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Natural Gas Monthly

August 1990

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Preface

The *Natural Gas Monthly* (NGM) is prepared in the Data Operations Branch of the Reserves and Natural Gas Division, Office of Oil and Gas, Energy Information Administration (EIA), U.S. Department of Energy (DOE).

General questions and comments regarding the *NGM* may be referred to Kendrick E. Brown, Jr. (202) 586-6077, James M. Todaro, (202) 586-6305, or Eva M. Fleming, (202) 586-6113. 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.

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.

Common Acronyms Used in the Natural Gas Monthly

AGA	American Gas Association	IOCC	Interstate Oil Compact Commission
Bbl	Barrels		
BLS	Bureau of Labor Statistics, U.S. Department of Labor	LNG	Liquefied Natural Gas
Bcf	Billion Cubic Feet	Mcf	Thousand Cubic Feet
BOM	Bureau of Mines, U.S. Department of the Interior	MMBtu	Million British Thermal Units
		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		
DOI	U.S. Department of the Interior	NGL	Natural Gas Liquids
EIA	Energy Information Administration, U.S. Department of Energy	NGPA	Natural Gas Policy Act of 1978
		OCS	Outer Continental Shelf
FERC	Federal Energy Regulatory Commission	PGA	Purchased Gas Adjustment
		Tcf	Trillion Cubic Feet

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Overview

Natural Gas Outlook - Winter 1990-1991

The Energy Information Administration (EIA) currently projects total domestic consumption of natural gas at 11.1 trillion cubic feet for the winter of 1990-1991 (October 1990 through March 1991). This level of consumption represents a 4 percent increase over the winter of 1989-1990. The EIA anticipates that increased needs at this level can be met without difficulty. Approximately 9.1 trillion cubic feet will be provided from domestic production, while the remainder will come from imports, withdrawals from storage, and supplemental sources. This forecast is predicated on the assumptions of normal weather and a world oil price of \$30 per barrel.

Total dry gas production is expected to rise 2 percent to meet the anticipated winter demand. Based on preliminary findings from a natural gas productive capacity study for the Lower 48 States by EIA, the annual capacity utilization is estimated to be 71 percent in 1990 and 72 percent in 1991. While the annual production estimates can be met, it is likely that heavy storage withdrawals will be necessary to meet peak-day demand during extremely cold weather. Extreme cold snaps are not expected to cause the severe hardships that occurred in December 1989 because the producers are better prepared to cope with line and well "freeze-ups" due to hydrates. However, unforeseen events such as storms in the Gulf of Mexico, could cause temporary gas-well shut-ins.

Net natural gas imports are expected to rise 8 percent this winter from the 1989-1990 winter. Imports of natural gas reached their highest level ever in 1989, totaling 1.4 trillion cubic feet. Through the first 8 months of this year, estimated imports are 11 percent greater than in 1989. The great majority (97 percent) of this gas is delivered via pipeline from Canada. The remaining 3 percent, or 42 billion cubic feet, is delivered in the form of liquefied natural gas (LNG) from Algeria. The potential for growth in LNG imports is significant since only two of the four receiving terminals in the United States were operating in 1989; one only during December. Current indications are that the price of imported natural gas from Canada and LNG from Algeria should remain stable with only normal seasonal fluctuations.

Natural gas storage is crucial during winter months since it is the source used to meet the increased demand, particularly in the residential sector, brought on by cold weather. It is expected that the volume of working gas in the 397 underground storage facilities in the United States at the beginning of the 1990-1991 heating season will exceed last year's record level of 3,268 billion cubic feet. As of August 31, 1990, working gas levels are 2 percent greater than at the same time last year.

During the record cold temperatures of December 1989, the natural gas industry was able to satisfy its commitments by relying on underground storage. Domestic production and imports were both slightly higher in December 1989 compared with December 1988; however, storage withdrawals were the highest on record, reaching 805 billion cubic feet. Despite some well freeze-up problems in the producing areas, high-priority residential customers in New England and the Mid-Atlantic States were not curtailed because the natural gas industry met the increased demand through traditional procedures, facilities, and contractual arrangements.

Last December, much attention was focused on the interruption of natural gas supplies to industrial and electric utility customers. Interruptible contracts for natural gas supplies are a typical way of conducting business in the natural gas industry and have been used for many years. They are an aid in managing load levels for pipeline and local distribution companies, and provide revenue for the companies in off-peak periods when the gas is not needed by weather-sensitive customers, such as residential users. Industrial and electric utility companies with fuel-switching capabilities typically contract for their gas supplies with interruptible provisions. In exchange for the favorable rates that interruptible contracts offer, these consumers may be interrupted by the pipeline or local distribution company when the higher priority residential and commercial customers require the supplies. Most of the fuel-switching capability for electric utilities and industrials is from natural gas to residual fuel oil. In practice, in some parts of the country customers with interruptible contracts are rarely interrupted, while elsewhere gas deliveries are cut off each year for extended periods of time.

Natural gas consumption during the winter of 1989-1991 was 10.7 trillion cubic feet, greater than that

during comparable months in any of the 5 previous years. EIA's projection for the coming winter is higher by another 460 billion cubic feet, and represents an additional 4 percent increase. While EIA projects increased demand for natural gas in each of the four

major consuming sectors, it is expected to occur mainly among industrial and electric utility customers. Higher residual fuel oil prices relative to natural gas will cause those companies having a choice to remain on natural gas.

Supply and Disposition of Natural Gas: \$30 World Oil Price Case
(Trillion Cubic Feet)

	Winter of 1989-1990	Winter of 1990-1991	Volumetric Change	Percentage Change
<hr/>				
Supply				
Total Dry Gas				
Production	8.95	9.13	.18	2.0
Net Imports	.73	.79	.06	8.2
Supplemental Gaseous				
Fuels	.07	.10	.03	42.9
Net Storage				
Withdrawals	1.39	1.45	.06	4.3
Total Supply ...	11.13	11.46	.33	3.0
 Disposition				
Lease and Plant				
Fuel.....	.58	.58	0	0
Pipeline Fuel.....	.31	.34	.03	9.7
Residential.....	3.38	3.48	.10	3.0
Commercial.....	1.80	1.84	.04	2.2
Industrial.....	3.52	3.67	.15	4.3
Electric Utilities.	1.07	1.24	.17	15.9
Total Consumption	10.68	11.14	.46	4.3
Unaccounted For....	.46	.32	-.14	-30.4
Total Disposition	11.13	11.46	.33	3.0

Source: Energy Information Administration, "Short-Term Energy Outlook," October 1990, DOE/EIA-0202(90/4Q).

