1,327	^R 1,481
July	^E 104	54	130	^R 150	^R 697	449	^R 1,426	^R 1,585
August	^E 105	54	115	^R 151	^R 698	457	^R 1,421	^R 1,580
September	^E 102	50	120	^R 147	^R 668	381	^R 1,315	^R 1,468
October	^E 105	51	200	178	^R 708	246	^R 1,332	^R 1,488
November	^E 101	59	390	^R 262	^R 725	178	^R 1,555	^R 1,715
December	^E 105	73	613	^R 369	^R 793	189	^R 1,964	^R 2,142
Total	^E 1,243	^R 730	^R 4,484	^R 3,041	^R 8,597	3,258	^R 19,380	^R 21,354
1999								
January	^E 104	86	908	^R 482	^R 765	179	^R 2,333	^R 2,523
February	^{RE} 95	72	^R 676	^R 396	720	152	^R 1,944	^R 2,111
March	^E 106	73	657	376	717	206	1,955	2,134
April(STIFS)	^E 101	^E 55	^E 428	^E 281	^E 702	NA	^E 1,635	^E 1,791
May(STIFS)	^E 104	^E 50	^E 233	^E 201	^E 682	NA	^E 1,419	^E 1,574
June(STIFS)	^E 101	^E 43	^E 144	^E 157	^E 680	NA	^E 1,358	^E 1,502
1999 YTD^d	^E 610	^E 380	^E 3,046	^E 1,892	^E 4,266	537	^E 10,645	^E 11,635
1998 YTD^d	^E 620	389	2,915	1,784	4,308	499	10,366	11,376
1997 YTD^d	600	402	3,146	1,885	4,498	472	10,723	11,726

^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.

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

^R Revised Data.

^E Estimated Data.

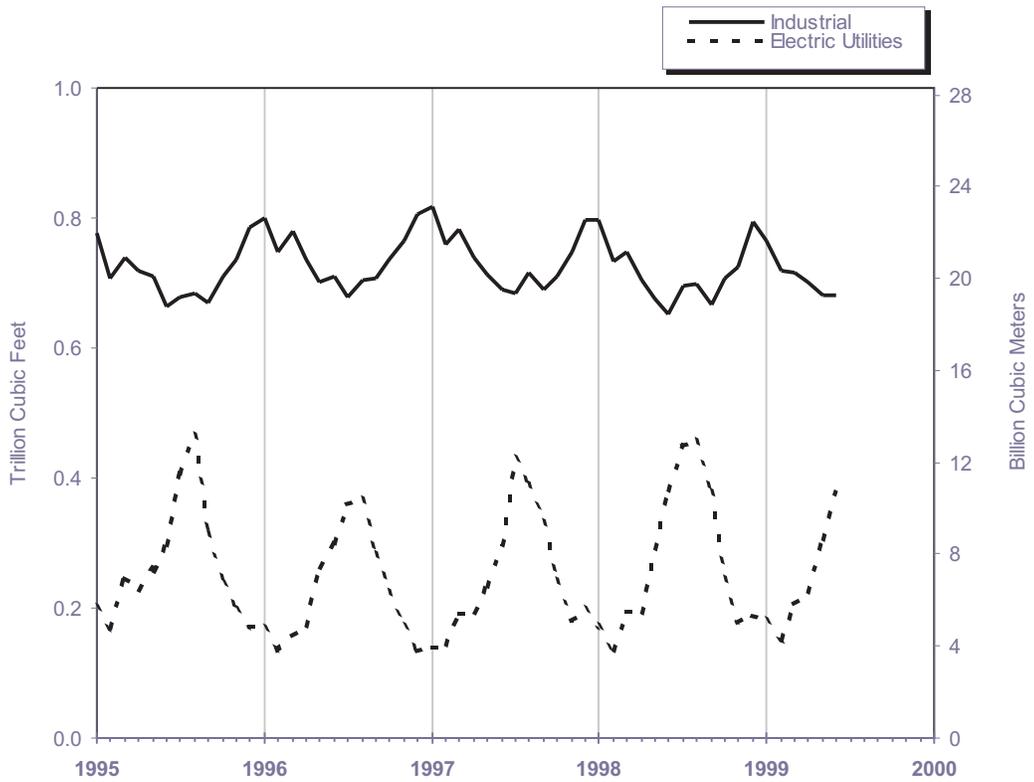
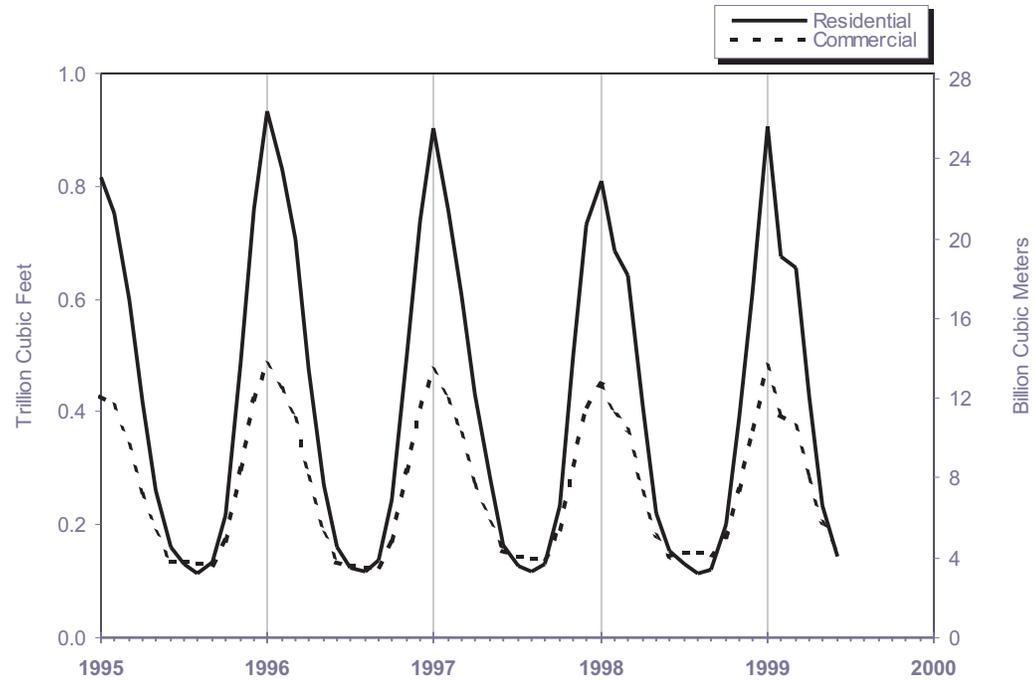
^{RE} Revised Estimated Data.

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: 1993-1997: 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 1998 through the current month: EIA: Form EIA-895, 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: Table 3.

Table 4. Selected National Average Natural Gas Prices, 1993-1999
(Dollars per Thousand Cubic Feet)

Year and Month	Wellhead Price ^a	City Gate Price	Delivered to Consumers					
			Residential Price	Commercial		Industrial		Electric Utilities Price
				Price	% of Total ^b	Price	% of Total ^b	
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 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 1.99	3.28	^R 6.45	5.59	^R 72.2	^R 3.67	15.1	2.64
February	^E 2.00	3.08	6.40	5.56	^R 71.2	^R 3.51	^R 15.4	2.51
March	^E 2.08	3.22	6.27	5.39	^R 71.9	^R 3.40	^R 16.7	2.53
April	^E 2.22	3.21	6.78	5.58	66.8	3.22	^R 15.0	2.59
May	^E 2.03	3.11	7.59	5.62	60.0	^R 3.09	^R 14.0	2.47
June	^E 1.97	2.99	8.41	^R 5.54	^R 59.8	2.96	^R 14.0	2.40
July	^E 2.08	3.39	8.62	^R 5.65	^R 51.9	^R 2.99	12.7	2.50
August	^E 1.84	3.13	9.19	5.50	^R 49.7	2.73	13.5	2.21
September	^E 1.83	2.76	8.94	^R 5.56	^R 52.8	^R 2.65	14.4	2.15
October	^E 1.84	3.02	7.55	^R 5.33	^R 55.3	2.76	^R 14.2	2.22
November	^E 1.94	3.01	6.60	5.26	62.1	2.83	^R 15.5	2.37
December	^E 1.73	2.44	6.36	5.22	^R 65.6	2.83	^R 16.8	2.22
Annual Average	^E1.96	3.02	6.82	5.47	^R64.6	3.07	14.8	2.37
1999								
January	^E 1.80	^R 2.86	^R 6.03	5.12	^R 71.5	^R 3.09	^R 15.7	2.26
February	^E 1.73	^R 2.94	^R 6.25	5.18	68.3	^R 3.01	^R 15.4	2.27
March	^E 1.70	2.67	6.02	5.03	68.8	2.77	16.6	NA
1999 YTD^c	^E1.74	2.82	6.09	5.11	69.7	2.96	15.9	2.26
1998 YTD^c	^E2.02	3.20	6.38	5.52	71.8	3.53	15.7	2.58
1997 YTD^c	2.56	3.78	6.70	6.04	77.3	4.10	20.0	3.51

^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.

^R Revised Data.

^E Estimated Data.

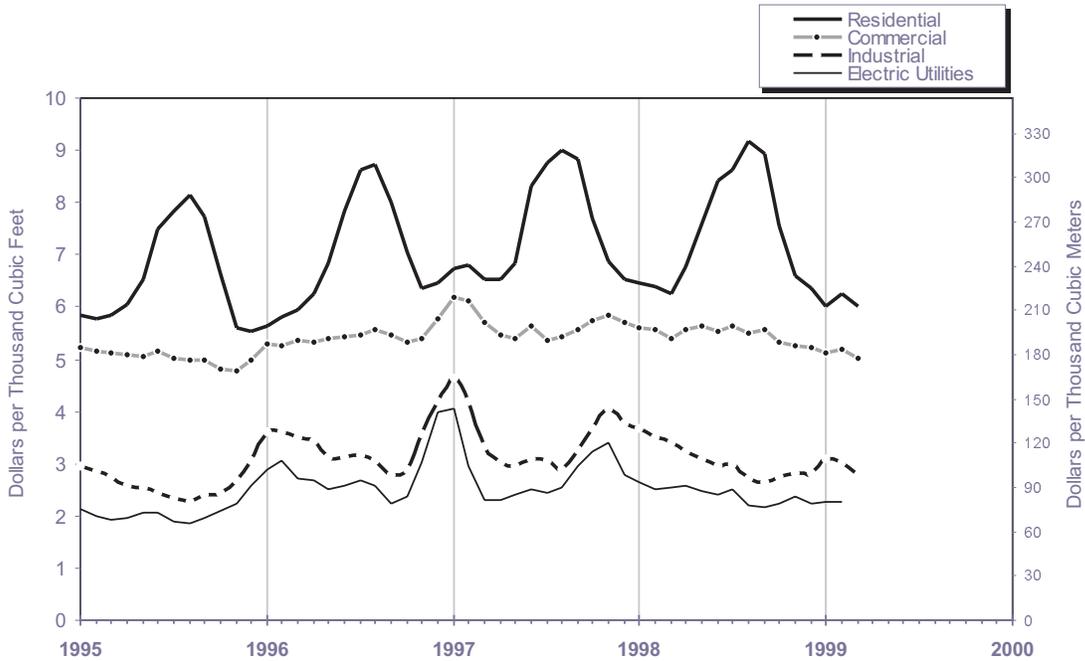
NA Not Available.

Notes: Data for 1993 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.

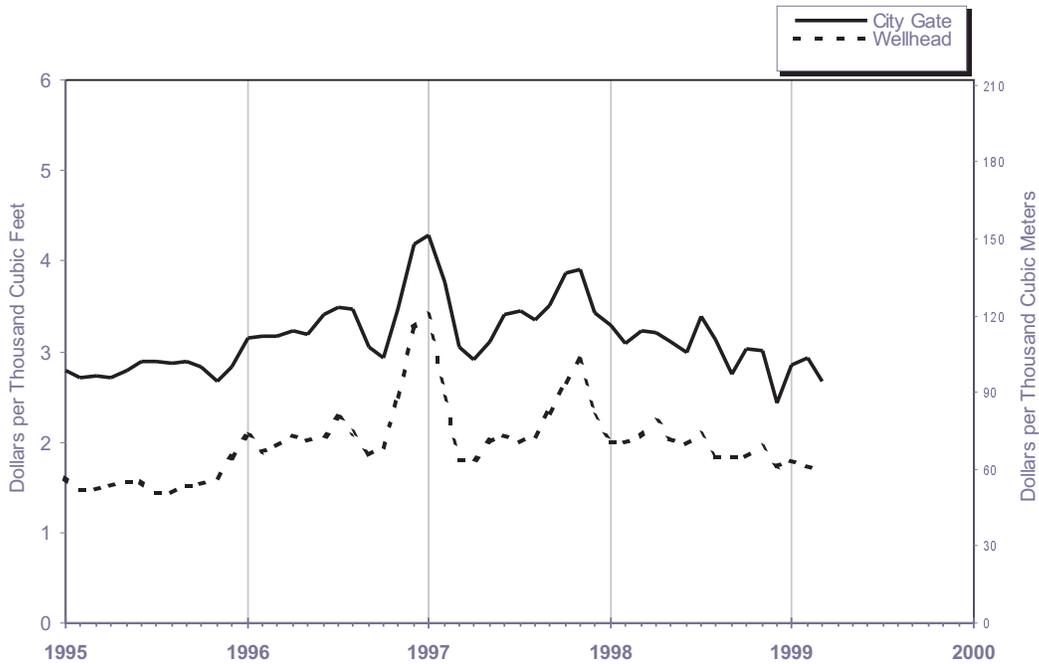
Sources: 1993-1997: Energy Information Administration (EIA) *Natural Gas Annual 1997*. 1998 forward: EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers," Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," and EIA estimates. January 1998 through 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 U.S., 1995-1999



Source: Table 4

Figure 4. Average Price of Natural Gas in the United States, 1995-1999



Source: Table 4

Table 5. U.S. Natural Gas Imports, by Country, 1993-1999
(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG		Other		Total	
	Canada		Mexico		Algeria		Volume	Average Price	Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price				
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 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	1.94	2,824	1.97	7,607	2.83	^b 2,171	3.84	247,890	1.98
March	258,067	1.98	382	2.20	5,166	3.12	—	—	263,615	2.00
April	242,191	2.00	3,251	2.37	2,549	2.20	—	—	247,991	2.01
May	242,041	1.97	846	2.15	7,596	2.52	—	—	250,483	1.99
June	243,259	1.92	5	2.21	5,125	2.39	^b 2,441	2.79	250,830	1.94
July	256,506	1.87	1,821	2.13	5,086	2.20	—	—	263,414	1.88
August	249,717	1.79	1,414	1.78	2,540	2.20	^b 2,321	2.80	255,993	1.80
September	260,599	1.75	2,256	1.86	5,133	1.73	—	—	267,988	1.75
October	263,823	1.98	906	1.64	5,025	2.56	—	—	269,753	1.99
November	246,409	2.10	—	—	5,042	2.30	^{ab} 5,020	3.05	256,470	2.13
December	269,687	2.11	1,418	1.77	7,572	2.49	^{ab} 4,933	3.10	283,609	2.14
Total	3,040,775	1.95	15,179	2.02	68,546	2.52	16,885	3.09	3,141,386	1.97
1999										
January	290,266	NA	^E 4,900	NA	12,612	NA	—	—	307,778	NA
February	258,656	NA	^E 4,400	NA	7,423	NA	^{bc} 5,038	NA	275,517	NA
March	^R 279,161	NA	^E 2,200	NA	12,648	NA	—	—	^R 294,009	NA
April	^E 264,770	NA	^E 2,200	NA	7,639	NA	—	—	^E 274,609	NA
1999 YTD	^E1,092,854	NA	^E13,700	NA	40,321	NA	5,038	NA	1,151,913	NA
1998 YTD	1,008,735	1.99	6,513	2.18	25,428	2.85	2,171	3.84	1,042,846	2.01
1997 YTD	983,867	2.30	7,396	2.32	20,314	2.82	2,417	3.68	1,013,995	2.32

^a Received from the United Arab Emirates.

^b Received from Australia.

^{ab} Received from Australia and the United Arab Emirates:
November 1998 - Australia 2,353; United Arab Emirates 2,667.
December 1998 - Australia 2,348; United Arab Emirates 2,585.

^{bc} Received 2,557 from Australia and 2,481 from Qatar.

^R Revised Data.

^E Estimated Data.

NA Not Available.

— Not Applicable.

— Data not available.

Sources: 1993-1994: 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, 1993-1999
(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Pipeline				LNG				Total	
	Canada		Mexico		Japan		Mexico		Volume	Average Price
	Volume	Average Price	Volume	Average Price	Volume	Average Price	Volume	Average Price		
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 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	2.69	—	—	14,717	2.20
July	2,533	2.05	3,853	2.20	5,681	2.70	—	—	12,067	2.40
August	1,241	1.92	5,292	1.95	5,676	2.70	1	6.44	^R 12,210	2.30
September	2,250	1.94	2,892	1.81	7,584	2.68	—	—	12,726	2.35
October	2,305	2.02	5,169	1.90	5,679	2.72	3	6.28	^R 13,156	^R 2.28
November	4,291	2.21	5,076	2.00	3,776	2.75	10	6.23	^R 13,153	2.29
December	5,376	2.24	5,322	1.99	5,662	2.68	20	6.22	^R 16,380	^R 2.32
Total	45,240	2.20	53,601	2.03	65,953	2.90	34	^R 6.23	^R 164,828	2.43
1999										
January	^E 4,625	NA	^E 4,600	NA	5,587	NA	NA	NA	^E 14,812	NA
February	^E 4,950	NA	^E 4,800	NA	5,563	NA	NA	NA	^E 15,313	NA
March	^E 7,900	NA	^E 4,600	NA	5,570	NA	NA	NA	^E 18,070	NA
April	^E 4,002	NA	^E 4,113	NA	5,699	NA	NA	NA	^E 13,814	NA
1999 YTD	^E 21,477	NA	^E 18,113	NA	22,419	NA	NA	NA	^E 62,009	NA
1998 YTD	21,757	2.34	14,256	2.13	24,309	3.25	—	—	60,322	2.66
1997 YTD	23,644	2.56	8,438	2.47	22,536	4.17	—	—	54,618	3.21

^R Revised Data.^E Estimated Data.

NA Not Available.

— Not Applicable.

Sources: 1993-1994: 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, 1993-1999

(Million Cubic Feet)

Year and Month	Alabama ^P	Alaska	Arizona	California	Colorado	Florida	Kansas
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 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	52,204
February	29,230	38,016	42	21,719	51,770	436	49,283
March	33,505	41,026	53	22,869	56,834	466	50,179
April	32,406	38,188	43	21,952	55,760	480	47,405
May	33,656	35,200	38	23,889	56,151	512	46,564
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	29,717	56,841	529	^E 48,172
September	30,466	^E 40,036	32	29,096	55,501	445	41,968
October	33,344	^E 46,034	31	29,858	58,862	470	48,568
November	31,876	^E 44,298	33	29,462	51,627	533	46,402
December	32,976	^E 47,760	33	28,879	60,780	515	46,677
Total	390,870	^E 483,221	457	314,240	668,014	5,796	^E 573,520
1999							
January	32,035	^E 42,766	31	29,268	^E 54,000	517	^R 41,599
February	^E 29,853	^E 37,209	27	26,541	^E 46,518	448	43,103
1999 YTD	^E 61,888	^E 79,976	59	55,809	^E 100,518	964	84,703
1998 YTD	61,969	81,731	84	46,529	104,794	914	101,487
1997 YTD	94,237	82,888	87	46,306	101,179	1,039	115,473

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1993-1999

(Million Cubic Feet) — Continued

Year and Month	Louisiana ^b	Michigan	Mississippi	Montana	New Mexico	North Dakota	Oklahoma
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 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	467,734	28,439	9,639	^E 5,058	142,312	4,623	159,422
February	418,165	28,259	8,574	^E 4,668	142,383	4,020	125,953
March	470,930	30,719	9,781	^E 5,018	141,671	4,337	136,396
April	456,246	17,983	8,957	^E 4,714	140,963	4,284	134,017
May	473,557	29,164	9,121	^E 4,672	140,258	4,488	136,703
June	^E 454,466	26,962	8,586	^E 3,805	139,557	4,210	130,734
July	^E 454,506	26,188	9,258	^E 3,990	138,859	4,384	133,099
August	^E 457,471	19,037	8,835	^E 4,242	138,165	4,499	135,122
September	^E 438,628	28,469	8,664	^E 4,332	137,474	4,427	^E 142,267
October	^E 462,358	21,908	8,868	^E 4,346	136,786	4,600	^E 140,146
November	^E 440,854	12,272	8,602	^E 4,934	136,102	4,428	^E 133,360
December	^E 461,135	29,159	9,184	^E 5,280	135,422	4,536	^E 136,123
Total	^E5,456,050	298,560	108,069	^E55,059	1,669,951	52,834	^E1,643,342
1999							
January	^E 466,143	20,853	9,154	^E 5,090	134,745	4,331	^E 144,408
February	425,121	8,746	8,678	^E 4,796	134,071	3,858	122,928
1999 YTD	^E891,264	29,599	17,832	^E9,886	268,816	8,188	^E267,336
1998 YTD	885,899	56,698	18,214	^E9,727	284,695	8,642	285,375
1997 YTD	850,623	51,814	16,060	9,105	257,919	7,851	279,063

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas, by State, 1993-1999

(Million Cubic Feet) — Continued

Year and Month	Oregon	Texas ^c	Utah	Wyoming	Other ^a States	U.S. Total
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 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 1,716,531
February	79	491,530	21,758	53,970	^E 57,200	^E 1,547,056
March	96	541,311	23,656	65,704	^E 61,188	^E 1,695,739
April	92	525,602	23,513	61,974	^E 57,188	^E 1,631,767
May	92	550,442	24,967	54,304	^E 58,146	^E 1,681,924
June	90	527,613	23,968	63,574	^E 56,699	^E 1,637,477
July	95	547,880	23,036	64,917	^E 55,998	^E 1,664,522
August	94	561,133	23,681	66,273	^E 57,217	^E 1,681,113
September	90	529,321	21,554	63,370	^E 55,348	^E 1,631,487
October	83	534,431	23,830	62,709	^E 59,433	^E 1,676,665
November	85	520,580	23,045	66,979	^E 59,256	^E 1,614,728
December	80	525,805	22,507	64,357	^E 62,674	^E 1,673,880
Total	1,067	6,398,110	277,340	754,206	^E702,185	^E19,852,889
1999						
January	83	528,793	^E 22,266	62,445	^E 60,748	^{RE} 1,659,276
February	84	483,571	^E 20,626	58,417	^E 56,306	^E 1,510,901
1999 YTD	167	1,012,364	^E42,892	120,863	^E117,053	^E3,170,177
1998 YTD	169	1,033,992	43,584	120,044	^E119,037	^E3,263,587
1997 YTD	203	1,061,702	40,897	114,864	126,734	3,258,043

^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 1993 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: 1992-1997: Energy Information Administration (EIA), *Natural Gas Annual 1997*. 1998 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, February 1999
(Million Cubic Feet)

State	Gross Withdrawals			Repressuring	Nonhydrocarbon Gases Removed ^a	Vented and Flared	Marketed Production
	From Gas Wells	From Oil Wells	Total				
Alabama	^E 32,487	^E 569	^E 33,055	^E 1,077	^E 2,032	^E 94	^E 29,853
Alaska	^E 14,934	^E 256,243	^E 271,177	^E 233,144	0	^E 824	^E 37,209
Arizona	27	0	27	0	0	0	27
California	6,483	24,296	30,779	4,023	144	70	26,541
Colorado	^E 40,531	^E 6,491	^E 47,022	^E 427	0	^E 78	^E 46,518
Florida	0	506	506	0	58	0	448
Kansas	39,763	3,458	43,220	73	0	43	43,103
Louisiana	^E 374,104	^E 56,239	^E 430,342	^E 3,375	0	^E 1,846	425,121
Michigan	7,118	1,780	8,898	63	0	89	8,746
Mississippi	9,497	542	10,039	507	637	217	8,678
Montana	^E 4,243	^E 743	^E 4,987	^E 6	0	^E 185	^E 4,796
New Mexico	126,554	21,938	148,491	904	13,275	241	134,071
North Dakota	1,190	2,911	4,102	0	6	237	3,858
Oklahoma	^E 110,899	^E 12,029	^E 122,928	0	0	0	122,928
Oregon	100	0	100	4	12	0	84
Texas	428,763	103,748	532,511	34,461	12,239	2,241	483,571
Utah	^E 19,621	^E 3,090	^E 22,711	^E 46	0	^E 2,038	^E 20,626
Wyoming	90,153	4,628	94,781	11,484	12,432	12,448	58,417
Other States	^E 53,221	^E 3,906	^E 57,126	^E 161	^E 517	^E 143	^E 56,306
Total	^E1,359,687	^E503,116	^E1,862,803	^E289,754	^E41,353	^E20,795	^E1,510,901

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

^E 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.