Note: Totals may not equal sum of components due to independent rounding.

Supply and Disposition

The natural gas market remained stable in August, so far unaffected by the Iraqi invasion of Kuwait and the subsequent surge in oil prices. For the most part, August activity in the natural gas industry followed seasonal patterns as gas was injected into underground storage reservoirs in preparation for the coming heating season. For the year to date, warmer than normal weather during the first quarter and a sluggish economy kept demand and prices lower than might otherwise have been expected.

EIA estimates that marketed production (gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations) totaled 1,469 billion cubic feet, down slightly from July's 1,477 billion cubic feet. A year to date comparison shows that marketed production in 1990 is so far running just 1 percent higher than in 1989 and 2 percent higher than in 1988. Production has increased in each of the last 3 years driven by growing demand, even though it has been somewhat depressed by low prices.

The total gas supply available for disposition in August was estimated at 1,570 billion cubic feet (virtually the same as in July). Shown in Table 2, this total includes 37 billion cubic feet withdrawn from storage, 11 billion cubic feet of supplemental fuel supplies, and 122 billion cubic feet of imported gas.

Although they account for less than 10 percent of total supply, it should be noted that imports, predominantly from Canada, have shot up by a full 11 percent for the year - the reason: their attractive price.

Total consumption rose to 1,264 billion cubic feet, 321 billion cubic feet were injected into underground storage reservoirs, and 8 billion cubic feet were exported, leaving 23 billion cubic feet unaccounted for.

Consumption

As noted earlier, total demand for the year was depressed by weak economic growth and abnormally warm weather. Data available through July show that at 11,060 billion cubic feet, total consumption was down by 2 percent for the year, as compared with the same period in 1989. Energy demand closely tracks economic growth and it is not surprising that demand for all fossil fuels was down during this period.

Although off by 4 percent for the year, electric utility consumption of natural gas increased by a full 10 percent from June to July. Typically, during the warmer spring and summer months, when natural gas is not

needed to meet space heating requirements, electric utilities capable of doing so switch from oil to natural gas.

Consumption levels in the industrial sector have remained more or less stable throughout the year, totaling 3,952 billion cubic feet for the year to date. Consumption is virtually the same as the same period of 1989 but 6 percent higher than 1988. Again, the relatively low price of natural gas probably kept demand from declining further than would be expected in a slow economy.

In both the residential and commercial sectors, demand for natural gas is predominantly driven by space-heating requirements. Following typical seasonal patterns, consumption of natural gas has declined markedly since the winter months in both these sectors. In July, demand dropped to 129 billion cubic feet in the residential sector, down from 160 billion cubic feet in June. In the commercial sector, demand was virtually unchanged: 125 billion cubic feet in July, 124 billion cubic feet in June.

For the year to date, with its warmer than normal first quarter, residential consumption totaled 2,887 billion cubic feet (7 percent lower than 1989 and 8 percent lower than 1988), while commercial consumption totaled 1,668 billion feet for the year to date (3 percent lower than 1989 and 4 percent lower than 1988).

Prices

As noted earlier, natural gas prices were relatively low in 1990 and have been for the past few years. The spot market has been an extremely efficient barometer of market conditions, in effect keeping prices far below the few ceilings that remain under the Natural Gas Policy Act. These low prices have kept natural gas extremely competitive with competing fuels, encouraging demand. Still, some argue that higher prices are necessary to spur further production.

As shown in Table 4,

- According to EIA's estimates, wellhead prices in June averaged \$1.53 per thousand cubic feet; they averaged \$1.65 per thousand cubic feet in June 1989, 7 percent more, but exactly the same as in June 1988.
- In July 1990, major interstate pipeline companies paid an average of \$2.00 per thousand cubic feet for gas purchased from domestic producers.
- In July, major interstate pipeline companies paid just \$1.88 per thousand cubic feet for imported gas, almost all of it Canadian. More expensive than domestic gas until 1988, Canadian gas has

been 5 to 7 percent cheaper since 1988, explaining the growing attractiveness of these imports.

- Distributors paid an average \$3.03 per thousand cubic feet at the city gate in July, a slight increase over the \$3.00 paid in June and a slight decline from the \$3.08 paid in July 1989. For the year to date, distributors are paying virtually the same as in 1989, 4 percent more than in 1988.
- Industrial consumers paid an average of \$2.47 per thousand cubic feet, less than they have paid in any month in recent history. This is a 3-percent decline from the \$2.55 per thousand cubic feet industrial consumers paid in June, and a drop of 8.5 percent from July 1988 prices.
- Commercial consumers paid \$4.46 per thousand cubic feet, 2 percent less than the \$4.59 they paid in June, in fact the lowest price paid so far in 1990. The \$4.46 is 4 percent lower than the July 1989 price; however, for the year as a whole, commercial sector prices are running 2 percent higher than year-to-date 1989 and almost 5 percent higher than year-to-date 1988.
- Residential consumers paid \$6.99 per thousand cubic feet, 1 percent more than they paid in July 1989 and 6 percent more than they paid in June. For the year to date, residential consumer prices are running almost 2 percent above year-to-date 1989 prices, and almost 7 percent above year-to-date 1988 prices.
- Electric utilities paid an average of \$2.16 per thousand cubic feet in June. This is a decline of just 1 percent from May's \$2.19 per thousand cubic feet, a drop of almost 10 percent from the \$2.40 per thousand cubic feet paid in July 1989.
- For the year to date, electric utility prices are running a scant 0.4 percent below 1989 prices and 4 percent above 1988 prices.

Underground Storage

To prepare for winter demand, natural gas was placed in underground storage facilities. As shown in Table 17, in August, 321 billion cubic feet were injected into storage and 37 billion cubic feet withdrawn, bringing the total working gas in underground storage to 2,995 billion cubic feet, up from 2,747 billion cubic feet in

July. This is almost 2 percent higher than August 1989 levels. Last December, storage levels were severely taxed in some parts of the country due to the record cold temperatures.

View of the intricate piping systems needed to operate a modern natural gas processing plant.