Sources: 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	0.9	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	4,347	1,713	6,060	218	14.5	68	535	466
February	4,341	1,419	5,760	280	24.6	74	373	300
March	4,342	1,185	5,527	194	19.6	136	378	242
April	4,339	1,382	5,721	331	31.5	277	78	-199
May	4,340	1,775	6,115	410	30.0	435	42	-393
June	4,346	2,103	6,448	372	21.5	375	52	-323
July	4,340	2,417	6,757	401	19.9	366	52	-314
August	4,336	2,697	7,033	359	15.4	342	58	-283
September	4,340	2,949	7,289	277	10.4	305	78	-227
October	4,342	3,176	7,517	290	10.0	301	46	-255
November	4,340	3,143	7,483	444	16.5	131	165	34
December	4,326	2,718	7,044	543	25.0	94	530	435
Total	—	—	—	—	—	2,905	2,386	-518
1999								
January	4,327	2,094	6,421	381	22.2	55	678	623
February	4,312	1,792	6,104	372	26.2	62	395	333
March	^d 4,361	^d 1,430	5,792	246	20.7	84	381	297
April	4,355	1,514	5,869	131	9.5	203	112	-91
May(STIFS)	^{RE} 4,355	^{RE} 1,839	^R 6,194	^{RE} 64	^{RE} 3.6	^{NA}	^{NA}	^E -325
June(STIFS)	^E 4,355	^E 2,169	^E 6,524	^E 66	^E 3.1	^{NA}	^{NA}	^E -330

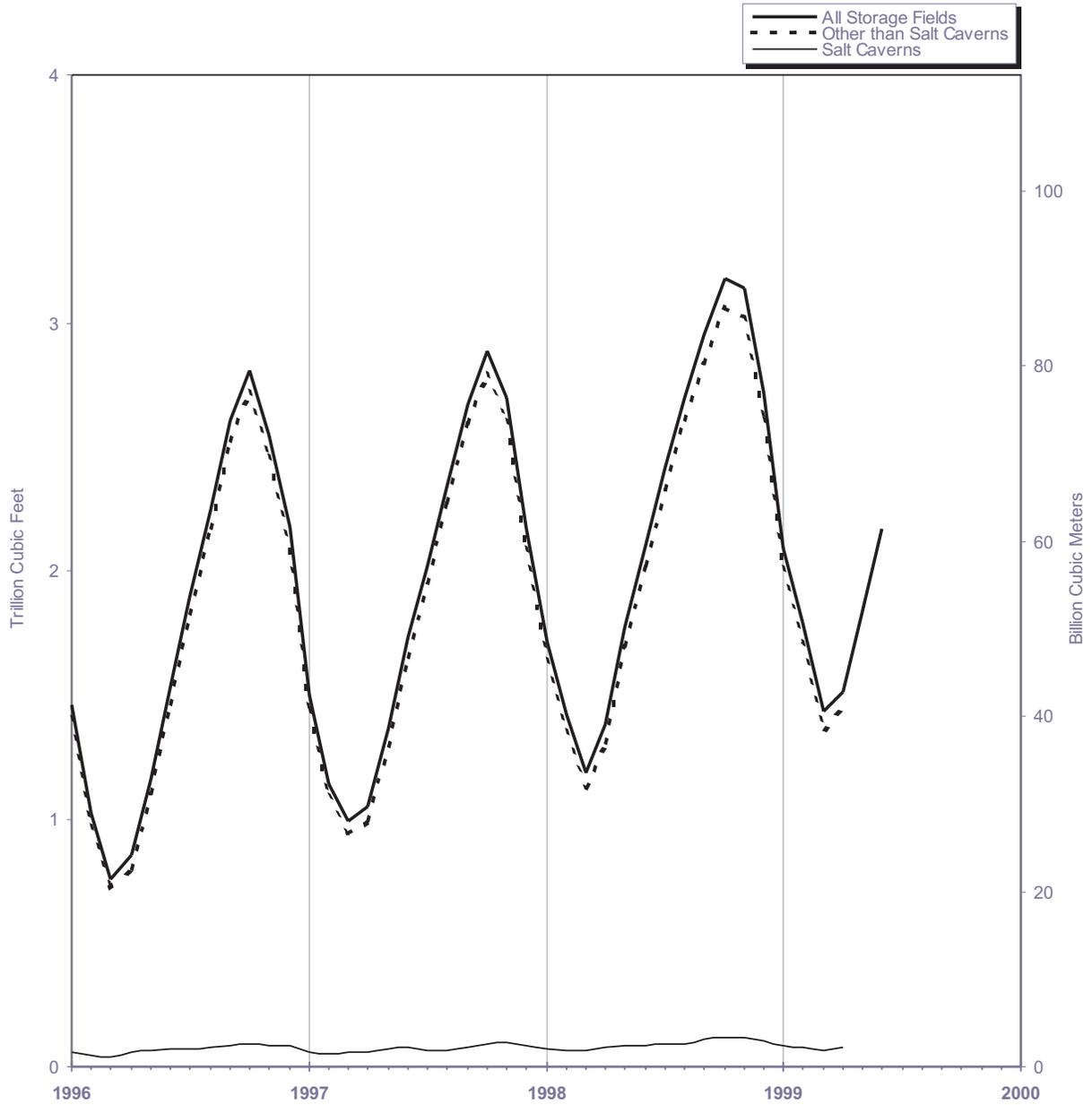
^a Total as of December 31.^b Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1991 - 7,993; 1992 - 7,932; 1993 - 7,989; 1994 - 8,043; 1995 - 7,927; 1996 - 8,159; and 1997 - 8,128.^c Negative numbers indicate the volume of injections in excess of withdrawals. Positive numbers indicate the volume of withdrawals in excess of injections.^d Reflects one respondent's reclassification of natural gas in underground storage from working gas to base gas.^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. Working Gas in Underground Natural Gas Storage in the U.S., 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
October 1996	4,335	2,810	7,145	--	--	--	--	--
1996-1997 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
1997-1998 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	4,347	1,713	6,060	218	14.5	68	535	466
February	4,341	1,419	5,760	280	24.6	74	373	300
March	4,342	1,185	5,527	194	19.6	136	378	242
Total	--	--	--	--	--	436	2,167	1,730
1998 Refill Season								
April	4,339	1,382	5,721	331	31.5	277	78	-199
May	4,340	1,775	6,115	410	30.0	435	42	-393
June	4,346	2,103	6,448	372	21.5	375	52	-323
July	4,340	2,417	6,757	401	19.9	366	52	-314
August	4,336	2,697	7,033	359	15.4	342	58	-283
September	4,340	2,949	7,289	277	10.4	305	78	-227
October	4,342	3,176	7,517	290	10.0	301	46	-255
Total	--	--	--	--	--	2,402	407	-1,995
1998-1999 Heating Season								
November	4,340	3,143	7,483	444	16.5	131	165	34
December	4,326	2,718	7,044	543	25.0	94	530	435
January	4,327	2,094	6,421	381	22.2	55	678	623
February	4,312	1,792	6,104	372	26.2	62	395	333
March	^b 4,361	^b 1,430	5,792	246	20.7	84	381	297
Total	--	--	--	--	--	427	2,148	1,721
1999 Refill Season								
April	4,355	1,514	5,869	131	9.5	203	112	-91
May(STIFS)	^{RE} 4,355	^{RE} 1,839	^R 6,194	^{RE} 64	^{RE} 3.6	NA	NA	^E -325
June(STIFS)	^E 4,355	^E 2,169	^E 6,524	^E 66	^E 3.1	NA	NA	^E -330

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

^b Reflects one respondent's reclassification of natural gas in underground storage from working gas to base gas.

^R Revised Data.

^E Estimated Data.

^{RE} Revised Estimated Data.

NA Not Available.

-- Not Applicable.

Notes: Data for 1996 and 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. 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.

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, 1994 - 1999
(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
1994 Total^c	44	70	113	—	—	142	123	-19
1995 Total^c	60	72	131	2	2.9	194	200	5
1996 Total^c	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	23.0	17	31	14
February	65	68	133	18	36.4	17	21	3
March	68	64	132	8	14.6	23	29	6
April	68	80	148	22	38.1	29	11	-17
May	68	83	151	10	13.0	26	22	-3
June	66	83	149	3	4.3	21	23	2
July	66	92	158	26	39.6	26	18	-8
August	66	93	159	27	40.0	24	21	-3
September	67	112	180	35	44.9	22	30	8
October	67	116	183	23	24.4	44	12	-32
November	67	119	187	24	25.5	22	17	-5
December	67	104	171	22	26.4	17	32	14
Total	—	—	—	—	—	288	267	-21
1999								
January	69	84	153	14	19.6	19	41	22
February	67	77	144	10	14.3	15	20	5
March	67	68	135	4	6.0	18	26	8
April	67	77	144	-3	-3.8	27	18	-9

^c Total as of December 31.

— Not Applicable.

Notes: Data for 1994 through 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, 1994-1999

(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
1994 Total^c	4,317	2,536	6,853	—	—	2,654	2,385	-269
1995 Total^c	4,290	2,082	6,371	-455	-17.9	2,372	2,774	403
1996 Total^c	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	4,281	1,643	5,923	204	14.2	51	504	453
February	4,275	1,352	5,627	262	24.0	56	353	296
March	4,274	1,121	5,394	186	19.9	113	349	236
April	4,271	1,302	5,573	309	31.1	248	67	-181
May	4,272	1,692	5,964	400	31.0	410	20	-390
June	4,279	2,020	6,299	368	22.3	354	29	-325
July	4,274	2,326	6,600	375	19.2	340	34	-306
August	4,270	2,604	6,875	333	14.7	318	37	-281
September	4,273	2,837	7,109	242	9.3	284	48	-236
October	4,274	3,060	7,334	267	9.6	257	34	-223
November	4,272	3,024	7,296	420	16.1	108	147	39
December	4,259	2,614	6,873	522	24.9	77	498	421
Total	—	—	—	—	—	2,617	2,120	-497
1999								
January	4,257	2,010	6,268	367	22.4	37	638	601
February	4,245	1,714	5,960	363	26.8	47	375	328
March	4,294	1,363	5,657	242	21.6	67	355	289
April	4,288	1,437	5,725	134	10.3	175	94	-81

^c Total as of December 31.

— Not Applicable.

Notes: Data for 1994 through 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, 1997-1999

(Volumes in Million Cubic Feet)

State	1999				1998		
	April	March	February	January	Total	December	November
Alabama	-137	312	114	813	-447	139	-1
Arkansas	-667	690	1,049	2,066	-1,774	1,245	63
California	-911	9,782	18,491	23,789	-44,006	29,749	-10,022
Colorado	8,881	3,319	3,684	3,990	-4,885	7,416	-1,764
Illinois	7,599	27,580	41,907	56,407	-11,545	26,858	9,641
Indiana	921	3,622	2,942	5,558	1,424	4,038	-618
Iowa	86	5,170	11,814	20,553	-3,131	20,547	-68
Kansas	5,085	13,977	9,273	22,470	-20,440	14,055	3,658
Kentucky	-2,297	6,081	7,825	12,241	-12,142	10,397	1,776
Louisiana	-16,632	10,263	15,966	43,591	-70,560	38,892	1,326
Maryland	-667	1,208	1,982	3,399	237	2,068	124
Michigan	-23,148	53,123	57,189	112,276	-77,044	60,725	18,548
Minnesota	214	167	238	287	442	438	-84
Mississippi	-2,240	6,840	3,303	9,981	-8,781	5,256	701
Missouri	-27	150	343	170	174	573	-204
Montana	1,329	2,410	3,375	4,860	-401	3,962	2,606
Nebraska	1,168	1,338	442	698	298	1,215	536
New Mexico	1,025	943	83	1,364	-6,247	-619	-1,243
New York	-5,300	10,688	10,057	15,534	-10,575	6,448	1,054
Ohio	-5,317	33,698	33,362	53,448	-26,542	35,311	7,921
Oklahoma	-8,791	8,079	-881	31,284	-34,004	40,863	-473
Oregon	735	1,185	1,717	1,979	829	1,888	28
Pennsylvania	-24,525	44,023	50,445	83,851	-30,915	46,400	30
Tennessee	3	80	131	130	-60	131	0
Texas	-15,510	14,152	9,654	43,297	-108,737	36,143	-3,908
Utah	1,667	5,738	6,185	10,569	-16,395	8,751	2,231
Virginia	-184	325	449	317	-709	359	0
Washington	1,852	1,113	3,144	603	-509	3,226	-730
West Virginia	-13,958	30,271	36,278	53,983	-28,894	26,188	3,337
Wyoming	-990	352	2,050	3,464	-2,837	2,621	-614
AGA Regions							
Producing	-37,730	54,944	38,447	154,055	-250,543	135,835	124
Eastern Consuming	-65,782	217,668	255,282	419,379	-199,871	241,397	42,077
Western Consuming	12,778	24,066	38,885	49,540	-67,763	58,052	-8,349
Total	-90,735	296,678	332,615	622,974	-518,177	435,284	33,852

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet) — Continued

State	1998						
	October	September	August	July	June	May	April
Alabama	-613	401	-200	9	-623	-144	-245
Arkansas	-580	-817	-1,005	-1,034	-1,100	-1,046	-471
California	-23,926	-9,990	-7,283	-9,435	-27,493	-29,210	-10,710
Colorado	-2,043	-5,919	-5,877	-4,060	-3,907	-6,040	3,534
Illinois	-27,923	-28,122	-31,634	-25,062	-31,348	-25,967	-293
Indiana	-2,904	-4,534	-3,695	-2,476	-575	-446	917
Iowa	-7,108	-12,149	-12,102	-11,525	-8,405	-3,600	348
Kansas	-8,737	-9,284	-12,200	-13,108	-6,267	-19,324	-6,954
Kentucky	-5,237	-8,821	-4,533	-10,622	-8,137	-11,793	-2,480
Louisiana	-30,831	-9,708	-20,159	-25,597	-14,635	-22,794	-21,191
Maryland	-1,267	-783	-1,407	-2,924	-1,251	-808	-1,127
Michigan	-27,089	-31,023	-52,128	-60,857	-69,589	-69,296	-31,779
Minnesota	-187	-275	-214	-289	-169	0	159
Mississippi	-9,800	156	-4,139	-5,961	-2,887	-3,438	-2,757
Missouri	-208	-414	-203	8	143	-460	48
Montana	-1,532	-4,239	-4,524	-2,295	-2,024	-2,571	224
Nebraska	-363	-864	-616	-796	-528	-860	754
New Mexico	-1,903	-1,185	-208	-191	-180	-1,120	287
New York	-4,464	-5,640	-5,247	-8,108	-8,786	-11,267	-3,673
Ohio	-12,746	-19,259	-27,246	-31,220	-25,882	-35,968	-14,906
Oklahoma	-19,520	-12,146	-7,189	-7,554	-12,460	-23,277	-21,343
Oregon	4	-818	-819	-852	-1,411	0	81
Pennsylvania	-20,091	-27,252	-19,657	-31,998	-34,236	-57,800	-32,842
Tennessee	-103	-102	-112	-134	0	0	0
Texas	-34,137	-5,040	-18,629	-18,872	-20,145	-27,286	-40,395
Utah	-3,879	-8,260	-7,385	-7,265	-8,225	-7,364	-596
Virginia	-229	-272	-341	-190	-309	-313	-209
Washington	719	-1,822	-3,640	-312	-2,963	-3,932	1,544
West Virginia	-7,094	-16,425	-29,075	-28,560	-26,404	-26,003	-14,607
Wyoming	-1,425	-2,602	-2,008	-2,807	-3,406	-1,344	89
AGA Regions							
Producing	-105,507	-38,023	-63,530	-72,318	-57,675	-98,285	-92,824
Eastern Consuming	-117,437	-155,259	-188,197	-214,455	-215,931	-244,724	-100,092
Western Consuming	-32,268	-33,925	-31,751	-27,316	-49,599	-50,461	-5,674
Total	-255,212	-227,207	-283,478	-314,088	-323,205	-393,470	-198,591

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet) — Continued

State	1998			1997			
	March	February	January	Total	December	November	October
Alabama	248	187	396	-162	243	243	-251
Arkansas	1,039	875	1,057	250	1,526	651	271
California	-2,257	26,766	29,805	16,340	58,418	2,846	-11,717
Colorado	3,928	6,337	3,510	-525	5,026	2,503	359
Illinois	28,186	36,082	58,036	-10,153	44,906	2,805	-28,399
Indiana	4,249	3,322	4,144	984	4,193	-879	-3,088
Iowa	6,692	5,335	18,905	-6,255	17,041	505	-8,412
Kansas	14,438	8,180	15,103	-11,372	12,277	8,384	-7,782
Kentucky	7,768	9,981	9,559	3,013	10,773	4,035	-2,926
Louisiana	7,400	5,164	21,574	-9,248	43,644	20,997	-24,035
Maryland	1,631	2,745	3,236	-544	1,298	33	-2,346
Michigan	55,388	45,886	84,170	-3,388	78,027	53,016	-32,466
Minnesota	416	203	444	-373	4	4	0
Mississippi	2,405	4,251	7,431	3,763	8,484	1,089	-2,126
Missouri	423	10	458	-453	228	-207	-215
Montana	3,017	2,554	4,421	11,962	3,169	2,760	1,015
Nebraska	1,090	355	376	-1,590	944	124	-69
New Mexico	658	-130	-412	2,065	2,500	25	-1,305
New York	7,977	9,548	11,582	304	10,735	4,857	-2,211
Ohio	28,619	34,023	34,810	-7,336	40,530	15,502	-8,809
Oklahoma	7,159	737	21,199	-9,482	25,362	13,995	-19,663
Oregon	934	1,253	540	-1,316	1,036	-262	-97
Pennsylvania	38,957	49,786	57,788	28,381	53,825	26,061	-15,914
Tennessee	83	60	116	0	0	0	0
Texas	-9,062	-3,341	35,935	10,035	53,619	18,531	-30,600
Utah	1,199	6,783	7,613	-7,571	13,169	2,721	-1,301
Virginia	312	437	46	0	0	0	0
Washington	3,329	4,131	-58	-1,003	3,159	83	702
West Virginia	22,818	36,285	30,647	16,716	36,318	6,615	-8,145
Wyoming	2,611	2,059	3,990	908	3,019	1,906	-591
AGA Regions							
Producing	24,038	15,735	101,887	-13,990	147,412	63,672	-85,240
Eastern Consuming	204,441	234,042	314,267	19,518	299,061	112,710	-113,251
Western Consuming	13,177	50,086	50,266	18,423	87,001	12,560	-11,630
Total	241,655	299,863	466,420	23,950	533,474	188,941	-210,121

See footnotes at end of table.

Table 13. Net Withdrawals from Underground Storage, by State, 1997-1999

(Volumes in Million Cubic Feet) — Continued

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

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,
April 1999**

(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	513	1,703	-69	-11.9	645	508
Arkansas	24,191	7,460	4,357	11,816	1,210	38.5	792	125
California	396,430	247,942	115,040	362,982	33,092	40.4	13,933	13,023
Colorado	99,600	48,229	15,050	63,279	2,161	16.8	403	9,284
Illinois	898,565	651,403	80,575	731,978	-12,468	-13.4	7,378	14,977
Indiana	113,210	73,802	18,577	92,378	626	3.5	514	1,435
Iowa	271,200	200,300	7,987	208,287	-2,827	-26.1	1,593	1,679
Kansas	304,066	188,978	43,741	232,719	1,169	2.7	4,955	10,040
Kentucky	219,908	109,121	69,245	178,366	12,495	22.0	4,252	1,955
Louisiana	559,013	265,855	168,109	433,964	33,943	25.3	25,800	9,168
Maryland	62,000	46,677	6,918	53,595	326	5.0	1,007	340
Michigan	992,934	460,638	267,817	728,455	-20,813	-7.2	28,415	5,266
Minnesota	7,000	4,623	1,024	5,647	-126	-11.0	0	214
Mississippi	134,012	77,620	33,498	111,118	2,245	7.2	3,974	1,733
Missouri	31,274	21,600	8,635	30,235	127	1.5	239	213
Montana	371,510	167,359	34,510	201,870	-1,343	-3.7	1,397	2,727
Nebraska	39,469	31,080	0	31,080	-919	-100.0	22	1,190
New Mexico	96,600	26,456	6,694	33,150	474	7.6	548	1,573
New York	175,479	103,063	34,593	137,655	2,231	6.9	6,140	839
Ohio	573,434	350,966	39,541	390,507	-6,526	-14.2	10,258	4,941
Oklahoma	396,087	217,663	100,233	317,895	28,729	40.2	11,529	2,738
Oregon	11,623	6,834	1,541	8,375	-1,636	-51.5	0	735
Pennsylvania	684,842	354,100	157,565	511,665	-5,267	-3.2	31,668	7,144
Tennessee	1,200	340	321	661	122	61.2	0	3
Texas	683,891	251,680	213,426	465,107	46,372	27.8	29,110	13,600
Utah	121,980	64,601	13,987	78,588	4,594	48.9	688	2,355
Virginia	4,669	2,467	929	3,397	187	25.2	221	37
Washington	37,300	21,596	4,987	26,583	3,274	191.1	675	2,528
West Virginia	734,158	290,727	47,815	338,542	3,247	7.3	15,202	1,245
Wyoming	105,869	60,721	16,458	77,180	6,815	70.7	1,322	332
AGA Regions								
Producing	2,197,859	1,035,711	570,058	1,605,769	114,141	25.0	76,707	38,977
Eastern Consuming	4,805,622	2,697,474	741,031	3,438,505	-28,588	-3.7	107,555	41,772
Western Consuming	1,151,311	621,906	202,597	824,503	46,830	30.1	18,418	31,196
Total	8,154,792	4,355,091	1,513,685	5,868,777	131,441	9.5	202,680	111,945

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, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				March	February	January
Alabama	22,283	26,391	23,795	6,604	6,364	9,316
Alaska	6,967	5,485	5,634	2,075	2,223	2,668
Arizona	15,384	18,030	15,254	3,662	5,368	6,355
Arkansas	19,503	20,484	20,958	5,156	5,259	9,087
California	233,771	220,518	187,206	67,414	77,987	88,370
Colorado	51,270	50,606	51,817	13,675	15,399	22,196
Connecticut	18,966	16,898	18,200	5,780	6,082	7,104
Delaware	4,602	4,016	4,451	1,574	1,469	1,560
District of Columbia	7,548	6,805	7,412	2,324	2,309	2,915
Florida	5,394	6,765	4,975	1,676	1,555	2,163
Georgia	40,398	54,510	46,696	10,625	13,082	16,692
Hawaii	141	157	145	44	48	49
Idaho	7,981	7,239	7,009	2,257	2,633	3,090
Illinois	216,639	186,260	230,764	61,415	61,438	93,786
Indiana	NA	70,894	79,210	NA	NA	^R 32,211
Iowa	36,646	34,456	39,205	9,863	10,656	16,128
Kansas	NA	42,900	33,450	NA	NA	NA
Kentucky	30,069	27,297	30,254	9,239	8,779	12,050
Louisiana	21,740	24,449	24,764	5,570	5,999	10,171
Maine	429	396	441	131	133	165
Maryland	NA	33,237	35,355	NA	NA	^R 14,660
Massachusetts	NA	47,106	50,382	NA	^R 17,828	^R 12,564
Michigan	174,726	153,009	175,914	53,871	52,119	68,737
Minnesota	57,865	52,963	61,886	15,346	17,096	25,424
Mississippi	NA	NA	13,139	3,709	4,022	NA
Missouri	61,304	59,107	63,989	16,580	18,523	26,201
Montana	8,136	8,251	9,367	2,138	2,519	3,479
Nebraska	20,238	21,026	23,742	5,721	5,949	8,568
Nevada	12,642	12,984	11,519	3,349	4,332	4,962
New Hampshire	3,273	2,996	3,110	991	1,036	1,246
New Jersey	NA	86,542	102,608	NA	NA	NA
New Mexico	21,172	16,961	16,873	6,478	4,896	9,799
New York	NA	142,791	169,235	NA	NA	NA
North Carolina	28,193	28,048	25,814	9,468	7,495	11,230
North Dakota	5,204	4,936	5,717	1,318	1,565	2,320
Ohio	159,695	138,649	159,566	51,339	49,194	59,162
Oklahoma	32,869	36,257	35,703	8,415	9,465	14,989
Oregon	16,828	NA	15,041	5,047	5,445	6,336
Pennsylvania	113,023	98,767	120,586	34,931	34,404	43,687
Rhode Island	8,449	7,903	8,242	2,704	2,662	3,083
South Carolina	13,663	14,615	12,814	4,380	3,591	5,693
South Dakota	5,721	5,599	6,449	1,486	1,719	2,516
Tennessee	31,680	NA	31,380	7,577	8,917	15,186
Texas	87,038	103,300	109,661	20,018	23,882	43,138
Utah	21,370	23,070	24,190	5,425	7,725	8,220
Vermont	1,260	1,164	1,217	377	387	496
Virginia	35,418	32,232	33,786	11,307	11,220	12,891
Washington	NA	NA	22,785	NA	NA	NA
West Virginia	NA	14,498	15,754	NA	4,936	6,204
Wisconsin	59,640	54,835	62,779	16,251	16,833	26,556
Wyoming	4,921	NA	5,468	1,317	1,674	1,929
Total	2,240,353	2,134,047	2,265,712	656,556	^R676,073	^R907,724

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999
(Million Cubic Feet) — Continued

State	1998					
	Total	December	November	October	September	August
Alabama	46,655	4,534	2,493	1,324	1,196	1,183
Alaska	15,617	2,183	1,858	1,346	818	648
Arizona	35,815	4,624	1,990	1,122	932	894
Arkansas	^R 38,166	4,917	2,957	1,366	1,067	1,058
California	549,885	68,820	40,193	26,155	22,034	21,621
Colorado	NA	14,198	8,454	4,185	2,690	2,480
Connecticut	35,704	4,490	3,259	1,532	937	848
Delaware	7,810	901	575	232	177	165
District of Columbia	13,189	1,541	1,084	457	338	327
Florida	15,252	1,397	935	718	626	639
Georgia	106,238	14,775	9,306	4,268	2,851	2,814
Hawaii	550	44	40	40	41	41
Idaho	15,975	2,434	1,507	656	316	292
Illinois	405,461	64,039	43,854	21,530	10,513	10,437
Indiana	NA	NA	13,244	6,355	NA	NA
Iowa	68,912	10,511	6,343	3,029	1,435	1,453
Kansas	84,208	10,495	6,968	2,780	1,771	1,851
Kentucky	55,894	9,366	6,142	2,239	1,167	1,104
Louisiana	NA	4,941	2,678	NA	1,703	1,574
Maine	928	132	95	62	27	25
Maryland	NA	9,252	6,554	NA	NA	1,854
Massachusetts	NA	NA	NA	4,257	NA	2,347
Michigan	317,329	42,050	29,476	15,851	7,533	6,740
Minnesota	110,578	18,670	12,214	5,328	2,683	2,465
Mississippi	NA	2,509	1,545	815	711	705
Missouri	110,375	13,831	8,075	3,345	2,619	2,185
Montana	NA	2,942	2,079	1,272	484	488
Nebraska	40,703	4,223	3,404	1,632	885	1,036
Nevada	30,023	4,335	2,526	1,367	824	813
New Hampshire	NA	739	597	294	159	NA
New Jersey	NA	NA	NA	8,124	NA	4,528
New Mexico	35,614	7,289	3,545	1,169	840	845
New York	NA	NA	NA	NA	NA	7,468
North Carolina	50,318	5,679	4,022	1,205	963	905
North Dakota	10,290	1,455	1,036	484	202	208
Ohio	NA	42,817	29,741	16,127	5,905	7,246
Oklahoma	65,403	7,678	4,327	1,780	1,494	1,430
Oregon	NA	5,504	3,150	1,431	760	679
Pennsylvania	NA	27,675	19,152	10,155	NA	NA
Rhode Island	NA	1,883	1,408	645	436	438
South Carolina	25,316	2,858	1,754	606	491	463
South Dakota	11,649	1,669	1,157	533	248	227
Tennessee	NA	8,358	4,525	1,492	1,172	1,111
Texas	200,728	28,481	13,025	7,370	5,930	5,810
Utah	56,731	9,826	5,808	4,463	1,913	1,332
Vermont	2,454	289	213	102	114	57
Virginia	63,029	8,989	5,980	2,478	1,443	1,064
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	3,895	NA	1,302	NA	NA
Wisconsin	116,373	18,698	11,803	6,382	2,723	2,768
Wyoming	NA	1,578	NA	745	388	298
Total	^R 4,483,911	613,452	389,640	200,270	119,590	115,277

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999

(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	2,090	2,512	4,451	8,389	13,482	13,593
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	6,077	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	130,370	152,827	220,677	407,761	640,684	685,125

See footnotes at end of table.

Table 15. Natural Gas Deliveries to Residential Consumers, by State, 1997-1999

(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	^R 7,747	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	15,826	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	^R 808,238	4,983,772	731,030	497,310	234,223	129,388

^R Revised Data.

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, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				March	February	January
Alabama	9,987	12,061	11,000	3,097	3,007	3,884
Alaska	8,838	7,474	8,726	2,822	2,894	3,122
Arizona	10,608	11,210	10,521	3,158	3,569	3,880
Arkansas	12,419	12,699	12,982	3,384	3,503	5,531
California	97,924	78,566	75,260	29,895	31,671	36,358
Colorado	27,481	28,674	29,542	7,527	8,906	11,048
Connecticut	18,462	16,296	16,014	5,831	6,038	6,594
Delaware	2,980	2,663	2,974	998	944	1,038
District of Columbia	7,368	6,957	6,834	2,333	2,549	2,486
Florida	12,094	12,097	11,010	3,969	3,797	4,328
Georgia	18,422	23,981	21,403	5,497	5,786	^R 7,139
Hawaii	557	548	496	181	191	185
Idaho	5,342	4,969	4,944	1,532	1,734	2,076
Illinois	85,886	75,545	89,356	24,499	26,221	35,165
Indiana	NA	34,399	35,056	NA	^R 12,406	^R 16,957
Iowa	21,246	21,484	22,963	6,201	6,162	8,883
Kansas	NA	25,096	17,228	NA	NA	NA
Kentucky	16,396	15,357	16,618	5,102	4,940	6,354
Louisiana	8,760	9,922	9,866	2,485	2,692	3,584
Maine	1,152	1,096	1,158	357	341	454
Maryland	NA	22,352	19,575	NA	NA	9,129
Massachusetts	NA	38,229	40,033	NA	NA	^R 6,643
Michigan	82,410	72,419	84,667	25,951	25,441	31,019
Minnesota	40,047	38,117	40,983	11,097	12,605	16,345
Mississippi	NA	9,440	8,432	2,676	2,934	NA
Missouri	30,702	29,589	33,146	8,515	9,713	12,474
Montana	5,012	5,164	6,097	1,346	1,550	2,115
Nebraska	13,528	13,167	11,969	3,484	4,246	5,798
Nevada	7,761	8,296	7,824	2,372	2,486	2,903
New Hampshire	3,408	3,087	3,186	1,026	1,070	1,312
New Jersey	NA	58,738	63,971	NA	NA	NA
New Mexico	13,986	12,983	13,294	3,836	4,322	5,827
New York	NA	NA	109,810	NA	NA	NA
North Carolina	22,484	17,165	15,443	9,796	6,309	6,380
North Dakota	4,894	4,559	5,155	1,253	1,558	2,083
Ohio	78,811	72,480	82,873	24,032	26,480	28,299
Oklahoma	18,655	21,176	20,209	4,745	5,832	8,077
Oregon	11,896	NA	10,809	3,462	3,880	4,554
Pennsylvania	61,269	59,034	58,921	19,237	20,975	21,058
Rhode Island	5,310	4,898	5,178	1,731	1,686	1,892
South Carolina	8,367	8,176	6,553	3,183	2,232	2,952
South Dakota	4,366	4,248	4,885	1,149	1,343	1,873
Tennessee	22,652	NA	23,886	6,399	6,648	9,606
Texas	64,331	65,210	70,033	18,021	18,878	27,433
Utah	11,846	12,565	12,888	3,068	4,198	4,580
Vermont	1,117	1,304	1,350	334	321	462
Virginia	24,635	24,950	23,841	7,611	8,062	8,962
Washington	NA	NA	15,362	NA	NA	NA
West Virginia	10,557	10,020	10,239	3,390	3,286	3,882
Wisconsin	40,631	33,552	37,621	11,763	11,927	16,941
Wyoming	3,557	NA	4,288	1,077	1,124	1,356
Total	1,253,344	1,207,273	1,256,472	375,645	^R396,177	^R481,523

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999
(Million Cubic Feet) — Continued

State	1998					
	Total	December	November	October	September	August
Alabama	27,983	2,355	1,676	1,228	1,053	981
Alaska	23,455	2,974	2,331	2,012	1,396	1,208
Arizona	31,754	3,376	2,343	1,902	1,730	1,721
Arkansas	NA	4,272	3,070	2,435	2,129	2,218
California	319,553	35,388	30,954	26,720	26,660	30,322
Colorado	NA	7,986	5,059	3,413	2,714	2,329
Connecticut	42,471	4,991	3,256	2,686	2,039	2,178
Delaware	5,624	626	446	243	179	176
District of Columbia	17,184	1,752	1,209	883	837	847
Florida	38,240	3,369	2,852	2,656	2,501	2,575
Georgia	55,578	5,541	4,110	3,073	2,612	2,649
Hawaii	2,119	185	173	162	171	187
Idaho	11,718	1,642	1,047	581	388	381
Illinois	^R 175,082	24,720	17,234	10,112	^R 6,559	6,672
Indiana	NA	NA	7,162	4,358	NA	2,446
Iowa	44,299	5,999	4,257	2,406	1,194	1,199
Kansas	50,545	5,585	3,672	1,929	1,626	2,077
Kentucky	33,883	4,924	3,368	1,705	1,143	1,134
Louisiana	^R 24,670	^R 2,259	^R 1,747	^R 1,533	^R 1,317	^R 1,398
Maine	NA	337	NA	165	78	74
Maryland	56,238	6,716	3,487	3,296	2,827	3,079
Massachusetts	NA	NA	NA	5,288	NA	3,407
Michigan	164,836	20,702	15,353	8,819	5,790	5,841
Minnesota	84,104	12,694	8,931	5,382	2,747	2,311
Mississippi	23,170	2,318	1,624	1,242	1,445	1,304
Missouri	61,869	7,156	4,410	2,395	2,195	3,039
Montana	NA	1,819	1,262	789	407	405
Nebraska	^R 28,465	3,910	^R 2,186	1,018	935	848
Nevada	23,049	2,528	1,822	1,288	1,090	1,052
New Hampshire	NA	810	323	371	222	NA
New Jersey	NA	NA	NA	NA	NA	6,079
New Mexico	30,824	4,613	2,533	1,410	1,242	1,214
New York	NA	NA	NA	NA	NA	15,604
North Carolina	37,774	4,006	2,870	1,867	1,678	1,650
North Dakota	10,290	1,390	1,042	558	329	354
Ohio	NA	21,958	14,908	^R 6,698	4,919	4,070
Oklahoma	45,044	5,604	2,911	1,813	1,756	1,812
Oregon	NA	3,630	2,689	1,296	1,028	905
Pennsylvania	NA	15,512	11,849	6,876	4,436	NA
Rhode Island	NA	1,308	996	613	472	195
South Carolina	19,887	1,940	1,531	1,148	1,055	1,019
South Dakota	9,274	1,306	914	363	269	263
Tennessee	NA	6,190	4,239	2,688	2,527	2,366
Texas	215,604	26,376	18,725	14,888	16,529	16,063
Utah	30,853	4,903	3,182	2,078	1,026	840
Vermont	2,979	401	276	165	125	100
Virginia	59,729	7,141	5,371	3,304	2,561	1,971
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	2,880	2,667	1,933	1,622	1,575
Wisconsin	81,410	11,696	8,101	4,339	3,346	3,410
Wyoming	NA	1,708	NA	461	324	232
Total	^R3,041,384	^R369,208	^R262,373	^R177,857	^R146,560	^R151,329

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999

(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	^R 5,252	6,702	6,961	15,326	22,556	22,455
Indiana	NA	NA	3,258	8,420	11,063	10,460
Iowa	1,353	1,237	1,566	3,605	7,584	5,962
Kansas	2,201	1,980	2,493	3,888	9,214	7,252
Kentucky	1,061	1,195	1,505	2,490	4,636	5,053
Louisiana	^R 1,321	^R 1,496	1,629	2,048	^R 3,079	^R 3,315
Maine	75	90	122	255	332	342
Maryland	2,927	3,155	3,514	4,885	7,125	7,365
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	^R 623	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	^R 2,423	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	^R 149,862	^R 143,378	176,612	^R 256,932	^R 369,030	^R 390,110

See footnotes at end of table.

Table 16. Natural Gas Deliveries to Commercial Consumers, by State, 1997-1999
(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	8,630	41,238	5,532	3,673	1,936	1,567
Kentucky	5,668	38,632	6,154	4,176	2,417	1,249
Louisiana	^R 3,527	25,629	3,073	2,048	1,414	1,353
Maine	422	2,713	375	289	176	91
Maryland	7,862	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	^R 448,133	3,223,030	411,204	306,311	190,027	142,068

^R Revised Data.

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 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, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				March	February	January
Alabama	55,354	60,113	50,945	20,820	17,325	17,209
Alaska	18,095	19,484	20,457	6,270	5,521	6,304
Arizona	6,888	7,171	6,719	2,237	2,291	2,360
Arkansas	37,319	38,815	38,533	12,581	11,668	13,070
California	180,076	178,724	173,663	52,152	65,298	62,625
Colorado	18,192	19,659	20,853	6,418	7,170	4,603
Connecticut	8,733	9,734	9,638	2,790	2,957	2,985
Delaware	5,718	4,524	3,663	1,952	1,878	1,887
District of Columbia	0	0	0	0	0	0
Florida	34,098	36,944	32,820	12,588	10,403	11,107
Georgia	35,983	40,578	49,696	12,217	11,713	12,054
Hawaii	0	0	0	0	0	0
Idaho ^a	9,097	9,956	9,168	3,214	3,081	2,802
Illinois	93,341	91,138	94,864	29,733	29,448	34,159
Indiana	NA	82,476	85,267	NA	NA	NA
Iowa	31,064	32,629	29,237	9,569	9,611	11,884
Kansas	NA	34,865	29,354	NA	NA	NA
Kentucky	26,756	26,274	27,569	9,276	8,168	^R 9,312
Louisiana	241,472	239,386	246,427	82,473	74,099	^R 84,900
Maine	586	565	526	189	104	293
Maryland	NA	9,440	14,901	NA	NA	^R 2,727
Massachusetts	NA	27,125	30,065	NA	^R 8,668	^R 8,789
Michigan	84,189	97,412	104,220	28,348	26,741	29,100
Minnesota	31,800	28,255	30,175	9,720	11,213	10,867
Mississippi	NA	NA	22,278	7,546	6,900	NA
Missouri	NA	20,195	22,281	5,175	NA	6,624
Montana	5,023	4,814	5,538	1,619	1,614	1,790
Nebraska	8,635	9,425	13,530	2,508	2,695	3,432
Nevada	8,506	5,746	7,196	2,816	2,674	3,016
New Hampshire	1,515	1,501	1,431	505	484	526
New Jersey	NA	53,786	58,092	NA	NA	NA
New Mexico	NA	9,040	10,966	5,497	4,870	NA
New York	NA	NA	85,410	NA	NA	NA
North Carolina	27,192	32,003	29,148	9,200	8,025	9,967
North Dakota	6,316	5,840	6,024	2,037	2,844	1,434
Ohio	97,934	99,948	98,338	32,561	31,901	33,472
Oklahoma	41,254	50,205	55,097	12,381	14,203	14,670
Oregon	33,463	NA	22,155	15,206	8,854	9,403
Pennsylvania	68,758	64,625	68,664	23,081	23,816	21,860
Rhode Island	5,479	6,300	6,366	1,717	1,728	2,033
South Carolina	26,845	27,894	25,049	9,684	8,284	8,877
South Dakota	1,447	1,539	2,373	439	463	545
Tennessee	39,734	NA	36,822	13,948	12,593	13,193
Texas	463,098	477,499	539,418	136,528	157,475	169,095
Utah	10,772	13,088	11,251	3,718	3,350	3,703
Vermont	833	621	611	301	312	220
Virginia	21,710	20,687	19,444	8,714	7,364	5,632
Washington	NA	NA	26,538	NA	NA	NA
West Virginia	NA	14,805	12,164	NA	3,705	4,141
Wisconsin	47,655	44,454	49,478	15,029	14,720	17,907
Wyoming	NA	NA	12,569	3,832	NA	4,359
Total	2,201,782	2,277,337	2,356,992	716,707	^R720,079	^R764,996

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	Total	December	November	October	September	August
Alabama	R225,062	15,857	R17,492	R18,337	R17,335	R19,366
Alaska	NA	NA	NA	NA	R5,699	NA
Arizona	28,209	2,609	2,384	2,522	2,078	2,508
Arkansas	R152,073	R13,073	R12,033	R12,433	R13,055	R13,027
California	729,514	64,279	60,200	61,870	65,490	64,310
Colorado	NA	6,739	5,399	4,683	4,230	5,294
Connecticut	32,455	2,815	2,641	2,571	2,417	2,455
Delaware	16,137	1,522	1,415	1,412	1,182	1,221
District of Columbia	0	0	0	0	0	0
Florida	138,914	11,116	11,473	10,774	11,553	10,827
Georgia	151,146	12,615	13,015	11,895	8,274	13,484
Hawaii	0	0	0	0	0	0
Idaho ^a	34,263	2,632	2,799	2,712	2,701	2,530
Illinois	306,290	29,103	28,080	25,507	21,840	20,413
Indiana	NA	28,078	NA	NA	NA	NA
Iowa	110,576	9,466	9,960	9,295	7,469	7,741
Kansas	NA	NA	13,258	12,280	9,502	13,725
Kentucky	91,604	8,188	7,950	7,705	6,695	6,702
Louisiana	NA	95,190	71,246	NA	84,209	85,378
Maine	NA	201	NA	224	190	179
Maryland	37,610	3,483	2,959	3,650	3,040	3,017
Massachusetts	NA	NA	8,152	8,006	NA	8,134
Michigan	301,398	26,840	25,540	22,636	18,483	17,707
Minnesota	99,663	9,222	9,226	8,990	4,187	8,677
Mississippi	NA	6,841	6,278	6,419	7,663	NA
Missouri	67,138	5,897	4,744	5,194	4,581	5,185
Montana	17,548	1,771	1,563	1,400	1,206	1,126
Nebraska	35,684	2,255	2,361	2,673	786	4,050
Nevada	28,532	2,986	2,730	2,836	1,793	2,739
New Hampshire	NA	484	NA	555	476	NA
New Jersey	NA	NA	NA	NA	NA	15,840
New Mexico	40,139	3,636	3,439	3,627	3,805	3,556
New York	NA	NA	NA	NA	NA	NA
North Carolina	115,082	9,524	9,456	9,423	8,986	9,283
North Dakota	20,912	1,840	1,712	1,110	1,655	1,625
Ohio	NA	31,615	28,292	27,630	24,368	23,492
Oklahoma	191,012	12,040	12,518	17,337	19,543	18,236
Oregon	NA	9,024	8,625	8,988	8,452	8,883
Pennsylvania	231,500	21,066	18,945	18,082	17,892	17,882
Rhode Island	NA	2,179	2,165	2,196	1,963	2,126
South Carolina	104,878	9,241	9,092	8,837	8,475	8,389
South Dakota	5,510	573	554	294	411	440
Tennessee	NA	12,892	12,705	13,618	12,499	12,815
Texas	NA	210,615	187,889	NA	151,722	164,970
Utah	45,366	3,830	3,533	3,432	3,192	3,040
Vermont	2,105	202	181	179	154	135
Virginia	94,436	7,488	7,847	8,947	8,135	9,453
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	4,262	NA	2,618	NA	NA
Wisconsin	140,446	14,588	12,952	11,284	9,610	9,221
Wyoming	NA	4,641	4,510	4,318	3,897	NA
Total	R8,597,090	R793,090	R725,350	R707,696	R668,145	R697,512

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	July	June	May	April	March	February
Alabama	^R 18,324	^R 19,075	^R 19,854	^R 19,308	^R 20,569	^R 18,609
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	^R 12,613	^R 12,419	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	25,124	27,772	25,847
Iowa	7,647	7,613	8,097	10,660	11,792	9,516
Kansas	15,481	12,763	11,091	10,661	11,559	10,398
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	^R 182	^R 182
Maryland	2,988	2,935	3,002	3,094	3,607	2,764
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	7,855	6,901	8,548	9,039	10,044
Mississippi	NA	NA	NA	NA	NA	6,814
Missouri	5,697	5,341	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	^R 523	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	1,522	1,794	1,961	1,853	1,924	1,844
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	8,185	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	^R 2,713	2,734	2,753	4,584	5,091	4,659
Wisconsin	^R 7,967	9,204	9,508	11,658	14,819	13,298
Wyoming	NA	4,119	4,293	3,344	NA	NA
Total	^R696,892	^R652,606	^R674,350	^R704,112	^R748,930	^R731,951

See footnotes at end of table.

Table 17. Natural Gas Deliveries to Industrial Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998	1997				
	January	Total	December	November	October	September
Alabama	R20,935	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	12,908	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	3,069	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	2,072	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	5,054	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	R796,456	8,842,896	796,281	747,720	711,325	688,885

^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.

^R Revised Data.

^{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, 1997-1999
(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				March	February	January
Alabama	2,036	901	450	925	550	561
Alaska	7,750	7,568	9,311	2,499	2,519	2,733
Arizona	6,220	2,482	1,265	2,013	1,783	2,424
Arkansas	3,974	2,063	1,079	2,034	1,376	564
California	59,492	68,381	56,106	19,915	19,517	20,060
Colorado	2,560	1,235	977	1,141	981	438
Connecticut	153	1,267	2,363	123	1	29
Delaware	3,731	804	6,093	1,687	912	1,131
District of Columbia	0	0	0	0	0	0
Florida	47,501	52,712	56,396	18,961	13,119	15,422
Georgia	255	308	89	220	20	16
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	6,690	11,463	5,300	2,863	1,357	2,470
Indiana	997	671	502	332	147	517
Iowa	527	687	832	189	193	145
Kansas	4,677	1,838	1,529	2,451	1,042	1,184
Kentucky	670	506	321	142	90	438
Louisiana	60,627	41,205	44,211	21,653	17,481	21,493
Maine	0	0	0	0	0	0
Maryland	871	785	569	289	138	444
Massachusetts	585	5,112	9,633	412	51	122
Michigan	10,591	9,434	6,655	3,881	3,061	3,649
Minnesota	882	424	1,473	437	151	294
Mississippi	14,722	9,783	8,853	4,296	4,678	5,748
Missouri	1,122	377	214	279	310	533
Montana	62	40	110	4	5	53
Nebraska	202	115	187	118	44	40
Nevada	12,550	9,835	6,650	4,274	3,699	4,578
New Hampshire	49	26	1	16	0	32
New Jersey	2,051	2,781	3,859	686	343	1,022
New Mexico	7,673	6,809	6,817	2,789	2,322	2,563
New York	29,253	37,416	31,925	12,815	8,397	8,041
North Carolina	62	103	10	25	3	34
North Dakota	0	0	0	0	0	0
Ohio	1,616	517	269	971	333	312
Oklahoma	30,599	20,954	17,725	12,492	7,519	10,588
Oregon	2,687	3,906	468	219	936	1,532
Pennsylvania	680	889	921	315	105	261
Rhode Island	0	6,099	6,288	0	0	0
South Carolina	83	150	28	48	21	14
South Dakota	477	111	84	232	120	125
Tennessee	0	0	0	0	0	0
Texas	203,592	183,474	175,243	81,573	55,651	66,368
Utah	1,060	515	476	392	337	331
Vermont	14	115	7	6	2	5
Virginia	5,677	2,524	1,345	2,093	1,918	1,666
Washington	75	618	9	6	40	28
West Virginia	86	78	58	35	24	27
Wisconsin	1,765	1,876	5,089	568	648	550
Wyoming	36	210	22	13	14	9
Total	536,979	499,164	471,810	206,430	151,958	178,592

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility^a Consumers, by State, 1997-1999
(Million Cubic Feet) — Continued

State	1998					
	Total	December	November	October	September	August
Alabama	25,546	789	568	973	4,213	5,129
Alaska	28,784	2,957	2,669	2,190	2,402	2,038
Arizona	38,674	3,738	2,716	4,777	6,200	8,185
Arkansas	40,576	367	122	1,753	6,764	8,176
California	271,154	17,740	20,126	25,310	31,816	34,624
Colorado	10,627	918	1,046	684	1,378	1,419
Connecticut	10,719	123	9	209	1,605	2,672
Delaware	11,135	911	1,152	985	1,319	1,672
District of Columbia	0	0	0	0	0	0
Florida	281,346	17,667	18,413	28,024	27,465	29,246
Georgia	22,371	259	337	741	3,350	5,027
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	56,337	1,469	1,465	1,426	6,084	7,669
Indiana	9,096	237	172	389	957	1,695
Iowa	5,947	144	147	177	1,099	1,049
Kansas	36,896	1,679	2,097	1,602	6,109	7,062
Kentucky	5,760	136	151	206	978	1,060
Louisiana	318,395	18,345	20,877	24,381	36,591	44,636
Maine	0	0	0	0	0	0
Maryland	12,303	499	188	232	2,565	3,146
Massachusetts	18,427	725	777	918	1,127	1,965
Michigan	48,321	3,449	3,163	3,934	5,415	5,520
Minnesota	7,738	120	268	504	1,538	1,461
Mississippi	76,362	4,126	3,553	4,004	9,141	11,125
Missouri	16,035	515	521	228	3,067	3,997
Montana	522	36	33	48	69	83
Nebraska	5,044	106	35	154	955	1,161
Nevada	60,937	5,362	4,649	5,732	6,460	8,818
New Hampshire	149	0	25	0	0	26
New Jersey	30,996	792	804	376	3,446	6,216
New Mexico	39,034	2,876	2,246	2,708	3,782	4,850
New York	208,348	10,911	8,116	15,872	20,464	34,201
North Carolina	12,418	36	29	136	2,132	3,116
North Dakota	0	0	0	0	0	0
Ohio	7,663	351	170	272	1,333	1,426
Oklahoma	174,577	13,066	11,482	11,983	21,106	26,807
Oregon	28,883	3,009	4,188	3,701	4,014	3,781
Pennsylvania	6,890	357	98	220	561	455
Rhode Island	15,589	0	0	0	0	2,251
South Carolina	5,893	42	97	72	919	1,237
South Dakota	2,865	189	190	61	366	608
Tennessee	6,213	0	0	190	1,860	1,123
Texas	1,242,574	71,865	61,712	95,036	143,064	161,408
Utah	5,945	493	165	648	1,206	1,323
Vermont	188	4	3	7	11	8
Virginia	20,386	757	625	1,435	3,323	3,645
Washington	13,352	635	1,742	3,318	2,749	3,470
West Virginia	417	25	56	52	20	34
Wisconsin	16,348	730	589	486	2,044	2,338
Wyoming	271	5	6	13	9	1
Total	3,258,054	188,557	177,596	246,171	381,075	456,960

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility^a Consumers, by State, 1997-1999
(Million Cubic Feet) — Continued

State	1998					
	July	June	May	April	March	February
Alabama	5,071	4,763	2,843	296	382	157
Alaska	2,163	2,102	2,420	2,274	2,391	2,316
Arizona	6,791	1,986	674	1,127	718	803
Arkansas	7,022	6,618	5,431	2,262	1,507	269
California	26,020	15,338	13,746	18,053	23,365	18,272
Colorado	1,763	914	690	581	412	446
Connecticut	1,582	1,708	1,385	157	23	109
Delaware	1,648	1,196	900	548	475	74
District of Columbia	0	0	0	0	0	0
Florida	31,965	33,183	26,818	15,852	18,011	15,630
Georgia	5,457	4,959	1,891	41	149	57
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	7,640	7,325	7,006	4,790	3,985	3,502
Indiana	1,911	1,732	1,102	231	427	129
Iowa	933	749	674	288	237	195
Kansas	7,713	5,133	3,088	575	891	426
Kentucky	649	950	1,017	107	282	138
Louisiana	43,677	38,806	31,804	18,072	16,190	9,854
Maine	0	0	0	0	0	0
Maryland	2,186	1,396	932	373	371	222
Massachusetts	1,404	2,164	2,661	1,575	1,561	1,316
Michigan	4,553	5,074	4,196	3,582	3,735	2,480
Minnesota	1,389	979	792	264	202	104
Mississippi	10,887	10,629	8,715	4,398	3,920	2,774
Missouri	3,750	2,425	947	208	160	80
Montana	80	26	89	15	39	0
Nebraska	1,022	702	621	173	58	21
Nevada	8,189	4,036	3,932	3,926	2,925	3,377
New Hampshire	37	35	0	0	0	26
New Jersey	7,105	4,303	3,925	1,248	1,835	419
New Mexico	5,283	4,019	3,015	3,446	3,091	1,801
New York	29,277	24,080	18,922	9,089	10,407	10,285
North Carolina	2,041	3,788	1,026	12	91	1
North Dakota	0	0	0	0	0	0
Ohio	1,307	1,103	1,005	179	307	96
Oklahoma	26,740	20,703	13,832	7,905	9,348	5,179
Oregon	3,008	835	176	2,265	1,334	1,101
Pennsylvania	1,411	2,017	622	260	406	257
Rhode Island	2,238	1,453	1,943	1,606	1,888	1,599
South Carolina	1,239	1,413	687	37	105	11
South Dakota	627	315	366	33	42	6
Tennessee	1,407	1,202	432	0	0	0
Texas	174,322	153,383	115,390	82,922	80,353	48,953
Utah	1,126	160	157	153	177	164
Vermont	15	7	12	6	3	47
Virginia	2,969	2,253	2,157	698	1,196	476
Washington	621	33	14	152	121	5
West Virginia	53	46	30	22	29	29
Wisconsin	3,059	2,554	2,279	394	1,106	352
Wyoming	5	10	6	8	3	200
Total	449,354	378,607	290,368	190,201	194,258	133,757

See footnotes at end of table.