Table 1. Summary of Natural Gas Production
(Billion Cubic Feet)

Year and Month	Gross Withdrawals	Repressuring	Nonhydrocarbon Gases Removed ^a	Vented and Flared	Marketed Production (Wet)	Extraction Loss	Total Dry Gas Production ^b
1984 Total	20,192	1,630	224	108	18,230	839	17,392
1985 Total	19,534	1,915	326	95	17,198	816	16,382
1986 Total	19,063	1,838	337	98	16,791	800	15,991
1987 Total	20,056	2,208	376	124	17,349	812	16,536
1988							
January	1,925	216	40	12	1,657	76	1,581
February	1,752	196	36	12	1,508	69	1,439
March	1,826	201	40	12	1,573	72	1,501
April	1,684	193	39	12	1,440	66	1,374
May	1,724	204	33	12	1,475	68	1,407
June	1,655	202	39	12	1,402	64	1,338
July	1,674	204	37	13	1,420	65	1,355
August	1,691	203	36	12	1,440	66	1,374
September	1,609	200	38	12	1,359	62	1,297
October	1,747	217	42	12	1,476	67	1,409
November	1,772	217	38	12	1,505	69	1,436
December	1,864	225	42	11	1,586	73	1,513
Total	20,922	2,478	460	143	17,841	817	17,026
1989							
January	1,859	217	34	11	1,597	70	1,527
February	1,709	191	29	11	1,476	64	1,412
March	1,804	195	31	13	1,564	68	1,496
April	1,734	201	29	12	1,491	65	1,426
May	1,766	212	31	12	1,511	66	1,445
June	1,677	190	28	12	1,449	63	1,386
July	1,710	197	30	12	1,474	64	1,410
August	1,701	205	28	12	1,460	63	1,397
September	1,637	205	28	12	1,393	60	1,333
October	1,718	209	29	12	1,469	64	1,405
November	1,782	213	31	12	1,525	66	1,459
December	1,901	217	33	12	1,635	72	1,563
Total	20,998	2,451	362	141	18,044	785	17,260
1990							
January	1,928	205	32	15	1,676	78	1,598
February	1,708	180	27	9	1,492	70	1,422
March	1,815	207	30	10	1,568	73	1,495
April	1,737	201	29	10	1,497	70	1,427
May	^R 1,772	203	35	11	^R 1,523	71	^R 1,452
June	^R 1,698	^R 191	^R 29	10	^R 1,468	^R 69	^R 1,399
July	^E 1,721	^E 198	^E 35	^E 11	^E 1,477	^E 69	^E 1,408
August	^E 1,708	^E 195	^E 33	^E 11	^E 1,469	^E 69	^E 1,400
1990 YTD	14,087	1,580	250	87	12,170	569	11,601
1989 YTD	13,960	1,608	240	95	12,023	523	11,499
1988 YTD	13,931	1,619	300	97	11,916	546	11,369

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

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

^E Estimated Data.

^R Revised Data.

Notes and Sources: See the last page of this section.

Table 2. Supply and Disposition of Dry Natural Gas
(Billion Cubic Feet)

Year and Month	Supply				Total Supply/Disposition ^b	Disposition			
	Total Dry Gas Production	Withdrawals from Storage ^a	Supplemental Gaseous Fuels	Imports		Additions to Storage ^a	Exports	Consumption ^c	Unaccounted For ^d
1984 Total	17,392	2,098	110	843	20,443	2,295	55	17,951	143
1985 Total	16,382	2,397	126	950	19,855	2,163	55	17,281	356
1986 Total	15,991	1,837	113	750	18,692	1,984	61	16,221	427
1987 Total	16,536	1,905	101	993	19,534	1,911	54	17,211	359
1988									
January	1,581	586	12	139	2,318	47	5	2,187	79
February	1,439	462	11	117	2,029	50	5	2,038	-64
March	1,501	259	10	113	1,883	99	6	1,867	-89
April	1,374	92	8	96	1,570	165	6	1,464	-65
May	1,407	46	7	94	1,554	288	4	1,302	-40
June	1,338	36	7	93	1,474	280	8	1,170	16
July	1,355	42	7	100	1,504	300	5	1,177	22
August	1,374	52	7	94	1,527	288	6	1,222	11
September	1,297	46	6	95	1,444	314	7	1,099	24
October	1,409	92	8	106	1,615	202	6	1,332	175
November	1,436	159	9	121	1,725	117	7	1,453	148
December	1,513	397	11	127	2,048	62	9	1,820	157
Total	17,026	2,270	101	1,294	20,691	2,211	74	18,030	376
1989									
January	1,527	426	11	119	2,083	53	7	2,023	0
February	1,412	614	10	110	2,146	32	7	2,008	99
March	1,496	369	10	113	1,988	106	11	1,945	-74
April	1,426	138	8	110	1,682	184	11	1,580	-93
May	1,445	44	8	108	1,605	326	8	1,348	-77
June	1,386	20	7	104	1,517	381	9	1,200	-73
July	1,410	29	8	101	1,548	377	9	1,220	-58
August	1,397	29	8	108	1,542	362	9	1,216	-45
September	1,333	39	7	117	1,496	325	9	1,181	-19
October	1,405	96	9	123	1,633	225	10	1,337	61
November	1,459	227	9	123	1,818	105	8	1,567	138
December	1,563	821	12	145	2,541	52	8	2,156	325
Total	17,260	2,852	107	1,382	21,599	2,529	107	18,780	182
1990									
January	1,598	339	16	149	2,102	91	8	2,088	-85
February	1,422	324	14	118	1,878	70	8	1,784	16
March	1,495	256	14	115	1,880	124	10	1,749	-3
April	1,427	140	13	122	1,702	183	8	1,550	-39
May	^R 1,452	45	11	108	^R 1,616	289	8	^R 1,358	^R -39
June	^R 1,399	42	11	114	^R 1,566	327	9	^R 1,255	^R -25
July	^E 1,408	27	12	122	1,569	325	8	^R 1,276	^R -43
August	^E 1,400	37	11	122	1,570	321	8	1,264	-23
1990 YTD	11,601	1,210	102	970	13,883	1,730	67	12,324	-241
1989 YTD	11,499	1,669	70	873	14,111	1,821	71	12,540	-321
1988 YTD	11,369	1,575	69	846	13,859	1,517	45	12,427	-130

^a Monthly and annual data for 1984 through 1989 include underground storage and liquefied natural gas storage. Data for January 1990 forward include underground storage only. See Appendix A, Explanatory Note 7 for discussion of computation procedures.

^b "Total" data for 1984 through 1989 do not equal equivalent data in Table 1 of the 1989 *Natural Gas Annual* due to the exclusion of intransit receipts and deliveries in the NGM.

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

^d Represents quantities lost and imbalances in data due to differences among data sources. See Appendix A, Explanatory Note 11 for full discussion.

^E Estimated Data.

^R Revised Data.