Table 18. Natural Gas Deliveries to Electric Utility^a Consumers, by State, 1997-1999
(Million Cubic Feet) — Continued

State	1998	1997				
	January	Total	December	November	October	September
Alabama	362	9,997	87	295	846	1,247
Alaska	2,862	33,510	3,013	2,668	2,680	2,289
Arizona	961	23,385	752	399	1,542	5,103
Arkansas	286	24,805	294	375	2,293	3,376
California	26,743	377,946	26,274	22,422	35,151	56,539
Colorado	377	5,536	450	385	641	667
Connecticut	1,135	16,761	554	1,446	2,234	1,722
Delaware	255	16,092	699	681	356	667
District of Columbia	0	0	0	0	0	0
Florida	19,071	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	3,977	44,607	5,018	3,906	3,795	2,375
Indiana	115	4,661	137	211	281	242
Iowa	255	4,124	208	252	459	235
Kansas	521	25,822	1,991	2,478	2,643	2,111
Kentucky	86	2,194	158	190	200	181
Louisiana	15,161	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	2,235	51,490	2,411	3,176	3,245	4,785
Michigan	3,218	33,287	3,028	3,135	3,242	2,922
Minnesota	118	6,098	112	139	382	289
Mississippi	3,090	73,083	4,573	4,060	5,428	8,115
Missouri	137	7,465	310	340	557	749
Montana	1	420	21	30	40	27
Nebraska	36	2,656	34	77	354	263
Nevada	3,532	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	1,917	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	6,427	128,818	11,401	8,233	10,061	14,023
Oregon	1,470	10,680	1,917	1,075	990	2,765
Pennsylvania	225	7,370	365	212	301	417
Rhode Island	2,612	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	54,167	1,056,550	69,566	72,391	90,883	126,044
Utah	174	4,078	177	173	134	906
Vermont	65	36	4	2	4	2
Virginia	852	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	171,149	2,968,453	196,980	179,723	244,394	332,781

^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, 1997-1999

(Million Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		
				March	February	January
Alabama	89,661	99,466	86,190	31,445	27,246	30,970
Alaska	41,650	40,011	44,128	13,666	13,158	14,826
Arizona	39,100	38,893	33,760	11,069	13,011	15,019
Arkansas	73,214	74,062	73,552	23,155	21,807	28,252
California	571,263	546,189	492,236	169,377	194,473	207,412
Colorado	99,503	100,175	103,189	28,762	32,456	38,285
Connecticut	46,314	44,196	46,216	14,524	15,078	16,712
Delaware	17,031	12,008	17,182	6,212	5,203	5,616
District of Columbia	14,915	13,762	14,246	4,658	4,857	5,400
Florida	99,088	108,518	105,201	37,194	28,874	33,020
Georgia	95,059	119,376	117,884	28,558	30,600	^R 35,900
Hawaii	697	704	642	226	238	233
Idaho	22,419	22,164	21,121	7,004	7,448	7,967
Illinois	402,555	364,406	420,284	118,510	118,464	165,581
Indiana	NA	188,440	200,035	NA	^R 59,915	^R 80,594
Iowa	89,484	89,255	92,237	25,822	26,622	37,039
Kansas	NA	104,699	81,561	NA	NA	NA
Kentucky	73,891	69,434	74,762	23,759	21,978	^R 28,154
Louisiana	332,600	314,963	325,267	112,180	100,272	^R 120,148
Maine	2,167	2,057	2,125	676	578	913
Maryland	NA	65,814	70,401	NA	NA	^R 26,960
Massachusetts	NA	117,571	130,114	NA	^R 34,771	^R 28,117
Michigan	351,916	332,275	371,456	112,050	107,362	132,504
Minnesota	130,593	119,758	134,516	36,599	41,064	52,930
Mississippi	NA	NA	52,702	18,227	18,533	NA
Missouri	NA	109,268	119,630	30,549	NA	45,831
Montana	18,233	18,270	21,111	5,108	5,688	7,437
Nebraska	42,603	43,734	49,428	11,831	12,934	17,838
Nevada	41,460	36,860	33,189	12,810	13,191	15,458
New Hampshire	8,245	7,610	7,727	2,539	2,590	3,115
New Jersey	NA	201,848	228,531	NA	NA	NA
New Mexico	NA	45,793	47,949	18,599	16,409	NA
New York	NA	NA	396,380	NA	NA	NA
North Carolina	77,931	77,319	70,415	28,489	21,832	27,610
North Dakota	16,413	15,335	16,896	4,608	5,967	5,837
Ohio	338,057	311,594	341,046	108,903	107,908	121,245
Oklahoma	123,377	128,592	128,734	38,033	37,020	48,324
Oregon	64,873	NA	48,472	23,934	19,114	21,825
Pennsylvania	243,730	223,315	249,092	77,564	79,300	86,866
Rhode Island	19,237	25,199	26,074	6,152	6,077	7,008
South Carolina	48,959	50,835	44,444	17,294	14,128	17,536
South Dakota	12,011	11,497	13,791	3,307	3,646	5,058
Tennessee	94,066	NA	92,088	27,924	28,158	37,984
Texas	818,059	829,483	894,354	256,140	255,885	306,033
Utah	45,047	49,239	48,805	12,602	15,610	16,835
Vermont	3,224	3,205	3,185	1,017	1,023	1,184
Virginia	87,439	80,393	78,416	29,725	28,564	29,151
Washington	NA	NA	64,694	NA	NA	NA
West Virginia	NA	39,401	38,216	NA	11,950	14,254
Wisconsin	149,692	134,717	154,967	43,610	44,128	61,954
Wyoming	NA	NA	22,347	6,239	NA	7,653
Total	6,232,458	6,117,821	6,350,986	1,955,338	^R1,944,286	^R2,332,834

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	Total	December	November	October	September	August
Alabama	R325,246	23,534	R22,229	R21,862	R23,797	R26,659
Alaska	NA	NA	NA	NA	R10,315	NA
Arizona	134,452	14,346	9,433	10,323	10,941	13,309
Arkansas	R265,283	R22,629	R18,181	R17,986	R23,015	R24,479
California	1,870,106	186,227	151,474	140,054	146,001	150,877
Colorado	NA	29,840	19,959	12,965	11,011	11,521
Connecticut	121,350	12,418	9,164	6,999	6,999	8,154
Delaware	40,707	3,961	3,589	2,871	2,857	3,234
District of Columbia	30,373	3,293	2,293	1,340	1,176	1,174
Florida	473,751	33,549	33,673	42,172	42,145	43,287
Georgia	335,333	33,189	26,768	19,977	17,087	23,974
Hawaii	2,669	229	214	202	212	228
Idaho	61,955	6,707	5,353	3,948	3,405	3,203
Illinois	R943,171	119,331	90,632	58,574	R44,996	45,191
Indiana	NA	NA	NA	NA	NA	NA
Iowa	229,735	26,120	20,707	14,907	11,196	11,442
Kansas	NA	NA	25,994	18,590	19,008	24,716
Kentucky	187,141	22,614	17,611	11,855	9,983	10,000
Louisiana	R1,352,234	R120,734	R96,548	R106,790	R123,820	R132,986
Maine	NA	670	NA	452	295	278
Maryland	NA	19,949	13,189	NA	NA	11,097
Massachusetts	NA	NA	NA	18,469	NA	15,853
Michigan	831,885	93,042	73,532	51,240	37,220	35,808
Minnesota	302,084	40,705	30,638	20,204	11,155	14,914
Mississippi	NA	15,794	13,000	12,479	18,959	NA
Missouri	255,416	27,398	17,749	11,162	12,462	14,406
Montana	NA	6,569	4,937	3,509	2,167	2,102
Nebraska	R109,897	10,494	R7,986	5,476	3,561	7,095
Nevada	142,541	15,210	11,727	11,223	10,166	13,421
New Hampshire	NA	2,033	NA	1,219	857	NA
New Jersey	NA	NA	NA	NA	NA	32,663
New Mexico	145,612	18,414	11,763	8,914	9,670	10,465
New York	NA	NA	NA	NA	NA	NA
North Carolina	215,593	19,245	16,376	12,630	13,759	14,953
North Dakota	41,491	4,685	3,789	2,153	2,186	2,187
Ohio	NA	96,741	73,111	R50,727	36,525	36,235
Oklahoma	476,035	38,388	31,239	32,913	43,899	48,285
Oregon	NA	21,167	18,653	15,418	14,253	14,248
Pennsylvania	NA	64,611	50,045	35,333	NA	NA
Rhode Island	NA	5,371	4,569	3,454	2,871	5,009
South Carolina	155,973	14,080	12,475	10,663	10,940	11,109
South Dakota	29,298	3,736	2,814	1,250	1,294	1,538
Tennessee	NA	27,441	21,469	17,987	18,058	17,415
Texas	NA	337,337	281,351	NA	317,245	348,252
Utah	138,895	19,052	12,689	10,621	7,336	6,535
Vermont	7,726	895	673	453	403	301
Virginia	NA	24,374	NA	16,165	15,462	16,133
Washington	NA	NA	NA	NA	NA	NA
West Virginia	NA	11,062	NA	5,905	NA	NA
Wisconsin	354,578	45,711	33,445	22,491	17,723	17,737
Wyoming	NA	7,931	NA	5,537	4,617	NA
Total	R19,380,438	R1,964,308	R1,554,960	R1,331,994	R1,315,370	R1,421,078

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998					
	July	June	May	April	March	February
Alabama	R25,628	R26,343	R28,801	R26,927	R31,953	R31,998
Alaska	10,373	10,255	10,891	11,880	13,049	12,525
Arizona	12,050	7,467	7,574	10,115	12,000	12,168
Arkansas	R23,034	R22,440	20,432	19,025	24,783	23,126
California	137,487	120,557	140,354	150,887	151,877	190,770
Colorado	NA	NA	18,653	24,714	31,312	32,169
Connecticut	7,337	7,280	7,933	10,871	13,255	14,383
Delaware	3,131	2,833	2,924	3,298	4,029	3,776
District of Columbia	1,242	1,348	1,720	3,025	4,064	4,747
Florida	46,686	48,216	42,712	32,793	36,977	32,918
Georgia	23,938	24,020	21,199	25,805	37,286	39,542
Hawaii	214	228	216	223	221	232
Idaho	3,429	3,876	4,186	5,684	6,585	7,284
Illinois	R42,646	46,294	51,218	79,882	110,448	107,822
Indiana	NA	NA	32,766	NA	62,621	57,103
Iowa	11,556	11,035	13,144	20,373	30,248	25,934
Kansas	27,485	22,388	21,123	23,512	35,146	31,669
Kentucky	9,770	10,292	11,505	14,076	21,967	21,257
Louisiana	R127,464	R115,782	111,320	101,827	R108,413	R95,623
Maine	251	305	335	470	R633	R647
Maryland	9,929	9,573	10,440	14,048	20,680	21,403
Massachusetts	16,112	NA	NA	29,252	36,404	38,346
Michigan	35,320	43,847	51,625	77,976	106,021	106,501
Minnesota	13,755	14,572	14,737	21,645	37,304	36,305
Mississippi	NA	NA	NA	NA	NA	17,461
Missouri	14,327	13,247	13,736	21,662	33,689	34,873
Montana	2,176	3,638	NA	4,240	5,477	5,313
Nebraska	8,959	5,832	6,933	9,827	13,611	13,802
Nevada	12,929	9,447	10,147	11,412	11,550	12,082
New Hampshire	871	NA	1,226	R1,776	R2,238	2,585
New Jersey	33,936	31,639	41,615	46,964	65,242	66,099
New Mexico	10,814	8,579	9,248	11,952	14,536	12,873
New York	NA	NA	NA	82,450	NA	NA
North Carolina	13,148	15,680	14,761	17,721	23,352	25,906
North Dakota	2,043	2,397	2,958	3,759	4,760	4,840
Ohio	NA	NA	45,666	67,612	98,219	99,777
Oklahoma	46,883	40,664	33,009	32,165	43,105	40,820
Oregon	13,185	10,671	10,944	NA	NA	17,735
Pennsylvania	28,412	31,355	34,777	NA	72,422	75,456
Rhode Island	5,305	4,612	NA	NA	7,899	7,949
South Carolina	10,338	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	380,407	320,879	292,694	266,948	287,964	252,419
Utah	6,659	6,949	7,578	12,236	14,719	16,672
Vermont	325	347	409	716	918	1,085
Virginia	16,599	14,962	14,714	18,955	25,190	27,386
Washington	NA	NA	NA	NA	NA	NA
West Virginia	R5,737	NA	NA	9,625	12,819	12,904
Wisconsin	16,504	18,699	19,667	27,883	44,074	39,113
Wyoming	NA	5,041	5,547	5,396	NA	NA
Total	R1,426,477	R1,327,418	R1,362,006	R1,559,006	R1,952,901	R1,940,944

See footnotes at end of table.

Table 19. Natural Gas Deliveries to All Consumers, by State, 1997-1999

(Million Cubic Feet) — Continued

State	1998	1997				
	January	Total	December	November	October	September
Alabama	^R 35,514	292,094	30,822	24,666	20,865	19,874
Alaska	14,438	149,164	15,172	12,560	13,113	8,844
Arizona	14,725	112,590	11,575	6,994	6,675	10,639
Arkansas	^R 26,153	244,644	23,947	19,854	17,536	16,564
California	203,541	1,850,248	185,860	147,134	137,655	164,736
Colorado	36,693	263,988	34,668	23,250	12,664	10,469
Connecticut	16,557	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	38,623	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	146,135	1,062,463	132,707	110,989	70,209	42,581
Indiana	68,716	546,337	64,388	54,190	37,412	27,504
Iowa	33,073	243,476	30,016	24,461	17,115	11,323
Kansas	37,884	248,563	29,528	22,869	14,839	12,763
Kentucky	26,211	202,583	26,707	21,185	14,189	9,760
Louisiana	^R 110,927	1,360,160	112,335	102,939	113,454	117,136
Maine	777	6,247	735	694	488	332
Maryland	23,731	204,319	31,410	17,582	11,557	9,379
Massachusetts	42,821	377,911	38,594	30,037	22,843	20,155
Michigan	119,753	943,881	112,039	89,089	55,893	41,643
Minnesota	46,150	334,572	39,996	36,158	21,195	12,500
Mississippi	NA	206,749	19,424	16,400	14,616	15,793
Missouri	40,706	276,124	35,740	25,019	12,114	9,958
Montana	7,480	54,114	7,361	5,273	3,728	2,287
Nebraska	16,321	128,031	14,339	10,024	7,229	5,472
Nevada	13,229	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	18,385	142,353	18,573	12,587	8,917	8,133
New York	NA	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	5,735	42,826	4,737	3,787	2,549	2,025
Ohio	113,599	878,124	107,489	83,928	55,298	36,252
Oklahoma	44,667	452,453	45,168	34,038	29,638	34,074
Oregon	21,237	159,105	19,704	14,600	12,135	12,639
Pennsylvania	75,438	652,219	79,772	62,794	40,047	28,446
Rhode Island	9,351	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	289,099	3,566,640	301,259	280,454	282,035	312,902
Utah	17,848	137,605	20,196	13,494	10,669	6,475
Vermont	1,202	8,052	988	723	529	345
Virginia	27,818	232,674	30,339	20,442	13,107	11,415
Washington	NA	222,391	30,513	25,964	15,906	16,143
West Virginia	13,678	119,512	14,615	11,696	7,894	6,412
Wisconsin	51,530	396,055	47,139	41,199	26,442	16,682
Wyoming	NA	70,797	7,494	6,457	5,066	3,926
Total	^R 2,223,976	20,018,151	2,135,495	1,731,064	1,379,970	1,293,122

^R Revised Data.

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, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999			1998	
				March	February	January	Total	December
Alabama	2.68	3.05	3.98	2.65	2.79	2.62	3.26	3.16
Alaska	1.33	1.74	1.85	1.33	1.34	1.32	NA	1.73
Arizona	2.18	2.42	3.26	2.18	2.19	2.17	2.55	2.31
Arkansas	2.87	3.03	3.50	2.58	3.40	2.69	2.94	3.13
California	2.19	2.29	3.28	2.07	2.25	2.23	2.38	2.76
Colorado	2.07	NA	3.30	1.84	2.07	2.21	NA	2.74
Connecticut	4.57	5.12	5.58	4.57	4.74	4.44	5.06	5.51
Delaware	3.54	2.81	4.54	3.33	3.68	3.63	3.01	4.10
District of Columbia	0.00	0.00	0.00	—	—	—	0.00	—
Florida	3.22	3.43	4.44	3.11	3.24	3.30	3.36	3.36
Georgia	3.83	3.46	4.28	3.33	3.47	4.61	3.51	4.34
Hawaii	4.70	6.13	6.79	4.53	4.47	5.07	5.33	5.17
Idaho	1.82	1.88	2.15	1.82	1.92	1.76	1.96	1.86
Illinois	2.52	2.81	3.34	2.51	2.59	2.49	2.75	2.74
Indiana	NA	2.42	3.35	NA	R2.26	R2.11	NA	2.75
Iowa	2.78	3.56	3.63	2.77	3.02	2.62	3.48	2.79
Kansas	NA	3.04	3.69	NA	NA	NA	3.05	2.79
Kentucky	3.07	3.18	3.77	2.79	3.10	3.35	3.22	3.08
Louisiana	2.18	2.53	3.37	2.16	2.19	2.20	NA	2.48
Maine	3.06	3.25	4.31	3.05	2.84	3.27	NA	3.10
Maryland	NA	3.33	3.88	NA	NA	2.82	NA	3.19
Massachusetts	NA	3.23	3.80	NA	NA	NA	NA	NA
Michigan	2.86	2.93	3.37	2.79	3.02	2.79	2.80	3.05
Minnesota	2.70	3.07	3.66	2.70	2.84	2.60	3.02	3.04
Mississippi	NA	NA	3.68	2.97	2.92	NA	NA	3.14
Missouri	2.67	2.97	3.60	2.75	2.89	2.49	3.32	2.77
Montana	2.81	2.54	3.39	2.98	2.70	2.75	2.40	2.40
Nebraska	2.97	3.40	3.83	2.90	3.11	2.90	3.23	3.10
Nevada	2.43	3.08	3.62	2.31	2.54	2.42	3.02	2.65
New Hampshire	3.53	3.80	4.47	3.24	3.56	3.73	NA	3.63
New Jersey	NA	3.74	4.33	NA	NA	NA	NA	NA
New Mexico	2.07	2.16	2.76	1.98	2.08	2.13	2.07	2.18
New York	NA	NA	3.67	NA	NA	NA	NA	NA
North Carolina	2.95	3.54	4.15	2.73	3.00	3.11	3.49	3.09
North Dakota	2.77	2.90	3.52	2.58	2.84	2.85	2.80	3.01
Ohio	4.39	4.66	5.23	4.43	4.62	4.22	4.66	4.32
Oklahoma	3.05	2.64	3.47	2.36	5.21	2.41	2.55	2.54
Oregon	2.56	NA	2.46	2.59	2.68	2.43	NA	2.50
Pennsylvania	3.26	4.16	3.98	3.26	3.41	3.15	NA	3.45
Rhode Island	3.20	3.55	4.12	3.06	R3.20	3.32	NA	1.25
South Carolina	3.03	3.26	3.81	2.86	R3.09	3.14	0.82	0.12
South Dakota	3.25	3.12	3.71	3.25	3.37	3.18	3.23	2.69
Tennessee	2.79	NA	3.66	2.80	2.72	2.85	NA	3.68
Texas	2.69	3.02	4.14	2.38	2.61	2.95	2.92	3.03
Utah	2.92	3.38	2.70	2.76	3.11	2.86	3.22	3.58
Vermont	2.92	2.70	1.96	2.92	3.01	2.85	2.58	2.52
Virginia	3.21	3.62	4.26	3.35	2.97	3.32	3.69	3.25
Washington	NA	NA	2.71	NA	NA	NA	NA	NA
West Virginia	NA	2.96	3.21	NA	4.00	6.98	NA	3.79
Wisconsin	2.63	3.18	3.60	2.64	2.77	2.52	3.36	2.84
Wyoming	3.17	NA	3.69	2.91	3.49	3.07	NA	4.14
Total	2.82	3.20	3.78	2.67	R2.94	R2.86	3.02	2.44

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	November	October	September	August	July	June	May	April
Alabama	3.26	3.64	3.43	3.82	3.97	3.86	3.56	3.20
Alaska	NA	1.73	1.71	1.71	1.64	1.67	1.68	1.71
Arizona	2.67	2.61	2.76	2.84	2.85	2.60	2.93	2.75
Arkansas	3.03	2.93	1.88	2.38	3.23	2.31	3.00	2.96
California	2.49	2.22	1.95	2.46	2.39	2.34	2.49	2.33
Colorado	2.18	2.24	NA	2.26	NA	2.43	2.46	NA
Connecticut	4.54	4.28	4.69	4.87	5.14	4.74	5.08	5.89
Delaware	3.83	3.75	3.76	2.70	2.86	4.35	1.79	2.63
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.66	3.48	2.99	3.10	3.14	2.96	3.15	3.92
Georgia	3.24	3.08	3.37	3.45	3.57	3.01	3.55	3.63
Hawaii	5.14	4.95	5.12	5.06	4.77	4.86	5.21	5.21
Idaho	1.99	1.95	2.38	2.14	2.81	2.18	1.94	1.96
Illinois	2.65	2.43	2.24	2.49	3.16	2.15	3.64	2.90
Indiana	NA	NA	NA	2.53	NA	1.04	2.80	NA
Iowa	3.05	4.98	4.00	4.29	4.11	1.98	4.17	3.33
Kansas	3.20	2.97	2.83	3.03	3.87	3.66	3.17	2.79
Kentucky	3.19	2.94	3.58	2.85	3.57	3.12	3.33	3.99
Louisiana	2.20	NA	2.01	2.05	2.45	2.19	2.36	2.29
Maine	NA	3.37	2.69	3.21	5.39	NA	NA	3.25
Maryland	3.42	NA	NA	5.86	7.62	5.94	5.58	4.37
Massachusetts	3.49	3.77	NA	7.10	5.83	5.52	4.56	3.48
Michigan	2.86	2.61	2.69	2.79	2.92	2.50	2.69	2.78
Minnesota	3.04	2.74	2.78	3.06	3.31	2.88	3.24	2.95
Mississippi	3.16	NA	2.65	NA	3.09	2.86	NA	NA
Missouri	3.12	4.06	4.50	4.61	5.12	4.87	4.47	3.72
Montana	2.57	2.29	2.20	1.87	2.27	2.39	2.22	2.29
Nebraska	2.84	3.03	2.90	3.01	3.65	2.98	3.73	3.29
Nevada	2.60	2.48	3.79	4.43	3.75	3.37	3.25	3.00
New Hampshire	3.41	NA	3.34	3.80	4.63	NA	3.36	3.37
New Jersey	NA	4.08	5.83	3.75	3.86	3.57	3.00	3.54
New Mexico	2.16	1.75	1.64	1.86	1.94	1.76	2.04	2.19
New York	NA	NA	NA	NA	3.34	2.88	NA	3.01
North Carolina	3.16	3.46	3.20	3.43	3.95	3.83	3.66	3.91
North Dakota	3.10	2.74	2.11	2.49	2.57	2.34	2.74	2.86
Ohio	4.23	6.02	3.55	4.70	5.16	4.75	5.04	4.89
Oklahoma	2.52	2.16	2.73	2.61	2.38	2.51	2.46	2.36
Oregon	2.61	2.72	2.93	3.60	4.13	3.22	2.78	NA
Pennsylvania	3.48	3.74	5.18	NA	5.50	4.79	3.94	NA
Rhode Island	4.04	4.02	4.23	3.53	3.68	3.61	3.70	NA
South Carolina	3.34	3.49	3.48	3.57	4.09	3.81	3.90	3.66
South Dakota	3.07	2.76	3.91	4.68	4.27	2.91	4.42	4.37
Tennessee	3.57	3.06	2.42	2.77	3.12	3.39	3.40	6.62
Texas	2.85	2.73	2.46	2.70	2.91	2.65	2.97	2.94
Utah	3.07	2.94	3.37	3.48	2.64	2.73	2.62	2.89
Vermont	2.67	1.99	2.26	2.34	2.60	2.69	2.82	2.74
Virginia	3.31	3.80	4.52	5.14	4.51	4.32	4.37	3.64
Washington	NA							
West Virginia	NA	3.48	3.59	NA	NA	NA	NA	3.61
Wisconsin	3.35	3.24	4.97	4.38	4.36	3.82	3.63	3.54
Wyoming	NA	2.88	2.46	2.93	NA	2.53	NA	1.28
Total	3.01	3.02	2.76	3.13	3.39	2.99	3.11	3.21

See footnotes at end of table.

Table 20. Average City Gate Price, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998			1997				
	March	February	January	Total	December	November	October	September
Alabama	3.03	2.93	3.18	3.65	2.60	3.97	4.17	3.83
Alaska	1.73	1.72	1.75	1.81	1.82	1.82	1.78	1.79
Arizona	2.55	2.28	2.46	3.15	2.53	3.48	3.80	3.74
Arkansas	3.13	2.85	3.09	3.23	3.19	3.44	3.61	2.87
California	2.38	2.12	2.35	2.98	2.65	3.30	3.18	2.74
Colorado	NA	NA	NA	2.92	2.57	3.59	2.71	2.66
Connecticut	4.87	5.24	5.23	5.11	5.55	3.87	4.96	5.29
Delaware	2.73	3.02	2.71	3.53	2.43	5.78	5.23	1.44
District of Columbia	—	—	—	—	—	—	—	—
Florida	3.25	3.20	3.81	3.97	3.85	4.45	4.64	3.82
Georgia	3.85	3.18	3.43	3.98	3.65	4.01	4.05	5.29
Hawaii	6.25	5.75	6.40	6.42	6.23	6.22	6.09	6.11
Idaho	1.81	1.94	1.89	2.12	1.79	2.07	2.01	2.17
Illinois	2.81	2.85	2.78	3.28	2.92	3.72	4.00	3.78
Indiana	2.32	2.48	2.49	3.03	2.79	3.21	3.64	3.15
Iowa	3.42	3.33	3.80	4.06	4.45	4.85	4.98	5.39
Kansas	2.86	2.73	3.56	3.47	3.60	4.28	3.67	3.47
Kentucky	3.23	3.09	3.22	3.83	4.07	4.28	3.83	3.57
Louisiana	2.53	2.25	2.81	3.04	2.86	3.75	3.44	3.02
Maine	3.25	3.25	3.25	3.84	3.10	2.72	4.11	3.79
Maryland	3.44	3.43	2.96	4.02	3.57	4.22	4.69	5.77
Massachusetts	3.30	2.89	3.40	3.85	3.09	4.14	4.52	5.00
Michigan	2.97	2.89	2.94	2.99	3.19	3.51	3.12	2.87
Minnesota	3.00	2.90	3.27	3.67	4.06	4.52	4.26	4.02
Mississippi	NA	2.99	NA	3.39	3.31	3.83	3.86	3.25
Missouri	2.97	2.99	2.96	3.75	3.13	3.92	4.66	5.08
Montana	2.50	2.41	2.71	3.16	2.51	3.15	4.47	3.76
Nebraska	2.98	2.70	4.71	4.24	5.31	6.30	5.76	7.03
Nevada	3.29	3.00	3.03	3.39	2.84	3.71	3.46	4.12
New Hampshire	3.93	3.74	3.77	4.10	3.72	4.02	3.95	4.02
New Jersey	3.53	3.38	4.37	4.19	3.77	4.49	4.84	4.34
New Mexico	2.20	2.02	2.24	2.53	2.31	2.85	2.59	2.62
New York	NA	NA	NA	3.51	3.33	4.00	3.68	2.92
North Carolina	3.49	3.47	3.65	3.97	3.72	4.09	3.95	4.13
North Dakota	2.91	2.85	2.93	3.38	3.01	4.01	3.73	3.53
Ohio	4.87	4.27	4.82	5.18	4.35	4.66	5.09	4.91
Oklahoma	2.38	2.61	2.86	3.12	3.33	3.19	3.04	2.58
Oregon	NA	2.31	2.53	2.58	2.42	2.73	2.48	3.12
Pennsylvania	5.26	3.64	3.68	4.09	3.84	4.20	4.60	4.22
Rhode Island	3.38	3.35	3.93	4.49	4.02	4.46	4.53	5.71
South Carolina	3.34	3.05	3.37	3.81	3.72	4.13	4.15	4.03
South Dakota	2.60	3.66	3.22	3.65	3.46	3.68	3.43	4.03
Tennessee	2.42	3.84	NA	3.36	3.66	4.37	3.93	2.78
Texas	2.84	2.87	3.26	3.66	3.97	3.86	3.57	3.21
Utah	3.23	3.68	3.25	2.79	3.46	3.07	2.64	2.81
Vermont	2.92	2.66	2.59	2.33	2.64	2.77	2.34	2.29
Virginia	3.25	3.63	3.97	4.14	3.69	4.11	4.71	4.69
Washington	NA	NA	NA	2.62	2.39	2.82	2.27	2.44
West Virginia	2.58	3.15	3.34	3.17	3.11	3.07	3.62	3.53
Wisconsin	3.33	2.99	3.21	3.67	3.32	3.75	3.91	4.63
Wyoming	3.29	3.31	NA	3.11	2.93	3.61	3.25	3.35
Total	3.22	3.08	3.28	3.61	3.42	3.91	3.86	3.50

^R Revised Data.

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, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999			1998	
				March	February	January	Total	December
Alabama	7.43	7.19	7.81	7.03	8.29	7.13	8.15	8.99
Alaska	3.55	3.63	3.67	3.59	3.53	3.53	3.67	3.51
Arizona	8.21	7.33	6.82	8.57	8.17	8.03	8.56	8.39
Arkansas	6.14	6.46	6.28	6.16	6.94	5.66	^R 6.82	6.83
California	6.56	6.87	6.30	6.22	6.54	6.82	6.93	6.89
Colorado	4.75	4.52	4.23	4.86	4.75	4.68	NA	4.86
Connecticut	9.97	10.30	10.28	10.08	10.18	9.71	10.59	10.96
Delaware	8.07	8.10	7.68	8.05	8.10	8.05	8.86	8.56
District of Columbia	8.25	8.70	9.31	7.76	8.25	8.61	8.97	8.96
Florida	10.62	10.43	10.28	10.58	11.10	10.29	11.54	10.05
Georgia	2.29	6.13	7.24	2.44	2.38	2.12	6.74	2.41
Hawaii	18.44	20.11	23.02	18.15	18.34	18.79	19.33	18.88
Idaho	5.08	5.10	4.85	5.10	5.13	5.03	5.34	5.16
Illinois	4.55	4.89	6.03	4.63	4.62	^R 4.46	5.46	4.77
Indiana	NA	6.15	6.04	NA	NA	^R 5.36	NA	NA
Iowa	5.00	5.12	5.62	5.26	5.07	4.79	5.91	4.91
Kansas	NA	5.78	6.29	NA	NA	NA	6.08	5.60
Kentucky	5.06	5.41	5.93	4.82	5.27	5.08	5.94	5.24
Louisiana	5.75	5.71	6.90	5.98	5.86	5.56	NA	7.00
Maine	7.22	7.90	8.45	7.38	7.34	7.00	7.93	7.59
Maryland	NA	7.42	7.98	NA	NA	^R 7.37	NA	8.13
Massachusetts	NA	9.27	9.50	NA	^R 9.19	^R 9.39	NA	NA
Michigan	4.74	4.82	4.99	4.78	4.76	4.68	5.12	4.82
Minnesota	5.02	5.11	5.71	5.08	5.06	4.96	5.47	5.21
Mississippi	NA	NA	5.87	5.20	5.41	NA	NA	6.22
Missouri	5.63	5.94	6.41	5.41	5.70	5.71	6.56	6.19
Montana	4.85	4.94	4.51	4.94	4.93	4.75	NA	5.05
Nebraska	4.40	5.00	5.54	4.47	4.38	4.37	5.19	4.63
Nevada	6.78	6.69	5.66	6.94	6.75	6.70	7.11	6.74
New Hampshire	7.73	8.38	9.23	8.23	7.60	7.44	NA	8.09
New Jersey	NA	7.34	7.69	NA	NA	NA	NA	NA
New Mexico	3.14	4.34	5.36	3.09	4.25	2.63	5.20	3.21
New York	NA	8.64	9.46	NA	NA	NA	NA	NA
North Carolina	7.33	8.04	8.93	6.20	8.40	7.56	8.71	9.48
North Dakota	4.67	4.65	4.37	4.76	4.67	4.62	5.19	5.04
Ohio	5.74	6.00	6.70	5.63	5.69	5.87	NA	6.08
Oklahoma	4.97	5.57	5.90	5.33	5.48	4.45	6.10	5.66
Oregon	6.78	NA	5.93	6.91	6.79	6.68	NA	6.72
Pennsylvania	7.86	8.54	7.91	7.82	7.86	7.88	NA	7.89
Rhode Island	8.82	8.90	9.10	8.88	8.90	8.71	NA	9.39
South Carolina	8.34	8.17	8.56	7.81	9.14	8.25	8.50	9.16
South Dakota	4.98	5.12	5.20	5.00	5.09	4.89	5.59	4.99
Tennessee	6.09	NA	6.84	6.37	6.05	5.97	NA	6.30
Texas	5.09	5.73	5.98	5.18	5.20	4.97	6.31	5.52
Utah	5.46	5.70	4.99	5.59	5.33	5.51	5.61	5.66
Vermont	6.54	6.24	6.05	6.68	6.29	6.64	6.54	6.38
Virginia	7.79	7.98	8.09	7.34	7.98	8.01	8.66	8.18
Washington	NA	NA	5.44	NA	NA	NA	NA	NA
West Virginia	NA	6.81	6.76	NA	6.96	6.89	NA	7.13
Wisconsin	6.12	6.07	6.52	6.05	6.28	6.07	6.08	5.97
Wyoming	5.05	NA	3.83	5.18	5.03	4.98	NA	5.10
Total	6.09	6.38	6.70	6.02	^R6.25	^R6.03	6.82	6.36

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	November	October	September	August	July	June	May	April
Alabama	9.94	10.92	10.71	10.78	11.13	10.91	8.99	7.73
Alaska	3.70	3.74	3.01	3.75	4.71	4.02	3.83	3.66
Arizona	9.91	12.07	13.01	13.19	12.24	11.02	9.58	8.14
Arkansas	6.79	8.13	8.81	8.99	9.03	8.72	5.83	6.86
California	6.80	6.88	7.01	7.21	7.07	7.32	7.01	6.80
Colorado	5.18	5.75	8.36	7.44	NA	NA	5.24	4.74
Connecticut	10.51	11.13	11.73	11.80	11.62	11.11	11.57	9.78
Delaware	9.38	11.62	12.78	12.61	11.67	10.99	9.44	8.51
District of Columbia	9.29	10.65	11.22	8.59	8.87	8.50	9.70	8.86
Florida	12.19	14.12	13.56	13.59	13.79	13.30	13.08	11.34
Georgia	3.43	7.99	15.53	15.94	16.76	11.73	13.50	7.09
Hawaii	19.41	19.27	19.41	18.31	18.60	18.75	19.37	19.21
Idaho	5.43	5.80	6.55	6.71	6.26	5.86	5.59	5.38
Illinois	5.01	5.97	8.06	8.16	8.69	8.09	7.94	5.79
Indiana	5.77	6.67	NA	NA	NA	9.95	8.81	NA
Iowa	5.69	7.32	10.97	10.78	11.56	8.41	7.80	6.36
Kansas	5.98	7.54	8.07	7.98	7.88	7.49	6.41	5.92
Kentucky	5.67	7.83	9.19	9.75	7.87	8.15	7.15	6.56
Louisiana	7.93	NA	8.91	8.84	8.85	8.36	8.95	6.46
Maine	7.40	7.61	8.88	9.13	9.11	8.33	8.66	7.90
Maryland	7.86	NA	NA	11.52	12.03	10.82	9.82	8.36
Massachusetts	NA	9.55	NA	11.36	10.45	NA	NA	9.64
Michigan	4.80	5.38	6.96	7.35	7.12	6.23	5.85	5.11
Minnesota	5.30	6.01	7.04	7.32	7.57	7.15	6.45	5.60
Mississippi	4.33	7.48	7.55	7.59	7.60	7.32	6.44	5.88
Missouri	6.62	8.84	9.86	10.94	9.76	8.84	7.40	6.14
Montana	5.27	5.90	7.04	6.89	6.70	6.44	NA	5.15
Nebraska	4.77	5.74	6.91	7.12	6.87	6.42	5.99	5.09
Nevada	7.14	8.00	9.25	9.27	8.69	7.74	7.30	6.90
New Hampshire	8.27	7.39	9.03	NA	9.15	8.20	7.07	6.50
New Jersey	NA	9.33	NA	9.93	9.63	9.32	6.80	7.71
New Mexico	4.22	7.96	10.19	10.57	10.89	31.23	9.69	6.26
New York	NA	NA	NA	13.55	7.01	NA	NA	9.26
North Carolina	8.33	11.73	12.56	13.29	12.05	11.81	9.29	7.91
North Dakota	5.08	5.69	7.69	9.87	7.09	7.03	5.96	5.12
Ohio	6.15	7.82	9.30	9.89	NA	7.35	6.56	6.22
Oklahoma	6.31	8.64	9.50	9.33	8.91	8.37	6.84	5.56
Oregon	6.88	7.62	8.78	9.04	8.33	7.48	7.19	NA
Pennsylvania	8.18	9.23	NA	NA	11.22	10.51	9.02	NA
Rhode Island	9.79	10.78	12.15	12.14	11.94	10.94	9.67	NA
South Carolina	8.96	9.57	10.10	10.32	10.18	9.76	8.44	7.88
South Dakota	5.35	6.34	8.38	8.63	8.90	6.54	6.88	5.88
Tennessee	6.62	8.09	8.51	9.03	8.68	8.15	6.95	6.42
Texas	6.58	8.16	8.79	8.97	8.86	7.94	7.31	6.29
Utah	5.77	4.78	6.13	7.01	6.70	5.39	5.72	4.85
Vermont	6.64	7.46	5.12	8.77	8.91	8.08	7.28	6.45
Virginia	8.52	10.97	12.22	12.28	12.22	11.73	10.14	8.28
Washington	NA							
West Virginia	NA	7.64	NA	NA	NA	NA	NA	7.55
Wisconsin	6.06	5.42	6.49	6.66	7.16	6.50	6.29	6.02
Wyoming	NA	5.26	5.20	7.30	NA	5.99	5.79	5.25
Total	6.60	7.55	8.94	9.19	8.62	8.41	7.59	6.78

See footnotes at end of table.

Table 21. Average Price of Natural Gas Delivered to Residential Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998			1997				
	March	February	January	Total	December	November	October	September
Alabama	7.00	7.10	7.41	8.35	7.28	7.95	11.05	11.56
Alaska	3.71	3.65	3.56	3.77	3.62	3.69	3.75	3.94
Arizona	7.39	7.40	7.23	7.83	7.61	9.20	11.36	9.13
Arkansas	6.41	6.50	^R 6.46	6.67	6.26	6.43	8.70	9.57
California	6.78	6.49	7.28	6.81	7.20	7.48	7.80	7.42
Colorado	4.49	4.57	4.50	4.81	4.73	5.18	5.96	7.16
Connecticut	10.18	10.33	10.36	10.33	10.15	10.30	10.27	11.45
Delaware	8.15	8.08	8.07	8.36	8.04	8.69	10.74	11.79
District of Columbia	8.62	8.44	9.01	9.39	8.97	11.01	11.27	11.34
Florida	10.51	10.47	10.33	11.90	11.78	13.01	13.85	14.01
Georgia	5.78	6.15	6.40	7.41	6.05	5.91	8.08	10.62
Hawaii	19.87	20.46	19.99	21.74	20.43	20.87	21.07	21.36
Idaho	5.18	5.14	5.01	5.12	4.98	5.28	5.66	6.37
Illinois	4.90	4.91	4.88	5.95	5.38	5.65	6.05	8.01
Indiana	6.13	6.22	6.12	6.37	5.51	5.85	6.65	8.81
Iowa	4.79	4.97	5.49	6.17	6.02	6.41	7.69	11.05
Kansas	5.76	5.77	5.81	6.42	5.92	6.42	7.68	8.49
Kentucky	5.25	5.47	5.48	6.37	6.39	6.09	7.41	7.82
Louisiana	5.28	5.60	6.10	7.16	6.34	7.88	9.43	8.96
Maine	7.90	7.90	7.90	8.47	8.36	8.21	7.80	9.46
Maryland	7.53	7.36	7.38	8.36	7.38	8.71	9.91	10.72
Massachusetts	9.37	9.26	9.19	9.43	9.94	9.70	8.51	10.00
Michigan	4.69	4.92	4.85	5.20	4.98	5.13	5.80	6.88
Minnesota	5.18	5.11	5.07	5.76	5.09	6.04	6.67	8.31
Mississippi	NA	5.39	NA	6.35	5.74	6.79	8.40	8.06
Missouri	5.58	5.86	6.30	6.61	6.46	6.70	8.86	9.63
Montana	4.97	5.03	4.87	5.05	5.31	5.39	5.81	6.70
Nebraska	4.74	4.93	5.28	5.69	6.01	6.01	7.31	7.67
Nevada	6.80	6.79	6.53	6.27	6.18	6.72	7.64	7.92
New Hampshire	8.50	8.38	8.30	8.48	8.46	8.87	7.47	8.93
New Jersey	7.39	7.23	7.41	7.93	7.62	7.77	8.53	9.91
New Mexico	4.55	5.23	3.72	5.87	3.68	4.56	8.48	11.05
New York	8.54	8.62	8.75	9.73	9.34	9.93	11.38	12.59
North Carolina	7.77	7.93	8.33	8.98	8.03	8.21	11.17	13.08
North Dakota	4.79	4.68	4.52	4.99	5.67	5.81	6.50	7.36
Ohio	5.97	5.75	6.25	6.75	6.20	6.31	7.40	8.29
Oklahoma	5.43	5.73	5.56	6.23	5.44	6.06	8.77	9.11
Oregon	NA	6.44	6.09	6.21	6.01	6.28	6.59	7.34
Pennsylvania	8.05	8.03	9.60	8.33	7.75	7.87	8.98	10.93
Rhode Island	9.03	8.86	8.83	9.61	8.97	9.74	10.64	12.10
South Carolina	8.02	8.27	8.17	8.37	7.77	7.79	9.28	9.88
South Dakota	5.31	5.07	5.01	5.75	5.94	6.16	7.07	9.10
Tennessee	5.96	6.31	NA	6.91	6.66	6.68	8.26	8.74
Texas	5.14	6.58	5.42	6.32	5.59	6.40	8.00	8.55
Utah	5.51	5.73	5.83	5.13	5.29	5.70	4.65	5.59
Vermont	6.30	6.23	6.19	6.41	6.21	6.43	7.06	8.41
Virginia	7.75	8.05	8.11	8.60	7.90	8.80	10.85	12.04
Washington	NA	NA	NA	5.64	5.68	5.75	5.83	5.86
West Virginia	6.85	6.78	6.81	6.81	5.87	6.63	6.02	8.96
Wisconsin	6.28	5.98	5.96	6.43	6.28	7.13	5.98	6.82
Wyoming	5.13	5.14	NA	4.58	6.16	5.26	5.54	6.29
Total	6.27	6.40	^R 6.45	6.94	6.54	6.86	7.69	8.84

^R Revised Data.