Notes and Sources: See the last page of this section.

Figure 1. Production and Consumption of Natural Gas in the United States

Source: Natural Gas Annual and the Short Term Energy Outlook.

Table 3. Natural Gas Consumption
(Billion Cubic Feet)

Year and Month	Lease and Plant Fuel	Pipeline Fuel	Delivered to Consumers					Total Consumption
			Residential	Commercial	Industrial	Electric Utilities	Total	
1984 Total	1,077	529	4,555	2,524	6,154	3,111	16,345	17,951
1985 Total	966	504	4,433	2,432	5,901	3,044	15,811	17,281
1986 Total	923	485	4,314	2,318	5,579	2,602	14,814	16,221
1987 Total	1,149	519	4,315	2,430	5,953	2,844	15,542	17,211
1988								
January	102	63	852	424	578	168	2,022	2,187
February	93	55	755	392	574	170	1,890	2,038
March	97	53	597	320	596	204	1,717	1,867
April	88	46	400	223	507	199	1,330	1,464
May	91	49	258	158	507	240	1,162	1,302
June	86	47	152	118	487	280	1,037	1,170
July	87	49	123	109	480	328	1,041	1,177
August	88	49	114	113	514	344	1,085	1,222
September	83	47	125	113	499	233	969	1,099
October	91	49	232	156	522	182	1,092	1,232
November	92	51	391	225	543	150	1,310	1,453
December	98	56	631	320	577	137	1,666	1,820
Total	1,096	614	4,630	2,670	6,383	2,636	16,320	18,030
1989								
January	95	57	751	376	598	146	1,871	2,023
February	88	57	742	380	570	171	1,863	2,008
March	93	54	645	342	602	209	1,798	1,945
April	88	49	414	233	563	233	1,443	1,580
May	89	51	256	159	544	249	1,208	1,348
June	86	50	155	121	529	258	1,064	1,200
July	88	50	129	110	525	318	1,082	1,220
August	87	50	121	110	539	308	1,079	1,216
September	82	48	139	113	532	266	1,051	1,181
October	87	49	228	152	568	252	1,201	1,337
November	90	50	405	231	603	187	1,427	1,567
December	97	65	790	391	643	170	1,994	2,156
Total	1,070	630	4,777	2,719	6,816	2,768	17,080	18,780
1990								
January	111	53	785	401	595	144	1,924	2,088
February	99	48	630	329	546	131	1,637	1,784
March	104	48	544	299	572	182	1,597	1,749
April	99	44	394	234	582	197	1,407	1,550
May	^R 101	47	245	156	569	239	1,210	^R 1,358
June	^R 97	44	160	124	535	295	1,114	^R 1,255
July	98	49	129	125	554	325	1,132	1,276
1990 YTD	709	333	2,887	1,668	3,952	1,514	10,021	11,060
1989 YTD	627	368	3,093	1,721	3,931	1,584	10,329	11,324
1988 YTD	644	362	3,137	1,744	3,729	1,589	10,198	11,205

^R Revised Data.

Notes and Sources: See the last page of this section.

Figure 2. Natural Gas Deliveries to Consumers

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

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

Year and Month	Wellhead Price ^a	Major Interstate Pipeline Companies		City Gate	Delivered to Consumers				
		Imports ^b	Purchased from Producers ^b		Residential	Commercial ^c	Industrial ^c	Electric Utilities ^d	Overall Average ^c
1984 Annual Average	2.66	4.08	2.91	3.95	6.12	5.55	4.22	3.70	4.85
1985 Annual Average	2.51	3.19	2.85	3.75	6.12	5.50	3.95	3.55	4.72
1986 Annual Average	1.94	2.53	2.39	3.22	5.83	5.08	3.23	2.43	4.13
1987 Annual Average	1.67	2.17	2.10	2.87	5.54	4.77	2.94	2.32	4.05
1988									
January	1.96	1.64	2.04	2.91	5.08	4.60	3.18	2.60	4.41
February	1.84	2.03	2.22	2.95	5.09	4.69	3.22	2.56	4.39
March	1.70	2.09	2.03	2.87	5.18	4.69	3.13	2.32	4.25
April	1.59	2.01	2.12	2.79	5.35	4.71	2.97	2.20	4.10
May	1.52	2.02	2.17	2.75	5.87	4.61	2.76	2.10	3.84
June	1.53	1.98	2.05	2.87	6.50	4.53	2.67	2.16	3.54
July	1.56	2.34	1.94	2.87	6.74	4.48	2.54	2.23	3.36
August	1.62	1.88	2.09	2.92	6.92	4.37	2.66	2.36	3.39
September	1.53	2.00	2.13	3.05	6.79	4.41	2.70	2.36	3.61
October	1.68	1.94	2.31	2.92	5.95	4.53	2.80	2.40	3.95
November	1.76	1.98	2.19	2.98	5.56	4.69	3.00	2.58	4.31
December	1.89	2.14	2.25	3.08	5.39	4.78	3.31	2.57	4.56
Annual Average	1.69	2.00	2.13	2.92	5.47	4.63	2.95	2.33	4.09
1989									
January	1.99	1.77	2.35	3.17	5.41	4.81	3.39	2.64	4.67
February	1.81	2.21	2.16	3.10	5.38	4.80	3.33	2.44	4.60
March	1.69	1.99	2.17	2.89	5.45	4.79	3.12	2.33	4.46
April	1.56	2.01	2.22	2.83	5.54	4.77	2.91	2.31	4.18
May	1.61	2.02	2.11	2.94	5.93	4.64	2.80	2.39	3.94
June	1.65	2.04	2.04	2.98	6.58	4.57	2.69	2.40	3.72
July	1.65	1.88	1.99	3.03	6.92	4.65	2.70	2.40	3.59
August	1.61	2.24	2.05	3.04	7.07	4.61	2.71	2.38	3.57
September	1.55	2.02	2.07	2.99	6.80	4.67	2.67	2.33	3.67
October	1.58	2.17	2.04	2.84	6.06	4.61	2.75	2.39	3.86
November	1.66	2.13	2.23	2.98	5.56	4.71	2.98	2.56	4.30
December	1.92	2.08	2.39	3.10	5.30	4.81	3.32	2.85	4.61
Annual Average	1.69	2.04	2.17	3.01	5.64	4.74	2.97	2.43	4.22
1990									
January	2.23	2.04	2.42	3.25	5.42	4.99	3.52	3.01	4.77
February	1.87	2.25	2.18	3.10	5.63	5.05	3.40	2.76	4.82
March	1.58	1.99	1.94	2.95	5.58	4.94	3.08	2.37	4.50
April	1.56	2.00	2.17	2.84	5.62	4.83	2.84	2.29	4.23
May	1.53	2.08	1.98	2.81	5.97	4.64	2.67	2.19	3.84
June	1.53	1.91	2.18	3.00	6.55	4.59	2.55	2.16	3.53
July	NA	1.88	2.00	3.03	6.99	4.46	2.47	NA	4.41
1990 YTD	NA	2.02	2.12	3.02	5.70	4.87	2.98	2.39	4.39
1989 YTD	NA	1.99	2.15	3.01	5.59	4.76	3.02	2.40	4.35
1988 YTD	NA	2.02	2.08	2.87	5.33	4.64	2.96	2.29	4.18

^a See Appendix A, Explanatory Note 8 for discussion of wellhead price.