^{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, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999			1998	
				March	February	January	Total	December
Alabama	6.44	6.48	6.96	6.10	6.93	6.33	6.65	7.18
Alaska	2.39	2.45	2.56	2.34	2.38	2.44	2.41	2.45
Arizona	6.15	5.58	5.11	6.12	6.18	6.15	5.95	6.25
Arkansas	4.90	5.13	5.17	4.85	5.27	4.70	NA	5.27
California	5.75	6.81	6.92	5.17	6.28	5.82	6.26	6.28
Colorado	4.14	4.10	3.76	4.14	4.12	4.16	NA	4.08
Connecticut	6.85	7.48	7.96	6.93	7.03	6.63	6.85	7.54
Delaware	6.66	6.72	6.37	6.69	6.59	6.68	7.07	6.93
District of Columbia	7.18	7.49	7.95	6.92	7.06	7.53	7.37	7.43
Florida	6.12	6.75	6.69	6.22	6.38	5.79	6.59	6.39
Georgia	2.86	5.86	6.79	2.17	2.35	^R 3.78	5.93	2.75
Hawaii	12.48	14.15	15.00	12.09	12.49	12.86	13.18	12.83
Idaho	4.51	4.42	4.33	4.49	4.59	4.46	4.62	4.58
Illinois	4.47	4.60	5.58	4.46	4.48	4.47	^R 4.97	4.68
Indiana	NA	5.63	5.34	NA	^R 4.52	^R 4.39	NA	NA
Iowa	4.17	4.21	4.99	4.11	4.30	4.12	4.56	3.95
Kansas	NA	4.81	5.68	NA	NA	NA	5.14	5.24
Kentucky	4.82	5.46	5.70	4.39	4.92	5.09	5.41	5.06
Louisiana	5.27	5.32	6.58	5.29	5.22	5.29	5.63	6.06
Maine	6.68	7.41	7.97	6.81	6.79	6.48	NA	6.96
Maryland	NA	6.23	6.69	NA	NA	6.94	6.63	7.03
Massachusetts	NA	7.52	8.19	NA	NA	^R 8.08	NA	NA
Michigan	4.67	4.71	4.92	4.69	4.68	4.65	4.84	4.72
Minnesota	4.27	4.45	5.09	4.20	4.25	4.33	4.40	4.38
Mississippi	NA	4.71	5.36	4.53	4.23	NA	4.47	4.69
Missouri	5.37	5.69	6.23	5.06	5.43	5.55	5.66	5.60
Montana	4.86	4.90	4.61	4.90	4.91	4.80	NA	5.05
Nebraska	4.05	5.03	5.27	3.98	4.00	4.14	^R 4.53	4.01
Nevada	5.88	5.69	4.89	5.89	5.92	5.85	5.94	5.88
New Hampshire	7.00	7.60	8.61	6.97	7.15	6.89	NA	7.38
New Jersey	NA	4.27	6.99	NA	NA	NA	NA	NA
New Mexico	2.99	3.93	4.12	3.53	3.40	2.45	3.95	3.05
New York	NA	NA	7.56	NA	NA	NA	NA	NA
North Carolina	6.18	6.77	7.65	5.87	6.44	6.25	6.62	7.15
North Dakota	4.12	4.10	4.02	4.09	4.04	4.19	4.33	4.29
Ohio	5.45	5.68	6.35	5.26	5.33	5.67	NA	5.73
Oklahoma	4.86	5.46	5.71	5.09	5.23	4.49	5.23	4.23
Oregon	5.56	NA	4.55	5.63	5.56	5.51	NA	6.01
Pennsylvania	7.20	7.27	7.31	7.03	7.25	7.30	NA	6.75
Rhode Island	7.74	7.80	8.08	7.73	7.75	7.74	NA	8.02
South Carolina	6.69	6.81	7.56	6.40	6.94	6.75	6.45	6.73
South Dakota	3.99	4.19	4.34	3.90	4.16	3.92	4.42	3.97
Tennessee	5.73	NA	6.27	5.68	5.72	5.77	NA	5.94
Texas	4.25	4.80	5.20	3.96	4.28	4.44	4.52	4.43
Utah	4.19	4.43	3.79	4.25	4.14	4.20	4.35	4.54
Vermont	5.26	5.18	5.20	5.49	5.23	5.12	5.08	4.72
Virginia	5.88	6.20	6.53	5.67	6.04	5.90	6.08	6.14
Washington	NA	NA	4.66	NA	NA	NA	NA	NA
West Virginia	6.24	6.30	6.06	6.19	6.23	6.30	NA	6.18
Wisconsin	4.95	5.11	5.60	4.78	4.90	5.09	4.89	4.94
Wyoming	4.51	NA	3.46	4.51	4.47	4.55	NA	2.76
Total	5.11	5.52	6.04	5.03	5.18	5.12	5.47	5.22

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	November	October	September	August	July	June	May	April
Alabama	7.53	7.06	6.92	6.96	7.25	7.24	6.18	6.00
Alaska	2.47	2.32	3.22	2.15	2.08	2.05	2.24	2.31
Arizona	6.38	6.45	5.78	6.30	6.25	6.19	6.14	5.79
Arkansas	5.16	4.90	5.02	4.99	5.29	NA	5.31	5.23
California	5.98	5.64	5.83	5.88	5.50	5.91	5.68	6.65
Colorado	3.83	4.01	4.44	4.16	NA	4.44	4.21	4.05
Connecticut	6.74	5.49	5.44	5.53	4.66	5.88	7.03	6.86
Delaware	6.93	8.05	8.72	8.40	8.14	7.81	7.33	6.85
District of Columbia	7.69	7.49	7.35	7.14	6.98	6.97	6.99	7.09
Florida	6.47	6.38	6.27	6.22	6.55	6.70	6.83	6.71
Georgia	3.34	4.90	9.08	8.96	9.40	7.59	7.99	5.53
Hawaii	13.04	13.00	12.68	12.61	12.36	12.60	13.20	13.32
Idaho	4.83	4.91	4.94	4.88	4.90	4.83	4.77	4.76
Illinois	4.84	5.20	^R 6.08	5.99	^R 8.15	5.72	6.81	5.21
Indiana	4.85	5.28	NA	6.92	NA	NA	6.35	5.74
Iowa	4.41	5.02	6.38	6.27	7.53	4.17	5.48	5.19
Kansas	5.84	5.45	5.64	4.42	5.45	5.65	5.63	6.08
Kentucky	5.05	5.58	5.69	5.69	6.14	5.57	5.33	5.67
Louisiana	6.19	^R 5.79	5.82	5.68	5.85	^R 5.58	6.10	5.49
Maine	NA	6.55	6.89	6.89	6.81	6.70	7.20	7.41
Maryland	6.07	7.74	7.27	7.40	7.88	7.02	7.35	7.06
Massachusetts	7.10	6.06	NA	6.45	6.22	6.55	6.86	7.65
Michigan	4.64	5.05	5.35	5.70	5.88	5.38	5.21	4.92
Minnesota	4.27	4.23	3.93	4.44	4.66	4.46	4.63	4.53
Mississippi	3.52	4.52	3.64	4.11	4.25	4.23	4.67	4.90
Missouri	5.50	6.17	5.71	6.04	5.93	5.65	5.52	5.37
Montana	5.24	5.73	6.23	5.86	6.06	5.47	NA	5.05
Nebraska	^R 3.97	3.72	3.52	3.73	3.91	3.91	4.25	4.42
Nevada	6.33	6.61	6.92	6.90	6.08	5.91	5.75	5.76
New Hampshire	NA	5.94	6.40	NA	6.59	NA	5.98	^R 6.18
New Jersey	NA	NA	NA	2.87	3.96	3.74	3.84	4.17
New Mexico	3.34	4.11	4.49	4.71	4.88	6.66	5.15	4.42
New York	NA	NA	NA	4.68	5.67	5.01	NA	6.20
North Carolina	6.89	6.23	6.26	6.28	6.45	6.16	6.18	6.09
North Dakota	4.31	4.39	4.73	7.28	4.72	4.86	4.54	4.16
Ohio	5.74	^R 6.97	7.19	7.81	NA	6.30	5.76	5.79
Oklahoma	6.24	5.34	5.39	5.34	5.39	5.24	4.97	4.57
Oregon	4.43	5.53	5.55	5.89	5.75	5.52	5.51	NA
Pennsylvania	6.63	7.33	7.92	NA	8.03	8.25	8.23	NA
Rhode Island	8.11	8.65	9.14	9.35	8.98	8.88	8.37	NA
South Carolina	6.58	5.73	5.89	5.91	5.94	6.00	5.98	6.40
South Dakota	4.24	4.84	5.65	5.60	6.23	4.33	5.07	4.69
Tennessee	5.97	6.65	5.79	6.24	5.98	5.95	5.83	5.68
Texas	4.40	4.33	4.33	4.19	4.30	4.12	4.44	4.75
Utah	4.69	4.00	4.43	4.81	4.37	3.93	3.93	3.76
Vermont	4.95	4.81	4.63	5.17	4.91	5.30	5.98	5.14
Virginia	6.19	6.44	6.06	6.21	5.76	6.14	5.44	5.63
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	6.12	6.21	6.22	6.55	^R 6.87	NA	7.34	6.60
Wisconsin	4.97	4.08	4.64	4.37	4.82	4.44	4.16	4.75
Wyoming	NA	4.70	4.69	5.84	NA	NA	4.77	4.62
Total	5.26	^R5.33	^R5.56	5.50	^R5.65	^R5.54	5.62	5.58

See footnotes at end of table.

Table 22. Average Price of Natural Gas Sold to Commercial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998			1997				
	March	February	January	Total	December	November	October	September
Alabama	6.27	6.47	6.65	6.98	6.56	6.77	7.40	7.53
Alaska	2.39	2.45	2.49	2.44	2.55	2.53	2.52	2.28
Arizona	5.50	5.59	5.65	5.31	5.55	5.82	5.82	5.81
Arkansas	5.04	5.19	5.14	5.23	5.13	5.47	5.77	5.56
California	7.06	6.75	6.69	6.41	6.99	7.04	6.65	5.84
Colorado	4.04	4.07	4.18	4.06	4.43	4.39	4.72	4.01
Connecticut	7.42	7.28	7.73	7.23	7.48	7.59	6.36	6.48
Delaware	6.75	6.72	6.70	6.70	6.60	6.88	7.46	7.15
District of Columbia	7.46	7.34	7.65	7.37	3.15	8.77	8.07	8.10
Florida	6.69	6.72	6.83	6.85	7.22	7.32	7.04	6.85
Georgia	5.51	5.86	6.16	6.43	5.73	5.53	6.22	6.49
Hawaii	13.66	14.41	14.35	15.77	13.87	59.38	14.59	14.46
Idaho	4.46	4.40	4.41	4.49	4.35	4.68	4.75	4.75
Illinois	4.70	4.25	4.76	5.43	5.21	5.26	5.79	6.22
Indiana	5.44	5.97	5.52	5.44	5.11	4.96	4.97	6.10
Iowa	3.72	4.08	4.71	5.18	5.16	5.46	5.91	7.37
Kansas	3.85	5.39	5.41	5.38	5.14	5.72	5.63	5.42
Kentucky	5.44	5.63	5.32	5.79	5.92	6.03	5.42	5.90
Louisiana	4.94	5.19	5.73	6.22	5.91	7.00	7.14	6.03
Maine	7.41	7.41	7.41	7.70	7.79	7.62	6.84	7.61
Maryland	6.16	6.08	6.43	6.52	5.61	7.12	7.19	6.90
Massachusetts	7.46	7.73	7.39	7.34	8.03	7.74	5.63	5.45
Michigan	4.58	4.76	4.77	5.00	4.87	5.03	5.49	6.07
Minnesota	4.41	4.42	4.50	4.80	4.34	5.20	5.11	5.20
Mississippi	4.69	4.35	5.11	5.26	5.23	5.75	5.77	4.93
Missouri	5.27	5.63	6.08	5.88	6.23	6.08	6.16	5.74
Montana	4.91	4.97	4.85	4.83	5.39	3.92	5.54	4.52
Nebraska	6.13	4.44	4.66	4.88	5.35	5.41	5.27	4.34
Nevada	5.69	5.76	5.63	5.08	5.32	5.42	5.43	5.18
New Hampshire	7.64	7.57	7.60	7.63	7.77	7.81	6.14	6.25
New Jersey	3.83	4.13	4.85	5.88	4.97	5.34	4.92	4.30
New Mexico	3.91	4.35	3.66	4.01	3.25	3.52	4.14	4.51
New York	NA	NA	NA	6.49	6.80	6.58	5.62	5.09
North Carolina	6.45	6.72	7.05	7.00	6.96	6.70	6.29	6.46
North Dakota	4.17	4.13	4.03	4.35	4.94	5.14	5.15	5.11
Ohio	5.62	5.43	5.96	6.23	5.86	5.97	6.14	6.45
Oklahoma	5.27	5.56	5.53	5.34	5.23	5.17	5.38	4.87
Oregon	NA	5.17	4.92	4.63	4.66	4.73	4.65	4.80
Pennsylvania	7.33	7.36	7.14	7.35	6.89	6.83	7.25	7.68
Rhode Island	7.88	7.78	7.75	8.21	7.98	8.02	8.00	8.77
South Carolina	6.55	6.91	6.92	6.74	7.31	7.22	6.52	3.49
South Dakota	4.37	4.10	4.12	4.71	5.06	5.22	5.50	6.51
Tennessee	5.55	6.37	NA	6.11	6.36	6.27	6.33	6.05
Texas	4.32	5.37	4.66	4.91	4.99	5.27	4.96	4.72
Utah	4.36	4.35	4.54	3.92	4.39	4.65	3.78	3.99
Vermont	5.10	5.23	5.21	5.18	5.15	4.99	4.91	5.01
Virginia	5.82	6.33	6.41	6.45	6.37	6.42	6.55	6.58
Washington	NA	NA	NA	4.73	4.78	4.81	4.87	4.90
West Virginia	6.32	6.31	6.28	6.34	6.18	6.24	6.76	7.54
Wisconsin	5.24	4.96	5.12	5.35	5.46	5.98	4.83	4.80
Wyoming	4.55	4.56	NA	3.93	5.52	4.62	5.08	4.55
Total	5.39	5.56	5.59	5.79	5.70	5.85	5.73	5.57

^R Revised Data.

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, 1997-1999

(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999			1998	
				March	February	January	Total	December
Alabama	3.20	3.13	4.10	3.05	3.34	3.24	^R 3.08	3.35
Alaska	1.18	1.51	1.56	1.17	1.18	1.20	NA	NA
Arizona	3.52	3.52	4.06	3.71	3.42	3.48	3.39	3.52
Arkansas	3.43	3.72	3.91	3.42	3.48	3.40	3.44	3.76
California	NA	4.31	5.05	3.09	NA	4.02	3.59	3.45
Colorado	2.22	2.64	4.25	2.16	2.32	2.20	NA	2.31
Connecticut	4.38	5.00	5.57	4.23	4.39	4.49	4.32	4.55
Delaware	4.06	4.03	4.95	4.00	3.93	4.33	4.13	3.71
District of Columbia	0.00	0.00	0.00	—	—	—	0.00	—
Florida	3.78	4.44	4.38	3.66	3.93	3.81	4.30	3.97
Georgia	2.74	5.39	4.95	2.76	2.83	2.63	4.75	2.61
Hawaii	0.00	0.00	0.00	—	—	—	0.00	—
Idaho ^a	3.19	3.09	2.76	3.14	3.23	3.19	3.09	3.08
Illinois	3.69	4.14	4.93	3.50	3.71	3.81	3.93	3.78
Indiana	NA	4.52	4.48	NA	NA	NA	NA	4.21
Iowa	3.38	1.48	4.19	3.33	3.52	3.32	2.15	3.28
Kansas	NA	3.72	3.78	NA	NA	NA	NA	NA
Kentucky	3.20	4.31	4.42	3.10	3.34	^R 3.17	3.78	3.74
Louisiana	1.98	2.72	3.22	1.88	1.95	^R 2.12	NA	1.20
Maine	5.53	6.21	7.04	5.76	6.05	5.20	NA	6.07
Maryland	NA	6.00	2.79	NA	NA	^R 6.18	5.31	5.31
Massachusetts	NA	6.75	7.36	NA	^R 6.88	^R 4.62	NA	NA
Michigan	3.78	3.88	3.94	3.76	3.66	3.92	3.99	3.96
Minnesota	2.78	3.11	3.66	2.67	2.81	2.86	2.85	3.01
Mississippi	NA	NA	3.83	2.99	3.11	NA	NA	3.30
Missouri	NA	4.78	5.43	4.00	NA	4.74	4.44	4.27
Montana	4.19	4.88	4.73	4.79	4.78	3.40	5.07	4.82
Nebraska	3.23	3.31	4.36	3.21	3.12	3.35	3.20	3.30
Nevada	4.49	5.98	7.40	4.45	4.50	4.50	4.74	4.59
New Hampshire	6.56	6.14	7.09	6.42	6.73	6.51	NA	4.95
New Jersey	NA	3.46	4.96	NA	NA	NA	NA	NA
New Mexico	NA	3.41	2.86	3.60	2.64	NA	3.15	1.54
New York	NA	NA	6.11	NA	NA	NA	NA	NA
North Carolina	3.68	4.52	5.33	3.79	3.60	3.63	3.95	4.12
North Dakota	2.55	3.15	3.08	2.47	2.53	2.66	2.88	3.14
Ohio	5.17	5.43	5.15	4.90	5.13	5.42	NA	5.76
Oklahoma	3.48	4.13	4.82	3.50	3.50	3.45	3.71	3.49
Oregon	1.71	NA	3.17	0.81	3.91	3.87	NA	4.25
Pennsylvania	4.50	4.65	5.01	4.42	4.45	4.60	4.27	4.26
Rhode Island	4.65	4.28	2.74	4.32	4.77	5.00	NA	3.85
South Carolina	3.02	3.53	4.16	2.93	3.15	3.00	3.24	3.25
South Dakota	3.10	3.31	4.13	3.03	3.12	3.13	3.27	3.10
Tennessee	3.59	NA	4.76	3.35	3.54	3.85	NA	3.88
Texas	2.01	2.52	3.18	1.91	2.02	2.10	NA	2.30
Utah	3.07	3.10	2.43	3.31	3.16	2.85	3.09	3.29
Vermont	2.80	3.01	3.18	2.72	2.75	3.00	2.80	2.61
Virginia	4.31	4.61	6.29	3.76	3.88	5.31	4.10	5.50
Washington	NA	NA	3.71	NA	NA	NA	NA	NA
West Virginia	NA	2.85	3.12	NA	2.82	2.68	NA	2.86
Wisconsin	3.84	4.11	4.36	3.73	3.82	3.92	3.92	4.01
Wyoming	NA	NA	3.51	3.87	NA	3.74	NA	3.87
Total	2.96	3.53	4.10	2.77	^R3.01	^R3.09	3.07	2.83

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	November	October	September	August	July	June	May	April
Alabama	R3.10	R3.06	R2.85	R2.95	R3.01	R2.98	R2.99	R3.26
Alaska	NA	NA	R1.21	NA	1.22	1.40	1.43	1.42
Arizona	3.37	3.11	3.22	3.20	3.36	3.51	3.44	3.45
Arkansas	3.32	3.24	3.04	3.09	3.47	3.28	3.28	3.39
California	3.48	2.77	3.46	3.28	3.48	3.38	2.88	3.97
Colorado	2.41	2.12	1.90	2.27	NA	NA	2.48	2.26
Connecticut	4.19	3.85	3.46	3.63	3.61	3.69	4.13	4.55
Delaware	3.85	3.75	4.39	5.12	4.32	4.35	4.32	4.63
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.18	4.47	4.05	4.02	4.37	4.20	4.46	4.58
Georgia	3.01	3.86	4.51	5.06	3.85	4.90	5.30	5.15
Hawaii	—	—	—	—	—	—	—	—
Idaho ^a	3.16	3.02	2.94	3.32	2.97	3.10	3.09	3.10
Illinois	3.61	3.32	3.71	4.38	3.10	4.49	4.18	4.02
Indiana	NA	NA	NA	NA	NA	4.53	4.51	4.77
Iowa	3.51	3.40	3.31	3.65	4.14	2.25	3.39	0.73
Kansas	NA	2.76	2.35	2.71	2.78	3.05	3.53	3.56
Kentucky	3.24	3.71	3.66	3.71	3.61	3.48	3.21	3.85
Louisiana	1.26	NA	1.85	1.98	2.30	2.43	2.62	2.19
Maine	NA	4.22	3.92	3.80	4.17	4.10	4.70	6.02
Maryland	4.76	4.21	5.86	4.57	8.24	5.60	4.54	5.10
Massachusetts	NA	4.34	NA	4.36	4.83	4.89	4.66	6.64
Michigan	3.60	4.29	4.67	5.21	4.77	4.32	4.01	3.81
Minnesota	2.82	2.67	2.18	2.51	2.84	2.58	3.03	3.06
Mississippi	2.84	3.02	3.24	NA	NA	NA	NA	NA
Missouri	4.46	4.16	4.13	4.15	3.72	4.56	4.25	4.30
Montana	5.31	5.54	11.14	7.57	6.88	3.72	5.89	5.22
Nebraska	3.28	2.86	2.56	2.72	3.20	3.34	3.34	3.35
Nevada	4.53	4.39	4.35	4.46	5.86	5.81	5.94	5.84
New Hampshire	NA	2.82	3.67	NA	3.58	3.38	3.90	3.77
New Jersey	NA	NA	NA	2.88	3.17	3.39	3.43	3.42
New Mexico	2.60	2.95	2.99	3.19	3.13	3.45	3.77	4.00
New York	NA	NA	NA	NA	NA	3.92	NA	4.49
North Carolina	3.90	3.63	3.55	3.62	3.60	3.57	3.68	3.63
North Dakota	2.64	2.51	2.11	2.53	2.85	2.60	3.15	3.10
Ohio	4.69	5.78	5.78	7.46	NA	5.05	4.98	5.21
Oklahoma	3.39	3.64	3.40	3.44	3.41	3.43	3.13	3.32
Oregon	3.50	3.96	3.57	3.74	3.80	3.77	3.75	NA
Pennsylvania	4.10	3.98	4.04	3.88	3.94	4.09	4.05	4.40
Rhode Island	3.68	3.93	3.08	2.98	3.59	3.58	NA	3.86
South Carolina	3.17	3.11	2.93	2.47	3.37	3.21	3.31	3.42
South Dakota	3.12	3.27	3.38	3.17	3.21	3.54	3.44	3.37
Tennessee	3.79	3.30	3.34	3.38	4.37	3.50	3.54	3.64
Texas	2.18	NA	1.87	2.15	2.53	2.24	2.44	2.49
Utah	3.24	3.03	3.08	3.36	3.20	2.78	2.90	2.95
Vermont	2.30	2.84	2.74	2.77	2.78	2.78	2.87	2.86
Virginia	4.62	4.00	3.16	3.33	3.61	3.44	3.01	3.45
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	NA	2.93	NA	NA	3.02	2.88	2.96	2.97
Wisconsin	4.17	3.40	3.13	3.56	3.76	3.44	3.69	4.20
Wyoming	3.79	3.79	3.80	NA	NA	3.82	4.19	4.12
Total	2.83	2.76	R2.65	2.73	R2.99	2.96	R3.09	3.22

See footnotes at end of table.

Table 23. Average Price of Natural Gas Sold to Industrial Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998			1997				
	March	February	January	Total	December	November	October	September
Alabama	^R 2.75	^R 3.34	^R 3.35	3.65	3.79	3.81	3.85	3.38
Alaska	1.45	1.52	1.56	1.54	1.56	1.55	1.54	1.57
Arizona	3.33	3.76	3.53	3.60	3.40	3.23	3.71	3.29
Arkansas	3.78	3.62	3.77	3.71	4.01	4.31	3.90	3.61
California	3.31	5.34	4.55	4.18	4.51	4.58	4.36	3.54
Colorado	2.62	2.58	2.69	3.66	3.79	4.91	4.07	3.31
Connecticut	4.74	5.13	5.12	4.73	5.10	4.94	4.33	4.06
Delaware	3.79	4.08	4.22	4.40	4.72	4.87	4.63	4.13
District of Columbia	—	—	—	—	—	—	—	—
Florida	4.40	4.29	4.59	4.41	4.70	4.96	4.78	4.56
Georgia	5.18	5.37	5.63	4.56	4.22	4.63	4.52	5.57
Hawaii	—	—	—	10.79	—	—	—	—
Idaho ^a	3.25	3.02	3.06	2.76	2.77	2.74	2.72	2.69
Illinois	4.08	4.12	4.22	3.97	4.17	4.80	3.77	3.23
Indiana	4.56	4.29	4.68	4.33	4.73	3.67	3.59	4.29
Iowa	0.64	2.42	3.43	4.11	4.55	4.53	4.41	3.89
Kansas	3.61	3.65	3.89	3.32	3.61	3.81	3.96	3.14
Kentucky	3.79	4.51	4.59	4.19	4.85	4.91	3.97	3.81
Louisiana	2.89	2.22	2.90	2.87	2.91	3.42	3.27	2.78
Maine	6.02	^R 6.62	6.02	5.55	7.19	5.88	4.68	4.65
Maryland	5.88	5.59	7.46	3.25	3.76	3.64	2.99	3.33
Massachusetts	6.77	6.70	6.79	5.78	6.72	6.34	4.34	4.03
Michigan	3.61	4.11	3.90	4.02	4.02	4.07	4.33	3.99
Minnesota	3.08	3.00	3.25	3.28	3.24	3.87	3.83	3.10
Mississippi	NA	3.22	NA	3.55	3.60	4.12	3.93	3.43
Missouri	4.27	4.69	5.30	4.78	5.48	4.23	4.51	4.03
Montana	5.02	4.85	4.82	4.79	4.85	4.80	4.91	4.90
Nebraska	3.34	3.27	3.30	3.85	4.08	4.44	4.28	3.59
Nevada	6.00	6.06	5.90	7.77	7.98	9.55	11.41	9.10
New Hampshire	^R 5.72	5.84	7.08	4.90	7.36	6.48	4.50	3.61
New Jersey	3.24	3.42	3.71	3.78	3.99	4.24	3.79	3.43
New Mexico	4.09	5.69	2.18	2.99	2.14	2.81	3.57	3.10
New York	15.18	NA	NA	5.05	5.56	5.29	4.69	3.47
North Carolina	4.19	4.41	4.95	4.66	5.03	4.98	4.07	4.24
North Dakota	3.22	3.01	3.22	3.05	3.24	3.64	3.84	3.16
Ohio	5.67	5.06	5.62	4.93	4.84	4.79	4.31	4.80
Oklahoma	4.12	4.18	4.10	4.18	4.39	4.50	4.22	3.59
Oregon	NA	3.73	3.67	3.03	3.32	3.10	2.86	2.78
Pennsylvania	4.57	4.55	4.80	4.61	4.62	4.32	4.36	4.13
Rhode Island	4.06	4.25	4.59	4.33	3.77	2.92	2.49	3.08
South Carolina	3.53	3.38	3.67	3.72	4.00	4.31	4.02	3.27
South Dakota	3.38	3.25	3.30	4.02	3.72	4.37	4.65	4.17
Tennessee	3.59	3.98	NA	4.18	4.81	4.72	4.47	3.95
Texas	2.49	2.44	2.66	2.82	2.76	3.54	3.33	2.69
Utah	3.05	3.19	3.06	2.55	3.02	2.90	2.73	2.54
Vermont	2.94	3.01	3.06	3.07	3.11	3.12	2.97	3.00
Virginia	4.08	4.99	4.81	4.68	5.20	4.73	3.92	4.32
Washington	NA	NA	NA	3.16	3.08	3.38	2.86	2.69
West Virginia	2.90	2.87	2.78	2.91	2.87	2.88	2.97	2.93
Wisconsin	4.17	4.48	3.79	4.13	4.53	5.05	4.23	3.62
Wyoming	NA	NA	3.29	3.49	3.65	3.66	3.42	3.42
Total	^R3.40	^R3.51	^R3.67	3.59	3.79	4.07	3.69	3.25

^R Revised Data.