^b See Appendix A, Explanatory Note 9 for discussion of major interstate pipeline company data.

^c See Table Notes and Sources for explanation of break in series for consumer prices in 1987.

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

NA = Not Available.

Notes and Sources: See the last page of this section.

Figure 3. Average Price of Natural Gas Delivered to Consumers

Source: *Natural Gas Annual*, Form FERC-11, and Form EIA-857.

Figure 4. Average Price of Natural Gas

Source: *Natural Gas Annual*, Form EIA-857, and Form FERC-423.

Table 5. Projected Volumes and Prices of Wellhead Purchases by NGPA Category
(Volumes in Billion Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Section 104 ^a		Section 105 ^b		Section 106 ^c		Old Gas ^d	
	Volume	Price ^m	Volume	Price ^m	Volume	Price ^m	Volume	Price ^m
1984 Total	3,961	1.46	53	2.60	283	1.15	4,301	1.45
1985 Total	3,549	1.48	57	2.54	358	1.18	3,964	1.47
1986 Total	2,675	1.41	58	2.26	320	1.13	3,053	1.39
1987 Total	2,035	1.34	33	2.08	260	1.15	2,327	1.33
1988								
January	160	1.36	2	2.37	22	1.22	185	1.35
February	160	1.36	2	2.37	22	1.22	184	1.36
March	155	1.41	2	2.33	21	1.23	179	1.40
April	128	1.50	2	2.28	14	1.30	145	1.49
May	129	1.46	2	2.28	14	1.32	146	1.46
June	123	1.46	2	2.22	14	1.42	139	1.47
July	110	1.40	2	2.33	12	1.42	125	1.42
August	104	1.40	2	2.35	12	1.43	118	1.42
September	108	1.44	2	2.26	12	1.37	122	1.45
October	134	1.69	2	2.16	13	1.55	149	1.68
November	133	1.70	3	2.22	14	1.51	150	1.69
December	135	1.82	2	2.12	14	1.56	152	1.80
Total	1,579	1.49	25	2.27	184	1.35	1,794	1.49
1989								
January	134	1.94	2	1.83	13	1.61	149	1.91
February	135	1.96	2	1.79	12	1.67	149	1.94
March	128	1.89	2	1.79	12	1.63	141	1.86
April	85	1.55	2	2.01	9	1.43	96	1.54
May	76	1.51	1	2.09	8	1.49	85	1.52
June	71	1.41	1	2.09	8	1.46	80	1.43
July	68	1.42	1	1.80	7	1.51	75	1.43
August	67	1.39	1	1.76	7	1.49	74	1.41
September	65	1.43	1	1.83	7	1.52	73	1.44
October	79	1.51	1	1.97	8	1.51	88	1.51
November	76	1.80	1	1.97	8	1.56	86	1.78
December	77	1.81	1	1.97	8	1.52	86	1.79
Total	1,060	1.69	15	1.90	108	1.55	1,183	1.68
1990								
January	69	1.92	2	1.04	8	1.70	79	1.88
February	59	1.97	2	.96	8	1.71	68	1.92
March	57	1.97	2	1.04	7	1.73	66	1.92
April	53	1.81	2	1.30	7	1.61	62	1.77
May	55	1.80	1	1.24	7	1.70	63	1.78
June	52	1.75	2	2.17	7	1.70	61	1.76
July	49	1.79	2	2.08	5	1.73	56	1.80
August	44	1.68	2	2.08	5	1.59	51	1.69
September	39	1.65	1	.87	5	1.53	45	1.62

See footnotes at end of table.

Table 5. Projected Volumes and Prices of Wellhead Purchases by NGPA Category (Continued)
(Volumes in Billion Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Section 102 ^a		Section 103 ^f		Section 108 ^g		Section 109 ^h		New Gas ⁱ	
	Volume	Price ^m	Volume	Price ^m	Volume	Price ^m	Volume	Price ^m	Volume	Price ^m
1984 Total	2,587	3.84	913	3.26	189	4.17	191	2.58	3,879	3.65
1985 Total	2,780	3.73	945	3.39	207	4.27	257	2.80	4,189	3.62
1986 Total	1,907	3.13	723	3.03	173	3.92	204	2.51	3,007	3.11
1987 Total	1,494	2.64	500	2.61	175	3.30	191	2.29	2,360	2.65
1988										
January	120	2.39	35	2.46	14	3.35	13	2.29	182	2.47
February	119	2.40	35	2.45	14	3.36	12	2.31	180	2.47
March	119	2.40	35	2.46	14	3.34	12	2.34	179	2.48
April	114	2.32	36	2.39	11	3.35	12	2.17	174	2.39
May	114	2.31	37	2.41	12	3.38	12	2.19	176	2.40
June	102	2.30	37	2.40	15	2.64	12	2.11	165	2.34
July	95	2.29	31	2.31	14	2.61	11	2.10	152	2.31
August	84	2.34	30	2.30	14	2.51	11	2.02	139	2.33
September	84	2.39	31	2.39	12	2.80	12	2.02	139	2.40
October	97	2.46	33	2.47	13	2.88	12	2.10	155	2.47
November	122	2.38	33	2.49	10	3.20	11	2.18	176	2.43
December	124	2.44	33	2.45	10	3.15	12	2.13	179	2.47
Total	1,295	2.37	406	2.41	153	3.03	142	2.16	1,996	2.41
1989										
January	124	2.49	32	2.50	10	3.30	12	2.17	178	2.51
February	117	2.66	33	2.50	11	3.31	14	2.18	175	2.63
March	114	2.61	31	2.48	10	3.27	13	2.21	169	2.60
April	100	2.48	29	2.32	10	3.14	13	2.10	151	2.46
May	73	2.45	27	2.28	8	3.23	10	2.02	119	2.43
June	67	2.39	27	2.26	9	3.01	10	2.04	112	2.38
July	58	2.42	25	2.17	9	2.95	9	1.97	101	2.36
August	60	2.60	23	2.09	8	2.78	8	2.08	100	2.45
September	59	2.64	22	2.15	9	2.87	8	2.14	99	2.51
October	66	2.68	29	2.11	9	2.90	12	2.34	116	2.52
November	89	2.33	33	2.18	10	3.04	33	2.20	165	2.32
December	91	2.33	34	2.16	10	3.09	34	2.17	169	2.31
Total	1,018	2.51	346	2.28	113	3.08	176	2.15	1,653	2.46
1990										
January	85	2.41	32	2.29	10	3.19	31	2.17	157	2.39
February	75	2.53	31	2.27	9	3.13	24	2.28	139	2.47
March	76	2.52	30	2.28	9	3.07	23	2.29	138	2.47
April	79	2.43	25	2.17	8	3.11	25	2.20	137	2.38
May	59	2.39	24	2.15	8	3.27	16	2.00	107	2.34
June	56	2.36	23	2.08	7	3.11	16	1.99	102	2.29
July	47	2.34	23	1.97	7	2.99	15	1.93	92	2.23
August	46	2.15	21	1.86	7	2.66	15	1.87	89	2.08
September	43	2.16	20	1.91	8	2.85	13	1.83	85	2.11

See footnotes at end of table.

Table 5. Projected Volumes and Prices of Wellhead Purchases by NGPA Category (Continued)
(Volumes in Billion Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Section 107 ^l		Miscellaneous ^k		Total Gas ^l		Number of Companies ⁿ
	Volume	Price ^m	Volume	Price ^m	Volume	Price ^m	
1984 Total	856	5.35	10	2.77	9,061	2.78	46
1985 Total	738	4.71	*	--	890	2.75	48
1986 Total	426	3.48	*	--	6,187	2.32	46
1987 Total	417	2.72	*	--	5,104	2.05	46
1988							
January	38	2.75	*	--	40	1.99	40
February	37	2.76	*	--	401	1.99	40
March	37	2.86	*	--	395	2.03	40
April	37	2.63	*	--	356	2.05	40
May	39	2.66	*	--	360	2.04	41
June	40	2.48	*	--	345	2.00	43
July	38	2.55	*	--	315	1.99	46
August	35	2.49	*	--	292	1.98	45
September	36	2.49	*	--	297	2.02	43
October	38	2.55	*	--	342	2.14	42
November	30	2.61	*	--	356	2.14	41
December	31	2.57	*	--	362	2.19	41
Total	438	2.61	*	--	4,226	2.04	42
1989							
January	31	2.51	*	--	358	2.26	39
February	34	2.54	*	--	358	2.33	41
March	33	2.56	*	--	343	2.29	40
April	31	2.58	*	--	278	2.16	41
May	29	2.56	*	--	233	2.11	44
June	28	2.57	*	--	220	2.06	45
July	26	2.45	*	--	203	2.03	45
August	24	2.54	*	--	199	2.07	44
September	24	2.55	*	--	195	2.11	44
October	28	2.62	*	--	231	2.15	44
November	29	2.43	*	--	280	2.16	44
December	28	2.43	*	--	284	2.16	44
Total	347	2.53	--	--	3,182	2.18	38
1990							
January	25	2.38	*	--	261	2.23	41
February	22	2.61	*	--	230	2.32	42
March	23	2.59	*	--	227	2.32	42
April	24	2.72	*	--	223	2.25	41
May	24	2.60	*	--	195	2.19	41
June	24	2.61	*	--	188	2.16	42
July	22	2.36	*	--	170	2.10	40
August	20	2.02	*	--	160	1.95	42
September	19	2.01	*	--	149	1.95	41

^a Dedicated to interstate commerce.

^b Existing intrastate contracts.

^c Rollover contracts.

^d Total of Sections 104, 105, and 106.

^e New natural gas and certain natural gas produced from the Outer Continental Shelf.

^f New onshore production wells.

^g Stripper well natural gas.

^h Other categories of natural gas.

ⁱ Total of Sections 102, 103, 108, and 109.

^j High cost natural gas.

^k Natural gas not identified by category in Purchased Gas Adjustments (PGA) filing.

^l Total of old gas, new gas, high cost gas, and miscellaneous.

^m All prices are weighted averages.

ⁿ Additional interstate pipeline companies have been included with the 20 major interstate pipelines starting with PGA filings effective July 1, 1984. See Appendix A. Explanatory Note 12 for expanded pipeline company list.

-- Not Applicable.

* Volume is less than 500 million cubic feet.

Notes and Sources: See the last page of this section.

Figure 5. Purchased Gas Wellhead Prices

Source: Purchased Gas Adjustment filings for interstate pipeline companies.

Table 6. Summary of Natural Gas Imports and Exports
(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	Imports				Exports	
	Longterm Contracts		Spot Markets		Volume	Average Price
	Volume	Average Price	Volume	Average Price		
1985 Total	949,715	3.21	NA	NA	55,268	4.77
1986 Total	715,960	2.43	34,489	1.57	61,271	2.81
1987 Total	804,496	1.95	188,036	1.30	54,020	3.07
1988						
January	109,709	2.05	28,156	1.63	4,765	3.11
February	85,449	1.99	30,774	1.63	4,650	3.14
March	78,548	1.97	33,268	1.49	6,218	2.84
April	66,170	1.96	28,552	1.29	6,354	2.75
May	68,642	1.89	24,728	1.21	3,777	2.30
June	67,847	1.86	25,318	1.20	8,469	2.53
July	76,951	1.84	22,893	1.24	4,892	2.94
August	77,121	1.91	18,313	1.27	6,008	2.70
September	75,942	1.92	19,919	1.35	7,187	2.59
October	77,011	1.86	29,873	1.43	5,497	2.78
November	82,395	1.88	38,290	1.40	6,771	2.61
December	86,735	2.09	41,208	1.57	9,050	2.70
Total	952,520	1.96	341,292	1.41	73,638	2.74
1989						
January	82,813	2.23	39,604	1.69	6,722	2.60
February	71,892	2.11	34,673	1.53	7,253	2.41
March	92,655	2.04	35,016	1.38	11,127	2.41
April	74,433	2.08	38,611	1.32	11,137	2.34
May	68,812	2.02	36,713	1.37	8,030	2.44
June	69,355	2.01	35,343	1.35	8,943	2.57
July	67,405	1.94	34,225	1.31	8,681	2.55
August	73,268	2.29	32,701	1.29	9,148	2.48
September	80,435	2.09	34,566	1.22	8,998	2.70
October	83,324	2.22	37,676	1.24	10,453	2.62
November	80,124	2.08	41,876	1.48	7,909	2.71
December	98,801	2.06	47,199	1.70	8,471	2.74
Total	933,317	2.11	448,203	1.41	106,871	2.51
1990						
January	113,386	2.05	35,675	2.01	8,207	2.92
February	86,212	2.28	30,872	1.76	7,933	2.71
March	88,372	2.24	27,854	1.68	9,846	2.49
April	76,113	2.22	36,281	1.50	8,124	2.48
May	69,224	2.19	33,692	1.48	7,833	2.51
June	68,667	2.21	31,504	1.41	8,617	2.58