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, 1997-1999
(Dollars per Thousand Cubic Feet)

State	YTD 1999	YTD 1998	YTD 1997	1999		1998		
				February	January	Total	December	November
Alabama	2.15	2.73	3.08	2.07	2.22	2.55	2.68	2.47
Alaska	1.69	1.86	1.68	1.70	1.68	1.80	1.72	1.74
Arizona	2.31	2.71	4.81	2.29	2.32	2.43	2.38	2.77
Arkansas	1.97	2.21	3.60	1.94	2.04	2.28	2.35	—
California	2.63	2.88	4.50	2.55	2.70	2.79	2.96	2.86
Colorado	2.55	2.81	3.59	2.24	3.26	2.91	3.33	3.15
Connecticut	2.11	2.73	3.20	2.02	2.11	2.42	1.90	2.45
Delaware	3.18	4.86	3.80	2.98	3.34	2.89	3.34	3.24
District of Columbia	0.00	0.00	0.00	—	—	0.00	—	—
Florida	2.44	2.36	3.07	2.86	2.08	2.27	1.39	2.30
Georgia	3.33	2.54	3.89	2.15	4.83	3.19	2.11	2.67
Hawaii	0.00	0.00	0.00	—	—	0.00	—	—
Idaho	0.00	0.00	0.00	—	—	0.00	—	—
Illinois	2.11	2.26	3.15	1.81	2.27	2.25	2.12	2.31
Indiana	2.94	3.21	4.41	2.78	2.99	2.88	3.36	2.86
Iowa	3.52	3.20	4.47	3.45	3.62	3.00	3.38	3.11
Kansas	2.11	2.73	3.86	1.96	2.24	2.13	2.21	2.25
Kentucky	2.59	3.53	4.36	2.99	2.51	3.11	2.90	3.11
Louisiana	2.11	2.55	3.67	2.08	2.13	2.38	2.16	2.32
Maine	0.00	0.00	0.00	—	—	0.00	—	—
Maryland	3.51	3.52	5.18	3.46	3.52	2.77	2.64	3.85
Massachusetts	2.31	3.08	4.04	2.13	2.43	2.78	2.26	2.44
Michigan	1.70	0.65	0.58	1.33	2.07	1.23	1.25	1.10
Minnesota	3.18	2.63	2.43	3.49	3.02	2.42	3.43	2.69
Mississippi	2.01	2.47	3.44	1.95	2.05	2.32	1.97	2.28
Missouri	2.35	2.70	5.11	2.29	2.34	2.23	2.31	2.32
Montana	2.31	6.28	5.38	5.20	2.04	3.65	1.48	1.37
Nebraska	2.55	3.36	3.21	2.79	2.28	2.38	2.92	2.81
Nevada	2.29	2.39	2.23	2.40	2.20	2.37	2.01	2.61
New Hampshire	0.00	0.00	0.00	—	—	0.00	—	—
New Jersey	2.90	2.91	4.04	2.76	2.95	2.74	2.44	3.11
New Mexico	1.92	2.37	3.47	1.89	2.03	2.22	2.14	2.34
New York	2.67	2.98	3.63	2.55	2.80	2.56	2.43	2.80
North Carolina	3.34	3.02	6.89	3.33	3.34	2.73	3.93	3.59
North Dakota	0.00	0.00	0.00	—	—	0.00	—	—
Ohio	3.59	3.25	4.30	3.32	3.88	3.51	3.88	4.36
Oklahoma	2.39	3.69	4.28	2.48	2.32	2.47	2.28	2.50
Oregon	1.94	1.09	1.96	1.83	2.01	1.55	1.92	1.88
Pennsylvania	2.95	2.71	3.73	2.98	2.94	3.30	4.88	6.91
Rhode Island	0.00	3.39	3.63	—	—	3.38	—	—
South Carolina	2.92	3.92	6.20	2.86	3.00	3.60	4.05	3.71
South Dakota	0.00	0.00	0.00	—	—	1.77	—	—
Tennessee	0.00	0.00	0.00	—	—	0.00	—	—
Texas	2.10	2.45	3.39	2.09	2.10	2.30	2.24	2.25
Utah	2.22	0.00	0.00	2.19	2.24	2.11	2.45	2.42
Vermont	2.52	2.92	4.19	2.47	2.55	2.90	2.87	2.84
Virginia	3.15	3.31	2.87	3.12	3.18	3.04	4.03	3.72
Washington	0.00	1.67	4.93	—	—	2.79	—	—
West Virginia	3.07	5.59	6.10	2.93	3.19	3.53	3.02	3.25
Wisconsin	2.72	2.90	3.94	2.79	2.64	2.68	2.73	2.63
Wyoming	5.65	8.60	8.78	4.83	6.92	8.61	11.18	14.27
Total	2.26	2.58	3.51	2.27	2.26	2.37	2.22	2.37

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers, by State, 1997-1999
(Dollars per Thousand Cubic Feet) — Continued

State	1998							
	October	September	August	July	June	May	April	March
Alabama	2.62	2.46	2.50	2.63	2.49	2.62	2.69	2.55
Alaska	1.72	1.73	1.76	1.80	1.87	1.84	1.84	1.85
Arizona	2.11	2.33	2.28	2.41	2.79	3.20	2.82	3.07
Arkansas	2.25	2.15	2.05	2.49	2.33	2.33	2.56	2.36
California	2.56	2.50	2.83	2.92	2.70	2.94	2.71	2.85
Colorado	2.71	2.82	3.31	2.77	2.83	2.56	2.53	2.61
Connecticut	2.07	2.22	2.34	2.46	2.38	2.56	2.70	2.79
Delaware	2.66	2.41	2.66	3.47	3.27	1.34	1.41	4.15
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.30	2.18	2.18	2.27	2.31	2.31	2.68	2.64
Georgia	3.80	4.00	2.82	3.18	2.91	3.72	1.94	1.72
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.20	2.01	1.95	2.27	2.37	2.37	2.55	2.34
Indiana	3.23	2.74	2.58	2.80	2.95	2.98	3.37	3.25
Iowa	2.93	2.91	2.80	3.01	2.86	3.16	3.14	3.35
Kansas	2.03	1.87	1.99	2.28	2.14	2.20	2.40	2.36
Kentucky	2.85	2.42	2.43	2.86	3.68	3.59	5.25	4.04
Louisiana	2.25	2.12	2.17	2.59	2.40	2.52	2.66	2.51
Maine	—	—	—	—	—	—	—	—
Maryland	3.13	2.53	2.49	2.84	2.93	2.96	3.33	3.18
Massachusetts	2.28	2.13	2.35	2.62	2.24	2.86	3.66	3.64
Michigan	1.46	1.67	1.38	1.34	1.29	1.20	1.35	0.75
Minnesota	2.32	2.00	2.41	2.48	2.42	2.74	2.76	2.83
Mississippi	2.21	2.16	2.16	2.47	2.36	2.41	2.56	2.46
Missouri	2.14	2.13	1.95	2.39	2.41	2.31	2.56	2.52
Montana	1.30	1.02	4.99	2.47	2.59	5.34	1.40	12.33
Nebraska	2.10	1.93	2.49	2.62	2.37	2.40	1.98	2.72
Nevada	2.33	2.42	2.42	2.34	2.73	2.44	2.31	2.02
New Hampshire	—	—	—	—	—	—	—	—
New Jersey	2.74	2.56	2.46	2.92	2.73	2.77	3.05	2.88
New Mexico	2.02	1.90	2.03	2.32	2.20	2.33	2.41	2.39
New York	2.30	2.21	2.29	2.63	2.51	2.64	2.87	2.96
North Carolina	3.00	2.53	2.55	2.92	2.78	2.89	3.37	4.03
North Dakota	—	—	—	—	—	—	—	—
Ohio	3.88	4.09	3.93	2.98	2.79	3.06	4.01	4.14
Oklahoma	2.41	2.16	2.07	2.52	2.41	2.52	2.88	2.62
Oregon	1.63	1.48	1.56	1.46	1.31	1.50	1.36	1.23
Pennsylvania	2.50	3.74	2.63	3.18	2.32	5.37	5.94	2.69
Rhode Island	—	—	3.40	3.38	3.40	3.43	3.45	3.19
South Carolina	3.21	3.37	3.53	3.58	3.92	3.41	3.44	3.58
South Dakota	—	1.77	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.16	2.05	2.11	2.46	2.34	2.38	2.52	2.43
Utah	2.20	1.95	2.04	2.15	1.94	—	—	—
Vermont	2.86	2.54	2.67	3.09	2.81	3.03	3.08	2.81
Virginia	3.09	2.76	2.60	3.02	2.93	2.99	4.46	3.34
Washington	—	—	—	—	—	—	5.59	3.86
West Virginia	1.20	2.94	3.85	6.31	2.62	3.58	—	—
Wisconsin	2.42	2.31	2.49	2.80	2.64	2.95	3.13	2.75
Wyoming	5.33	6.64	67.70	8.23	7.66	11.70	4.77	10.42
Total	2.22	2.15	2.21	2.50	2.40	2.47	2.59	2.53

See footnotes at end of table.

Table 24. Average Price of Natural Gas Delivered to Electric Utility^a Consumers, by State, 1997-1999

(Dollars per Thousand Cubic Feet) — Continued

State	1998		1997					
	February	January	Total	December	November	October	September	August
Alabama	2.44	2.86	2.86	2.90	3.70	3.75	2.88	2.56
Alaska	1.88	1.85	1.74	1.84	1.84	1.85	1.88	1.69
Arizona	2.56	2.84	2.99	2.86	4.00	3.11	3.37	2.63
Arkansas	2.16	2.25	2.69	2.24	3.12	3.12	2.89	2.64
California	2.79	2.94	3.08	2.96	3.64	3.40	3.14	2.77
Colorado	2.65	3.01	3.16	2.93	3.90	2.37	2.42	2.77
Connecticut	2.63	2.74	2.47	2.74	3.38	2.76	2.37	2.35
Delaware	3.21	5.34	3.15	4.28	2.58	5.69	3.40	3.00
District of Columbia	—	—	—	—	—	—	—	—
Florida	2.49	2.25	2.51	2.52	3.29	3.21	3.03	2.50
Georgia	2.88	2.35	2.72	4.97	3.33	3.94	3.07	2.27
Hawaii	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—
Illinois	2.28	2.25	2.55	2.48	3.31	3.13	2.82	2.39
Indiana	2.64	3.84	3.23	3.67	4.03	5.25	3.67	3.39
Iowa	3.00	3.36	3.41	2.99	4.16	3.81	3.28	3.12
Kansas	1.97	3.35	2.53	3.33	3.02	3.06	2.70	2.13
Kentucky	3.58	3.46	3.45	3.47	4.24	4.00	3.25	2.92
Louisiana	2.47	2.61	2.79	2.86	3.61	3.40	3.03	2.60
Maine	—	—	—	—	—	—	—	—
Maryland	3.32	3.75	2.97	3.61	4.10	3.91	3.42	2.89
Massachusetts	2.95	3.16	3.11	3.57	4.08	4.10	3.21	2.87
Michigan	0.84	0.51	0.79	0.47	1.08	1.58	0.73	0.58
Minnesota	2.62	2.63	2.44	2.99	3.72	3.67	3.56	2.43
Mississippi	2.46	2.48	2.72	2.80	3.51	3.35	3.02	2.61
Missouri	2.82	2.63	2.81	2.77	3.52	3.35	2.94	2.51
Montana	8.49	4.61	NA	4.18	6.84	2.98	64.31	1.92
Nebraska	4.47	2.72	2.86	4.94	4.29	3.21	2.98	2.49
Nevada	2.37	2.41	2.18	2.16	2.80	2.64	2.39	2.02
New Hampshire	—	—	2.71	—	—	—	2.85	2.55
New Jersey	2.83	2.98	3.06	3.20	4.19	4.23	3.42	2.87
New Mexico	2.30	2.43	2.64	2.55	3.02	3.05	2.82	2.47
New York	2.95	3.00	2.88	3.38	3.83	3.37	2.89	2.60
North Carolina	—	3.02	3.22	3.60	4.95	3.68	3.38	3.09
North Dakota	—	—	3.43	—	—	—	—	—
Ohio	3.16	3.32	3.72	4.13	4.12	4.00	4.35	4.28
Oklahoma	2.72	4.47	2.97	2.89	4.05	3.46	3.20	2.49
Oregon	1.03	1.14	1.49	1.48	1.44	1.45	1.49	1.49
Pennsylvania	2.64	2.79	3.02	3.16	3.69	3.65	2.99	2.81
Rhode Island	3.24	3.48	3.35	3.78	4.05	4.02	3.32	3.04
South Carolina	3.53	4.05	4.07	4.46	4.00	4.10	4.54	4.54
South Dakota	—	—	—	—	—	—	—	—
Tennessee	—	—	—	—	—	—	—	—
Texas	2.41	2.49	2.69	2.74	3.33	3.15	2.85	2.50
Utah	—	—	2.09	—	—	2.00	2.66	1.79
Vermont	2.77	3.02	3.16	3.42	4.21	3.96	3.23	2.90
Virginia	3.78	3.05	2.93	2.54	4.09	4.73	3.77	2.95
Washington	4.11	1.64	NA	5.73	5.16	4.21	8.62	0.67
West Virginia	—	5.59	3.35	3.31	3.00	3.29	3.41	3.71
Wisconsin	2.91	2.90	3.17	2.92	4.11	3.94	3.09	2.85
Wyoming	8.72	5.39	NA	1.63	3.43	4.88	7.74	34.13
Total	2.51	2.64	2.74	2.77	3.41	3.24	2.96	2.53

^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, 1997-1999

State	YTD 1999		YTD 1998		YTD 1997		1999	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	March	
							Commercial	Industrial
Alabama	78.5	16.6	78.1	20.9	83.2	23.9	76.3	15.5
Alaska	57.1	99.9	59.3	100.0	59.1	97.9	57.5	99.9
Arizona	85.2	30.9	86.9	31.4	87.3	19.6	84.6	26.3
Arkansas	91.9	10.3	95.0	10.4	96.2	12.7	90.1	9.6
California	55.8	13.4	59.9	11.7	57.4	10.5	59.5	13.4
Colorado	95.7	5.8	95.5	7.0	94.8	17.5	96.7	0.4
Connecticut	68.9	60.1	76.1	58.4	89.2	73.0	67.4	58.6
Delaware	100.0	21.6	100.0	27.5	100.0	32.8	100.0	22.7
District of Columbia	54.8	—	59.7	—	63.6	—	53.8	—
Florida	91.1	3.6	96.3	4.1	97.4	11.9	90.3	4.2
Georgia	83.5	11.1	88.9	16.8	93.0	29.6	83.0	13.5
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	88.7	3.1	89.0	2.5	88.5	2.1	87.8	2.8
Illinois	46.9	10.0	53.2	10.4	58.4	13.5	47.7	9.1
Indiana	NA	NA	86.3	11.4	96.0	21.1	NA	NA
Iowa	86.3	8.3	82.4	12.9	90.4	9.1	87.3	7.5
Kansas	NA	NA	74.3	5.3	76.8	9.7	NA	NA
Kentucky	89.5	17.1	88.9	14.0	91.6	23.4	88.8	16.6
Louisiana	96.1	7.6	95.0	7.1	96.8	11.3	96.2	7.5
Maine	100.0	90.2	100.0	91.8	100.0	96.8	100.0	80.7
Maryland	NA	NA	47.4	7.4	81.4	15.5	NA	NA
Massachusetts	NA	NA	63.6	19.2	69.8	23.9	NA	NA
Michigan	65.2	13.6	66.5	9.6	69.3	13.6	63.3	16.2
Minnesota	96.5	36.9	93.6	43.5	99.0	42.5	96.5	39.3
Mississippi	NA	NA	93.4	NA	96.8	40.2	88.4	35.1
Missouri	82.9	27.3	84.6	23.1	83.3	24.4	83.3	24.6
Montana	81.0	2.9	85.3	4.2	92.9	4.0	78.1	2.4
Nebraska	63.0	25.2	78.5	26.0	83.2	30.2	67.6	23.8
Nevada	70.0	11.4	77.6	2.4	78.4	2.3	67.7	28.0
New Hampshire	95.1	22.6	96.3	34.6	95.0	49.0	94.5	19.6
New Jersey	NA	NA	61.3	47.9	66.9	47.8	NA	NA
New Mexico	60.0	NA	67.6	7.2	79.0	23.9	58.1	4.2
New York	NA	NA	NA	NA	72.0	10.3	NA	NA
North Carolina	72.2	42.8	92.6	27.2	96.6	57.6	55.1	44.4
North Dakota	88.9	14.7	87.1	17.2	92.9	29.1	89.7	13.7
Ohio	51.1	3.7	60.3	4.1	71.0	9.4	48.5	3.6
Oklahoma	80.8	5.3	80.8	5.6	87.5	7.4	79.2	5.0
Oregon	99.0	30.5	NA	NA	98.8	20.7	98.7	47.4
Pennsylvania	61.5	12.7	57.9	15.2	69.4	16.5	61.4	12.5
Rhode Island	60.4	9.3	66.9	14.1	87.8	16.6	60.4	50.1
South Carolina	90.2	83.7	98.2	85.4	98.8	84.9	78.0	83.3
South Dakota	85.2	49.9	86.0	43.2	86.3	29.7	84.3	47.4
Tennessee	86.6	23.7	NA	NA	94.5	40.9	83.9	22.5
Texas	76.0	14.2	67.2	14.3	68.9	19.0	78.2	16.3
Utah	85.0	10.4	85.5	8.3	85.7	8.9	82.8	8.3
Vermont	100.0	81.7	100.0	100.0	100.0	100.0	100.0	82.2
Virginia	70.4	16.1	74.9	17.4	84.3	11.1	65.8	15.2
Washington	NA	NA	NA	NA	91.9	27.7	NA	NA
West Virginia	52.8	NA	54.5	6.2	67.7	16.2	54.2	NA
Wisconsin	78.9	23.4	81.3	24.4	88.9	34.7	76.6	21.9
Wyoming	94.2	3.3	NA	NA	88.8	2.3	88.1	2.9
Total	69.7	15.9	71.8	15.7	77.3	20.0	68.8	16.6

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1999				1998			
	February		January		Total		December	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	77.4	16.1	81.0	18.4	69.4	^R 18.4	68.2	16.7
Alaska	53.8	99.9	59.8	99.9	57.2	NA	55.5	NA
Arizona	84.6	34.0	86.3	32.3	84.7	33.4	83.7	33.5
Arkansas	91.4	10.6	93.3	11.7	NA	^R 9.0	66.0	^R 8.8
California	52.6	14.4	55.7	11.8	43.1	10.8	43.6	12.0
Colorado	93.2	0.3	97.1	0.1	NA	NA	93.0	—
Connecticut	69.7	67.0	69.6	60.4	68.8	56.6	62.8	63.5
Delaware	100.0	24.0	100.0	18.1	100.0	21.8	100.0	24.4
District of Columbia	52.4	—	58.2	—	51.4	—	53.1	—
Florida	90.9	3.4	92.0	3.6	96.1	4.0	95.0	3.7
Georgia	81.6	9.7	85.4	10.1	81.9	12.5	77.6	10.7
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	88.8	3.1	89.4	3.6	86.1	2.6	85.8	3.6
Illinois	46.1	10.0	46.9	10.9	^R 46.5	8.5	44.0	11.4
Indiana	^R 79.3	NA	^R 79.9	NA	NA	NA	NA	8.7
Iowa	84.7	8.0	86.7	9.2	82.1	10.0	88.3	10.4
Kansas	NA	NA	NA	NA	67.6	NA	58.9	NA
Kentucky	89.2	18.0	90.3	^R 16.9	86.6	14.5	88.4	19.6
Louisiana	95.9	7.8	96.2	^R 7.5	^R 95.5	NA	^R 94.1	23.9
Maine	100.0	97.3	100.0	93.8	NA	NA	100.0	84.2
Maryland	NA	NA	39.3	^R 7.5	37.6	6.3	36.7	9.8
Massachusetts	NA	^R 32.3	^R 78.5	^R 28.3	NA	NA	NA	NA
Michigan	64.5	17.3	67.3	16.2	58.2	6.5	63.6	9.6
Minnesota	96.5	33.8	96.6	37.9	95.4	40.7	96.5	38.3
Mississippi	96.9	38.2	NA	NA	94.1	NA	95.8	34.8
Missouri	79.1	33.9	85.5	26.3	77.9	17.6	78.6	21.2
Montana	80.1	2.7	83.5	3.5	NA	2.6	79.9	2.4
Nebraska	63.5	28.7	59.8	23.5	^R 71.9	17.9	50.7	26.9
Nevada	69.2	30.9	72.6	31.4	71.1	5.5	70.9	35.4
New Hampshire	95.3	24.1	95.5	24.2	NA	NA	95.3	24.4
New Jersey	NA	NA	NA	NA	NA	NA	NA	NA
New Mexico	52.8	3.6	66.7	NA	62.5	12.6	75.9	4.1
New York	NA	NA	NA	NA	NA	NA	NA	NA
North Carolina	73.8	43.2	97.0	41.1	88.8	25.4	88.4	25.9
North Dakota	83.6	13.6	92.4	18.4	84.2	14.2	87.5	18.9
Ohio	47.1	3.6	57.0	4.1	NA	NA	49.3	3.1
Oklahoma	78.9	5.1	83.2	5.7	73.1	3.5	72.5	5.0
Oregon	99.0	16.0	99.1	16.9	NA	NA	99.1	14.8
Pennsylvania	56.4	11.1	66.5	14.6	NA	13.4	64.1	13.4
Rhode Island	61.5	30.8	59.4	24.4	NA	NA	53.7	38.3
South Carolina	97.8	83.0	97.6	84.8	97.6	86.8	96.7	86.7
South Dakota	84.1	50.0	86.6	51.8	84.1	34.0	84.6	46.2
Tennessee	84.8	23.3	89.7	25.4	NA	NA	85.2	26.0
Texas	81.3	13.0	71.0	13.8	60.3	14.1	61.7	12.8
Utah	85.7	10.8	85.8	12.2	82.5	8.9	85.2	10.0
Vermont	100.0	81.5	100.0	81.4	100.0	100.0	100.0	100.0
Virginia	68.2	13.6	76.4	20.7	70.8	12.5	74.2	14.8
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	54.8	10.1	49.9	5.5	NA	NA	50.9	7.1
Wisconsin	78.8	22.5	80.6	25.4	71.1	19.4	76.7	20.9
Wyoming	97.3	4.2	96.5	4.3	NA	NA	97.7	3.1
Total	68.3	^R 15.4	^R 71.5	^R 15.7	^R 64.6	14.8	^R 65.6	^R 16.8

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1998							
	November		October		September		August	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	66.0	^R 19.1	63.6	^R 17.6	69.1	^R 17.0	72.0	^R 15.6
Alaska	58.6	NA	56.1	100.0	54.9	^R 100.0	57.0	NA
Arizona	82.6	35.2	79.5	36.6	83.4	33.3	82.7	32.6
Arkansas	56.0	^R 10.0	45.5	^R 10.1	44.2	^R 9.4	46.1	^R 7.8
California	33.6	10.8	32.4	11.6	28.4	9.3	24.6	8.2
Colorado	94.9	0.1	85.2	0.2	85.8	—	91.3	1.1
Connecticut	76.2	58.2	61.4	54.1	55.3	59.6	58.1	51.5
Delaware	100.0	22.7	100.0	17.8	100.0	17.5	100.0	11.3
District of Columbia	49.8	—	37.5	—	36.5	—	35.4	—
Florida	94.6	3.3	95.1	3.2	96.5	3.9	96.3	6.1
Georgia	75.3	9.5	72.2	9.4	71.1	14.4	68.9	7.0
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	83.7	2.2	74.9	2.6	80.3	2.5	83.1	3.5
Illinois	44.1	9.1	40.5	8.2	^R 36.4	7.0	37.9	6.0
Indiana	75.5	NA	70.1	NA	NA	NA	60.2	NA
Iowa	82.9	10.1	76.2	7.2	76.8	6.4	79.7	5.2
Kansas	59.9	NA	58.5	5.4	55.4	10.9	59.9	11.2
Kentucky	87.0	17.2	82.3	13.0	81.6	12.0	78.9	11.6
Louisiana	^R 95.5	15.5	^R 95.5	NA	^R 95.4	8.8	^R 95.5	7.5
Maine	NA	NA	100.0	86.8	100.0	87.1	100.0	85.7
Maryland	54.1	8.7	25.6	8.3	23.1	3.5	22.7	7.2
Massachusetts	59.7	NA	47.6	26.5	NA	NA	51.3	18.1
Michigan	56.3	8.7	45.9	5.1	41.1	5.0	35.9	3.8
Minnesota	95.6	37.2	97.5	35.5	98.3	78.1	98.1	36.9
Mississippi	94.7	34.8	94.3	33.8	93.8	27.1	96.2	NA
Missouri	73.7	17.7	65.7	12.3	69.2	12.7	43.6	12.0
Montana	78.1	2.3	73.9	1.6	68.2	0.9	73.4	1.2
Nebraska	^R 66.0	20.9	80.1	15.9	75.1	40.8	81.5	10.4
Nevada	64.6	29.5	63.7	27.4	56.6	20.7	56.4	19.1
New Hampshire	NA	NA	93.1	21.5	91.9	21.5	NA	NA
New Jersey	NA	NA	NA	NA	NA	NA	50.0	33.4
New Mexico	66.6	11.0	52.4	7.9	45.9	12.9	45.9	15.1
New York	NA	NA	NA	NA	NA	NA	45.7	NA
North Carolina	85.2	27.1	80.3	21.1	82.3	18.0	83.8	21.3
North Dakota	86.5	19.3	81.1	21.5	68.6	13.4	67.7	8.3
Ohio	49.7	2.5	^R 55.4	1.5	41.7	1.2	35.3	0.8
Oklahoma	65.2	3.6	57.4	1.8	57.9	1.8	56.4	1.8
Oregon	99.0	15.6	98.4	12.2	98.7	12.0	98.7	12.2
Pennsylvania	61.0	13.5	54.4	11.4	57.4	12.1	NA	11.6
Rhode Island	53.4	41.9	49.2	34.6	49.3	33.7	100.0	34.2
South Carolina	96.4	86.6	96.4	87.5	96.7	88.3	96.8	88.1
South Dakota	84.4	45.0	95.7	33.9	73.5	20.8	74.8	17.1
Tennessee	81.5	25.0	68.2	14.9	66.7	19.9	63.0	21.3
Texas	64.0	13.5	47.7	15.1	57.7	15.8	54.4	14.7
Utah	82.2	10.9	80.2	10.2	77.6	9.2	71.6	8.7
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	69.6	15.7	61.6	8.7	57.6	8.5	50.8	13.2
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	38.6	NA	29.7	8.1	28.9	NA	25.6	NA
Wisconsin	69.9	20.5	67.7	16.5	40.0	15.5	48.0	12.8
Wyoming	NA	2.2	82.5	2.0	83.8	2.5	91.8	NA
Total	62.1	^R15.5	^R55.3	^R14.2	^R52.8	14.4	^R49.7	13.5