NA Not Available

Notes and Sources: See the last page of this section.

Table 7. Marketed Production of Natural Gas by State
(Million Cubic Feet)

Year and Month	Alabama	Alaska	Arkansas	California	Colorado	Florida	Kansas
1984 Total	101,821	289,129	135,161	476,333	173,257	12,585	465,979
1985 Total	107,342	321,346	155,099	491,283	178,233	10,545	512,872
1986 Total	107,184	304,841	131,075	462,218	163,684	8,833	465,695
1987 Total	117,241	359,837	141,151	424,621	164,557	8,281	457,050
1988							
January	11,392	32,910	19,390	34,672	19,577	652	72,587
February	10,929	29,964	15,308	30,938	18,155	597	50,858
March	11,255	36,393	14,968	35,114	18,025	643	55,095
April	10,471	29,666	12,473	32,892	15,972	614	46,812
May	9,236	28,656	12,473	34,562	16,515	607	43,514
June	10,523	29,466	11,793	33,765	12,769	790	45,802
July	10,953	29,263	11,566	33,339	13,028	677	36,847
August	10,753	29,530	13,040	35,317	14,001	644	33,789
September	10,368	30,159	12,246	34,343	14,099	602	28,996
October	11,100	34,017	12,587	33,193	15,057	538	46,615
November	10,663	34,088	13,607	30,674	15,588	528	51,178
December	11,880	34,525	17,122	30,855	18,759	593	64,090
Total	129,524	378,638	166,573	399,663	191,544	7,484	576,274
1989							
January	12,166	35,680	E 20,100	30,377	22,256	639	57,650
February	10,588	33,405	E 15,300	28,008	19,088	550	60,563
March	11,626	35,160	E 15,900	30,661	17,871	577	55,636
April	11,628	33,821	E 12,800	30,396	15,564	597	47,992
May	11,340	24,870	E 12,500	31,068	16,010	660	50,550
June	10,914	32,380	E 11,900	30,379	15,551	571	42,180
July	11,212	32,531	E 11,500	32,013	15,750	638	47,756
August	10,599	30,266	E 13,200	31,718	15,420	645	43,662
September	10,119	30,257	E 12,000	29,806	16,468	665	36,719
October	9,709	34,951	E 12,400	30,677	19,373	708	41,051
November	9,137	34,619	E 13,900	28,134	21,568	611	46,650
December	9,973	35,789	E 16,800	29,623	21,818	673	57,710
Total	128,411	393,729	E 168,300	362,860	216,737	7,534	587,230
1990							
January	10,650	35,514	E 20,800	28,313	21,484	699	57,345
February	10,097	34,268	F 15,600	25,362	17,390	649	48,176
March	11,223	34,845	E 16,400	30,292	17,567	553	41,472
April	11,165	32,533	E 13,700	29,010	18,070	629	40,422
May	11,736	29,666	E 13,400	E 29,800	18,034	660	H 45,477
June	10,988	30,091	E 12,700	E 29,100	16,976	557	F 40,801
1990 YTD	65,859	196,917	92,600	171,877	109,521	3,747	273,693
1989 YTD	67,662	195,316	88,500	180,889	106,340	3,594	313,682
1988 YTD	63,806	187,055	86,405	201,943	101,013	3,903	314,758

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas by State (Continued)
(Million Cubic Feet)

Year and Month	Louisiana	Michigan	Mississippi	Montana	New Mexico	North Dakota	Oklahoma
1984 Total	5,825,055	144,537	157,911	51,474	957,366	70,496	1,985,880
1985 Total	5,013,702	131,855	144,170	52,404	905,272	72,633	1,936,341
1986 Total	4,895,394	127,287	140,833	46,592	702,614	55,098	1,917,493
1987 Total	5,122,509	146,996	139,727	46,456	823,773	62,258	2,004,797
1988							
January	489,503	12,922	10,167	5,159	85,471	4,992	185,737
February	445,057	11,869	9,842	4,746	72,987	4,671	172,119
March	454,289	12,317	12,267	4,131	74,098	4,980	176,902
April	417,561	11,160	11,025	3,246	61,934	4,773	166,061
May	437,323	12,993	13,653	3,215	66,043	5,131	170,902
June	404,480	12,943	7,565	3,276	61,230	5,008	167,219
July	416,209	12,550	7,964	2,997	57,384	5,046	172,969
August	423,979	12,225	10,363	3,713	62,752	4,973	173,393
September	375,326	11,944	10,001	3,898	61,629	4,140	174,621
October	425,295	11,490	10,149	5,463	59,083	4,520	176,889
November	443,353	12,170	10,027	5,918	60,000	4,862	177,191
December	467,897	11,561	10,032	5,893	70,097	4,651	183,810
Total	5,180,267	146,145	124,053	51,654	791,819	57,747	2,106,632
1989							
January	456,935	12,129	9,885	5,285	76,385	4,534	171,407
February	412,186	12,715	8,724	4,740	71,990	3,874	170,435
March	447,078	12,637	8,780	4,789	72,556	4,309	178,866
April	425,344	12,663	9,364	4,372	67,421	4,252	182,017
May	431,478	12,812	9,204	3,797	65,556	4,417	190,207
June	408,474	14,724	8,932	2,541	60,526	4,136	183,465
July	403,879	12,896	8,693	3,165	67,229	4,468	185,458
August	403,686	12,807	8,987	3,369	70,746	3,771	180,743
September	381,306	13,696	6,984	4,257	67,447	3,935	174,864
October	402,685	13,326	7,194	4,858	70,808	4,566	185,799
November	427,222	13,955	7,632	5,036	80,013	4,418	190,129
December	477,852	11,628	8,266	5,098	83,938	4,494	191,814
Total	5,078,125	155,988	102,645	51,307	854,615	51,174	2,185,204
1990							
January	^b 484,445	14,451	8,360	5,291	86,860	4,681	^E 186,000
February	^b 424,394	12,737	7,677	4,711	79,375	4,221	^E 168,533
March	^b 450,096	13,702	8,359	4,229	81,171	4,700	^E 175,918
April	^b 426,415	14,745	7,886	4,546	75,750	4,562	^E 179,017
May	^b 435,138	12,988	7,885	3,397	76,645	4,413	^E 184,349
June	^b 412,576	14,773	8,090	3,438	74,052	4,254	^E 181,950
1990 YTD	2,633,064	83,396	48,257	25,612	473,862	26,831	1,075,767
1989 YTD	2,581,495	77,680	54,889	25,524	414,434	25,522	1,076,397
1988 YTD	2,628,213	74,204	65,519	23,773	420,872	29,555	1,047,960