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1998							
	July		June		May		April	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	71.8	^R 17.6	74.7	^R 17.9	35.4	^R 17.5	80.2	^R 18.6
Alaska	56.0	96.5	53.6	100.0	55.9	100.0	57.4	100.0
Arizona	84.1	32.8	86.2	33.8	83.3	35.8	84.9	32.7
Arkansas	48.8	^R 7.0	NA	^R 8.1	88.7	9.0	89.5	9.1
California	31.4	9.5	52.9	11.2	48.3	11.7	52.7	10.9
Colorado	NA	NA	91.8	NA	95.0	1.0	95.8	0.8
Connecticut	62.4	57.1	61.2	52.9	76.3	55.7	62.3	61.9
Delaware	100.0	17.8	100.0	19.3	100.0	19.5	100.0	23.3
District of Columbia	40.4	—	41.9	—	47.7	—	52.5	—
Florida	96.0	4.2	96.6	4.3	96.7	3.5	96.8	4.5
Georgia	68.9	5.1	79.0	15.1	82.0	15.7	85.5	13.4
Hawaii	100.0	—	100.0	—	100.0	—	100.0	—
Idaho	83.9	2.7	85.3	1.8	85.4	2.2	86.4	2.2
Illinois	^R 27.0	4.9	45.8	5.2	34.8	6.8	44.3	9.1
Indiana	NA	NA	NA	4.2	76.7	6.2	87.9	11.4
Iowa	69.6	5.3	70.3	4.9	87.3	5.4	82.8	19.9
Kansas	58.8	13.5	54.2	10.8	67.5	7.7	69.5	5.6
Kentucky	76.4	15.2	82.6	13.8	84.2	14.7	85.7	14.7
Louisiana	^R 95.3	6.9	^R 96.2	7.0	96.5	7.3	98.1	7.2
Maine	100.0	84.1	100.0	87.9	100.0	84.1	100.0	97.9
Maryland	22.2	2.7	25.2	3.8	27.8	6.7	32.2	2.3
Massachusetts	48.4	16.8	46.3	NA	52.8	28.8	60.0	27.5
Michigan	38.1	4.4	40.8	4.8	42.2	5.9	58.3	9.6
Minnesota	97.2	34.8	98.2	41.1	98.5	35.1	96.1	38.9
Mississippi	94.3	NA	94.9	NA	93.6	NA	93.3	NA
Missouri	65.6	16.0	69.4	13.0	75.7	14.0	82.0	17.4
Montana	69.1	0.7	75.3	4.4	NA	1.2	79.4	2.2
Nebraska	65.6	5.7	66.3	13.5	74.0	14.8	71.5	21.3
Nevada	66.3	4.0	70.9	4.6	71.9	4.8	73.2	5.8
New Hampshire	89.1	34.9	NA	32.7	94.3	38.9	^R 95.5	47.0
New Jersey	47.4	25.6	51.5	27.7	46.0	26.4	55.2	29.2
New Mexico	46.7	17.9	39.7	13.9	48.8	10.0	57.3	6.5
New York	49.6	NA	47.4	6.9	NA	NA	58.1	10.1
North Carolina	83.3	26.4	82.5	24.3	86.7	26.9	90.6	31.2
North Dakota	80.8	11.0	82.1	10.4	79.2	6.1	80.0	12.3
Ohio	NA	NA	44.7	1.3	41.4	1.5	53.9	2.7
Oklahoma	55.4	2.1	63.6	2.2	70.4	2.9	75.0	4.9
Oregon	98.9	12.8	98.9	14.9	98.8	15.0	NA	NA
Pennsylvania	51.4	12.3	54.9	12.7	59.4	13.2	NA	13.3
Rhode Island	48.5	31.2	53.3	33.4	58.6	NA	NA	41.2
South Carolina	97.4	87.5	97.4	88.2	98.2	87.7	98.4	86.0
South Dakota	75.4	22.5	72.8	24.9	65.9	15.8	93.7	56.2
Tennessee	63.7	20.3	66.6	23.3	77.4	23.9	75.8	29.3
Texas	48.8	12.1	63.8	15.2	55.9	14.1	59.8	14.5
Utah	70.7	7.5	75.6	9.1	73.7	8.9	82.5	7.9
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	69.4	8.4	66.8	9.3	70.0	13.0	70.9	11.2
Washington	NA	NA	NA	NA	NA	NA	NA	NA
West Virginia	^R 15.5	^R 8.3	NA	8.2	29.0	8.5	50.3	5.8
Wisconsin	45.1	12.6	52.4	15.5	53.8	15.1	72.9	19.3
Wyoming	NA	NA	NA	2.3	89.8	1.8	92.1	3.4
Total	^R51.9	12.7	^R59.8	^R14.0	60.0	^R14.0	66.8	^R15.0

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1998						1997	
	March		February		January		Total	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	77.8	^R 21.4	80.1	^R 20.7	76.7	^R 20.7	64.7	24.6
Alaska	57.6	100.0	60.0	100.0	59.9	100.0	54.5	97.8
Arizona	86.7	34.0	87.2	27.7	86.9	32.3	84.6	25.1
Arkansas	93.9	10.2	95.3	10.9	95.5	10.5	94.2	10.5
California	71.1	16.5	54.3	8.7	58.1	11.0	50.7	8.9
Colorado	96.0	1.2	95.2	1.2	95.4	2.5	92.8	23.6
Connecticut	71.2	59.4	78.2	57.8	78.4	61.0	81.9	66.4
Delaware	100.0	27.9	100.0	28.6	100.0	26.4	100.0	31.0
District of Columbia	60.1	—	59.0	—	60.2	—	54.9	100.0
Florida	96.2	4.4	96.3	4.0	96.3	4.5	97.5	10.0
Georgia	87.5	17.2	90.3	16.7	88.7	16.5	89.1	26.7
Hawaii	100.0	—	100.0	—	100.0	—	100.0	100.0
Idaho	88.1	2.0	88.7	3.0	90.0	2.5	86.1	2.0
Illinois	55.3	10.6	50.4	9.8	53.7	10.7	54.3	11.5
Indiana	88.6	12.3	84.6	11.1	85.7	11.2	89.8	16.0
Iowa	72.1	22.8	88.7	7.1	87.4	7.4	88.2	8.6
Kansas	76.9	5.5	73.6	5.3	71.9	5.1	70.7	9.5
Kentucky	90.0	13.1	86.5	17.2	90.0	12.3	90.0	19.2
Louisiana	^R 96.0	9.8	^R 93.8	6.0	^R 95.2	5.4	95.9	10.1
Maine	100.0	^R 85.5	100.0	^R 91.4	100.0	97.9	100.0	91.4
Maryland	45.7	8.3	49.5	10.6	47.1	3.4	67.1	7.4
Massachusetts	65.5	29.0	61.4	32.5	64.3	30.3	62.6	20.2
Michigan	64.3	12.1	65.2	12.6	69.5	13.5	63.7	9.0
Minnesota	96.2	48.8	93.3	37.4	91.9	45.0	98.8	40.4
Mississippi	89.6	NA	94.8	38.5	95.3	NA	94.8	39.6
Missouri	83.3	21.5	85.4	24.0	85.2	23.7	79.9	21.8
Montana	83.1	3.5	83.1	4.3	88.3	4.7	91.4	3.1
Nebraska	77.3	24.0	78.0	23.2	79.9	30.1	74.2	27.0
Nevada	75.9	7.1	79.8	15.3	77.3	7.2	71.4	1.8
New Hampshire	96.1	^R 36.1	96.2	37.2	96.4	30.4	92.4	48.8
New Jersey	62.4	29.5	62.1	34.6	59.4	31.7	56.2	47.0
New Mexico	66.7	1.5	63.8	1.8	71.1	8.2	74.6	5.7
New York	NA	10.1	NA	NA	NA	NA	64.7	8.5
North Carolina	91.1	26.6	93.1	27.3	93.4	27.6	94.4	45.5
North Dakota	87.0	17.0	84.9	17.1	89.1	17.6	88.9	18.5
Ohio	60.1	3.2	60.2	4.7	60.5	4.5	65.6	5.7
Oklahoma	77.7	5.2	83.2	5.2	81.1	6.3	81.8	4.7
Oregon	NA	NA	99.2	15.3	99.3	19.7	98.5	16.3
Pennsylvania	57.7	14.2	57.2	15.2	58.7	16.3	63.6	14.2
Rhode Island	64.7	49.9	71.6	38.5	64.5	39.7	80.5	17.5
South Carolina	98.2	84.9	98.4	85.4	98.1	85.8	98.8	86.9
South Dakota	85.6	37.9	85.7	45.9	86.5	45.2	83.3	24.1
Tennessee	93.1	28.1	87.8	25.5	NA	NA	92.2	38.3
Texas	61.3	15.2	71.6	15.5	68.3	12.3	61.4	17.3
Utah	81.2	8.6	89.1	8.5	85.7	7.8	83.3	8.9
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	73.4	19.2	76.7	14.6	74.4	18.7	77.9	13.0
Washington	NA	NA	NA	NA	NA	NA	84.1	23.5
West Virginia	51.9	6.1	55.5	6.1	56.0	6.4	54.6	12.2
Wisconsin	77.6	23.4	80.3	23.8	85.4	26.0	82.1	27.1
Wyoming	87.4	NA	80.3	NA	NA	1.5	84.2	2.5
Total	^R 71.9	^R 16.7	^R 71.2	^R 15.4	^R 72.2	15.1	70.8	17.7

See footnotes at end of table.

Table 25. Percentage of Total Deliveries Represented by Onsystem Sales, by State, 1997-1999 — Continued

State	1997							
	December		November		October		September	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	80.9	27.9	69.1	26.4	51.0	24.5	40.8	24.3
Alaska	54.2	100.0	51.9	100.0	52.2	100.0	49.9	100.0
Arizona	85.2	33.0	83.2	31.2	81.1	30.2	83.9	29.5
Arkansas	95.9	10.4	90.4	11.2	92.6	9.7	91.3	8.3
California	52.9	9.3	49.4	7.4	41.9	6.1	41.0	8.6
Colorado	93.0	23.7	89.8	25.1	86.9	28.3	90.2	24.6
Connecticut	77.0	61.7	71.1	65.9	68.6	65.9	75.0	64.2
Delaware	100.0	28.1	100.0	28.0	100.0	29.9	100.0	27.7
District of Columbia	55.9	100.0	60.4	100.0	44.5	100.0	35.5	100.0
Florida	96.0	8.4	96.4	8.1	97.5	8.8	97.8	8.9
Georgia	91.6	32.7	88.6	27.6	85.6	30.8	82.9	15.5
Hawaii	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Idaho	86.6	2.0	83.2	1.8	76.4	1.5	82.5	1.7
Illinois	52.1	11.9	52.5	9.4	50.4	9.1	47.7	12.1
Indiana	94.1	15.4	96.0	22.6	93.9	16.1	87.2	10.3
Iowa	89.3	9.3	85.0	13.4	80.1	11.5	77.9	6.7
Kansas	73.3	7.5	66.0	9.9	73.6	9.9	57.3	10.9
Kentucky	91.3	17.6	89.9	18.7	89.9	19.5	84.9	16.3
Louisiana	96.5	7.9	95.1	9.3	94.7	9.9	94.3	9.0
Maine	100.0	88.7	100.0	91.4	100.0	88.4	100.0	86.7
Maryland	52.7	1.1	64.7	3.3	51.8	7.0	48.6	2.7
Massachusetts	68.5	19.2	62.9	21.0	48.7	16.8	43.8	16.6
Michigan	65.6	11.8	64.8	9.5	54.2	4.0	39.7	2.7
Minnesota	98.5	40.9	99.1	42.9	98.6	38.7	97.7	42.0
Mississippi	95.0	41.1	94.0	38.0	91.2	40.2	91.0	42.9
Missouri	82.6	23.3	78.3	23.8	68.6	19.7	68.3	22.6
Montana	92.8	3.7	90.5	2.8	88.1	2.3	85.7	1.9
Nebraska	77.2	25.6	72.3	41.2	50.0	22.2	63.2	26.5
Nevada	72.7	2.1	67.9	1.6	65.9	1.2	63.0	1.1
New Hampshire	93.9	32.4	89.1	34.2	85.7	44.2	87.2	49.6
New Jersey	52.0	49.0	48.2	48.3	47.0	42.8	47.2	43.6
New Mexico	81.5	7.8	78.0	6.8	67.0	4.6	63.3	7.0
New York	67.8	10.3	65.7	10.0	59.3	7.6	56.2	7.4
North Carolina	95.7	35.7	99.4	81.7	98.2	73.8	86.9	25.2
North Dakota	84.4	15.3	90.5	17.7	83.2	11.9	72.5	8.4
Ohio	67.1	7.3	67.3	6.1	55.1	2.7	50.5	2.2
Oklahoma	81.8	5.4	71.4	4.3	76.9	3.1	69.9	3.2
Oregon	98.4	16.0	98.4	14.5	97.5	14.1	98.0	12.1
Pennsylvania	63.9	15.3	63.8	14.8	50.1	12.6	57.8	12.1
Rhode Island	64.0	11.4	80.7	13.5	71.1	21.1	68.7	17.1
South Carolina	98.0	84.7	100.0	89.1	99.9	89.8	98.8	87.5
South Dakota	86.0	34.2	84.0	37.4	68.3	17.8	59.9	14.0
Tennessee	92.9	35.3	95.0	39.8	89.9	37.3	85.3	33.1
Texas	68.3	14.6	63.7	14.1	55.0	14.7	52.9	15.2
Utah	86.1	8.2	83.1	9.5	80.2	8.9	74.8	11.7
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	71.3	19.4	90.2	28.8	71.2	18.6	70.8	10.0
Washington	93.4	19.3	54.5	24.0	90.6	25.0	78.9	19.2
West Virginia	58.9	11.7	53.4	12.7	38.7	12.8	32.7	12.0
Wisconsin	83.1	26.6	85.9	27.6	69.3	24.3	62.9	21.3
Wyoming	96.2	2.7	88.2	1.8	87.9	2.7	87.2	3.1
Total	72.8	17.2	70.4	18.0	62.9	16.8	59.5	15.1

^R Revised Data.

^{NA} Not Available.

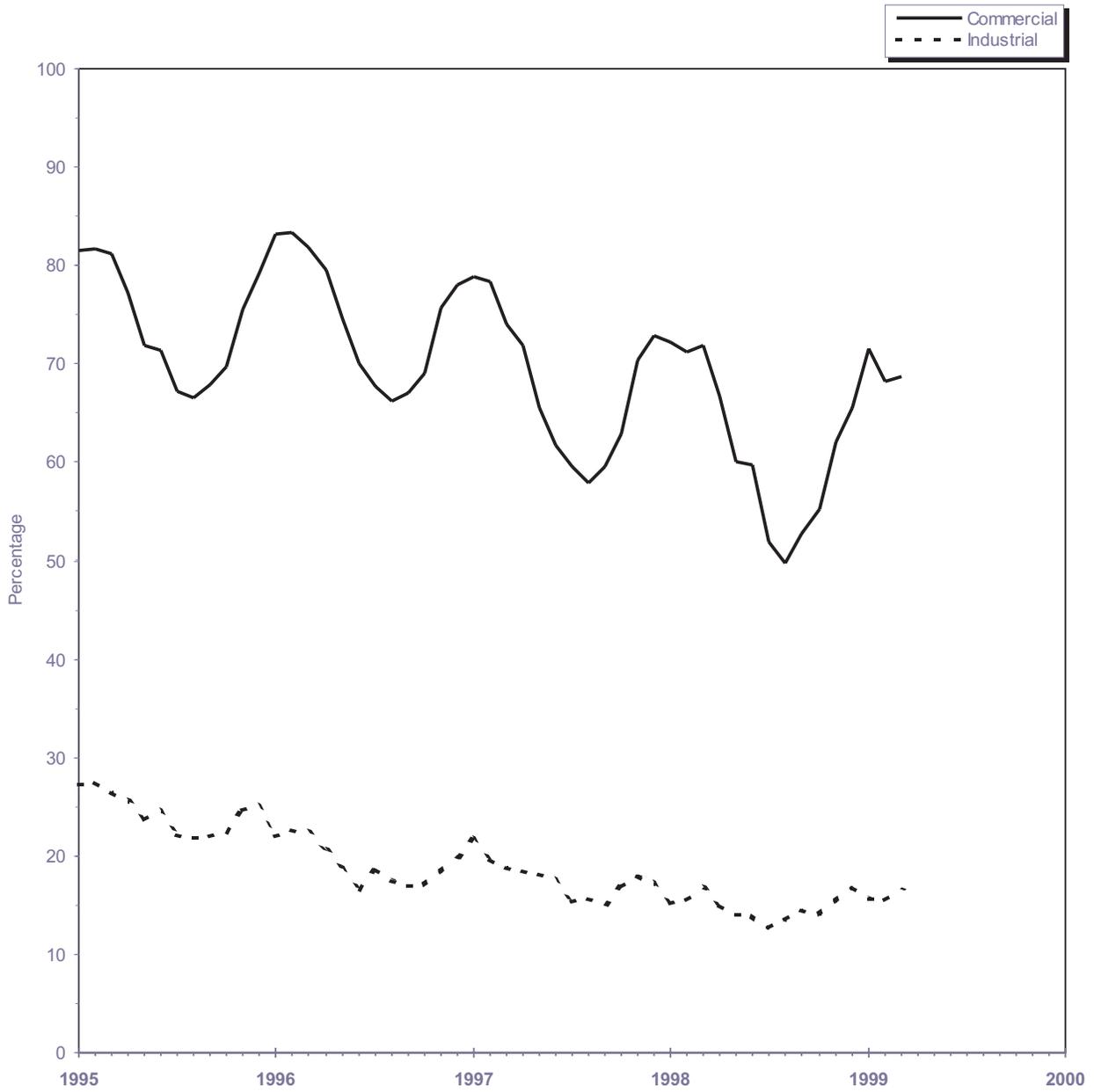
— Not Applicable.

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, 1995-1999



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."

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. De-

partment 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 Nat-

ural 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

Preliminary values for the monthly U.S. Natural gas wellhead price are estimated from the prevailing cash market prices at 5 major trading hubs: Henry Hub, LA; Carthage, TX; Katy, TX; Waha, TX; and Blanco, NM. These prices appear initially in the trade publication, *Natural Gas Week*, and they reflect the spot delivered-to-pipeline, volume-weighted average prices for natural gas bought and sold at the specified trading hubs. Prices include processing,

gathering, and transportation fees to the hubs. The estimated wellhead prices are derived with a statistical procedure based on analysis of monthly time series data for the period 1995 through 1997. The preliminary estimates are replaced when annual survey data become available. This procedure was adopted beginning with publication of the February 1999 issue of the *Natural Gas Monthly* and it affects price estimates from January 1998 to the present.

Final Monthly Data

The Form EIA-895 requests State agencies to report monthly values of marketed production. Preliminary monthly gas price data are replaced by these final monthly data.

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

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 published 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 State-wide 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 follow-up, 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 annual-ly 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 com-

panies 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 us-

ing 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.

A uniform random number R was selected between zero and $\left(\sum I = \frac{X_2}{m} \right) I$. 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:

$$V_j = y_{j,j} E_{vj} \quad (4)$$

where:

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

$y_{j,j}$ = 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:

$$F_t = F_{t-1} - 1'' \frac{Y_{jt}}{Y_{jt-1}} \quad (5)$$

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,

$y_{j,t-1}$ = 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:

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

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:

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

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 nonsampling 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:

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

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, March 1999

State	Volume Million Cubic Feet				Price Dollars per Thousand Cubic Feet		
	Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial
Alabama	6,604	3,097	20,820	31,445	7.03	6.10	3.05
Alaska	2,075	2,822	6,270	13,666	3.59	2.34	1.17
Arizona	3,662	3,158	2,237	11,069	8.57	6.12	3.71
Arkansas	5,156	3,384	12,581	23,155	6.16	4.85	3.42
California	67,414	29,895	52,152	169,377	6.22	5.17	3.09
Colorado	13,675	7,527	6,418	28,762	4.86	4.14	2.16
Connecticut	5,780	5,831	2,790	14,524	10.08	6.93	4.23
Delaware	1,574	998	1,952	6,212	8.05	6.69	4.00
District of Columbia	2,324	2,333	0	4,658	7.76	6.92	—
Florida	1,676	3,969	12,588	37,194	10.58	6.22	3.66
Georgia	10,625	5,497	12,217	28,558	2.44	2.17	2.76
Hawaii	44	181	0	226	18.15	12.09	—
Idaho	2,257	1,532	3,214	7,004	5.10	4.49	3.14
Illinois	61,415	24,499	29,733	118,510	4.63	4.46	3.50
Indiana	NA	NA	NA	NA	NA	NA	NA
Iowa	9,863	6,201	9,569	25,822	5.26	4.11	3.33
Kansas	NA	NA	NA	NA	NA	NA	NA
Kentucky	9,239	5,102	9,276	23,759	4.82	4.39	3.10
Louisiana	5,570	2,485	82,473	112,180	5.98	5.29	1.88
Maine	131	357	189	676	7.38	6.81	5.76
Maryland	NA	NA	NA	NA	NA	NA	NA
Massachusetts	NA	NA	NA	NA	NA	NA	NA
Michigan	53,871	25,951	28,348	112,050	4.78	4.69	3.76
Minnesota	15,346	11,097	9,720	36,599	5.08	4.20	2.67
Mississippi	3,709	2,676	7,546	18,227	5.20	4.53	2.99
Missouri	16,580	8,515	5,175	30,549	5.41	5.06	4.00
Montana	2,138	1,346	1,619	5,108	4.94	4.90	4.79
Nebraska	5,721	3,484	2,508	11,831	4.47	3.98	3.21
Nevada	3,349	2,372	2,816	12,810	6.94	5.89	4.45
New Hampshire	991	1,026	505	2,539	8.23	6.97	6.42
New Jersey	NA	NA	NA	NA	NA	NA	NA
New Mexico	6,478	3,836	5,497	18,599	3.09	3.53	3.60
New York	NA	NA	NA	NA	NA	NA	NA
North Carolina	9,468	9,796	9,200	28,489	6.20	5.87	3.79
North Dakota	1,318	1,253	2,037	4,608	4.76	4.09	2.47
Ohio	51,339	24,032	32,561	108,903	5.63	5.26	4.90
Oklahoma	8,415	4,745	12,381	38,033	5.33	5.09	3.50
Oregon	5,047	3,462	15,206	23,934	6.91	5.63	0.81
Pennsylvania	34,931	19,237	23,081	77,564	7.82	7.03	4.42
Rhode Island	2,704	1,731	1,717	6,152	8.88	7.73	4.32
South Carolina	4,380	3,183	9,684	17,294	7.81	6.40	2.93
South Dakota	1,486	1,149	439	3,307	5.00	3.90	3.03
Tennessee	7,577	6,399	13,948	27,924	6.37	5.68	3.35
Texas	20,018	18,021	136,528	256,140	5.18	3.96	1.91
Utah	5,425	3,068	3,718	12,602	5.59	4.25	3.31
Vermont	377	334	301	1,017	6.68	5.49	2.72
Virginia	11,307	7,611	8,714	29,725	7.34	5.67	3.76
Washington	NA	NA	NA	NA	NA	NA	NA
West Virginia	NA	3,390	NA	NA	NA	6.19	NA
Wisconsin	16,251	11,763	15,029	43,610	6.05	4.78	3.73
Wyoming	1,317	1,077	3,832	6,239	5.18	4.51	3.87
Total	656,556	375,645	716,707	1,955,338	6.02	5.03	2.77

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.)

Revisions to Monthly Natural Gas Data

(Discusses the revision errors for natural gas data.)

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.)

July 1998**Revisions to Monthly Natural Gas Data**

(Discusses the revision errors for natural gas data.)

April 1999**Natural Gas 1998: Issues and Trends - Executive Summary**

(Examines the current natural marketplace from a series of vantage points.)

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.)

April 1999

Natural Gas 1998: A Preliminary Summary

(Reviews data for 1998 based on Energy Information Administration surveys.)

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"	Sharon Belcher (202)586-6119
		Annual: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202)586-4790
Extraction Loss	1	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: Quarterly Natural Gas Import 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" Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202)586-4790
Commercial,	16		
Industrial,	17		
Electric Utility,	18		
All Consumers	19		
Average Price to:	20	Monthly: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers" Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants"	Roy Kass (202)586-4790
City Gate,	21		
Residential,	22		
Commercial,	23		
Industrial,	24		
Electric Utility 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 representations 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 (InfoDisk); (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 burner tip.	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, Tadzhikistan, 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 de-

mand 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.