See footnotes at end of table.

Table 7. Marketed Production of Natural Gas by State (Continued)
(Million Cubic Feet)

Year and Month	Texas	Utah	West Virginia	Wyoming	Other ^a States	U.S. Total
1984 Total	6,185,021	74,698	143,730	516,689	462,539	18,229,638
1986 Total	6,052,663	83,406	144,883	416,565	467,294	17,197,899
1986 Total	6,151,776	90,013	135,431	403,266	481,584	16,790,910
1987 Total	6,128,315	87,158	180,000	497,980	457,830	17,348,637
1988						
January	575,425	10,268	17,005	48,751	40,008	1,656,588
February	529,339	9,369	16,449	34,516	39,504	1,508,217
March	548,365	9,602	15,227	50,106	39,605	1,573,882
April	507,830	8,280	14,671	48,261	37,589	1,440,411
May	514,825	9,197	14,226	35,440	37,589	1,475,100
June	493,090	7,475	14,116	43,307	36,884	1,401,600
July	513,708	7,287	14,004	37,103	37,388	1,420,282
August	521,584	8,275	13,670	29,618	38,698	1,440,317
September	484,953	8,562	13,560	42,143	37,188	1,368,776
October	526,788	8,032	11,892	43,810	39,705	1,476,023
November	525,427	10,031	15,005	45,919	38,295	1,504,524
December	544,695	4,993	15,116	50,065	39,605	1,586,259
Total	6,286,029	101,372	174,942	509,058	462,056	17,841,474
1989						
January	545,845	11,563	19,100	63,140	41,235	1,597,461
February	498,336	10,831	19,700	54,794	40,722	1,476,349
March	541,753	10,346	18,200	56,294	40,824	1,563,865
April	518,207	9,313	16,700	51,686	38,773	1,491,410
May	525,157	10,134	15,900	56,519	38,978	1,511,166
June	508,113	7,824	16,600	52,138	37,850	1,449,198
July	520,968	10,092	15,300	51,594	38,383	1,473,505
August	516,596	9,588	14,900	50,036	39,696	1,460,435
September	491,862	8,462	14,500	51,023	38,158	1,392,528
October	512,554	9,473	12,700	55,332	40,722	1,468,886
November	517,874	10,130	16,400	58,195	39,286	1,524,909
December	544,810	12,533	17,200	64,948	40,620	1,634,787
Total	6,241,425	120,089	198,200	665,699	475,227	18,044,499
1990						
January	570,208	14,705	19,000	61,622	41,100	1,675,528
February	506,557	12,782	22,800	56,233	40,600	1,491,962
March	541,062	12,822	20,100	62,938	40,700	1,568,149
April	513,659	9,820	19,700	56,500	38,700	1,496,647
May	527,747	11,992	17,600	54,733	37,400	1,523,060
June	513,071	12,060	18,100	48,413	36,400	1,468,390
1990 YTD	3,172,304	73,990	121,100	340,439	234,900	9,223,736
1989 YTD	3,137,561	59,811	107,200	334,571	238,382	9,089,449
1988 YTD	3,168,874	54,191	91,694	260,381	231,179	9,055,298

^a Includes Arizona, Illinois, Indiana, Kentucky, Maryland, Missouri, Nebraska, New York, Ohio, Oregon, Pennsylvania, South Dakota, Tennessee, and Virginia. The 1990 monthly values for these States are estimated.

^b Total marketed production for Louisiana in January - June 1990 were estimated on the basis of production reported in January - December 1989, seasonally adjusted.

^c Total marketed production for Texas in February 1990 represents reported data for State onshore and estimated data for Outer Continental Shelf (OCS) producing areas.

^E Estimated Data.

^R Revised Data.

Notes and Sources: See the last page of this section.

Table 8. Well Determination Filings
(Volume in Billion Cubic Feet)

Year and Month	Section 102 ^a			Section 103 ^b			Section 107 ^c		
	Number of Filings ^a		Estimated Annual Volume ^f	Number of Filings ^a		Estimated Annual Volume ^f	Number of Filings ^a		Estimated Annual Volume ^f
	Total	With Volumes		Total	With Volumes		Total	With Volumes	
1984 Total	10,187	8,071	2,432	16,048	12,751	1,217	9,656	7,846	757
1985 Total	9,052	7,028	1,905	15,896	12,531	1,455	10,940	8,766	741
1986 Total	4,631	3,620	1,010	11,348	8,956	959	6,709	4,874	367
1987 Total	2,387	1,787	471	5,717	4,548	532	6,655	4,242	248
1988									
January	118	86	18	444	352	32	327	233	13
February	186	132	31	540	415	44	605	386	21
March	204	135	38	670	495	82	582	341	14
April	101	80	18	686	477	59	454	232	14
May	170	127	30	680	571	66	620	426	18
June	425	360	55	794	698	40	444	252	13
July	121	71	22	269	198	21	478	304	19
August	190	135	217	585	458	51	575	377	25
September	111	83	23	435	349	54	535	246	17
October	193	104	27	356	288	25	465	288	10
November	145	90	26	345	271	30	269	144	7
December	183	105	21	555	432	60	389	265	16
Total	2,147	1,508	526	6,359	5,004	563	5,743	3,494	185
1989									
January	124	97	25	389	300	31	385	286	14
February	134	103	28	400	303	54	268	219	14
March	104	78	22	392	317	23	351	234	10
April	131	93	24	384	279	40	286	217	15
May	135	107	29	405	285	30	295	192	21
June	66	44	13	294	199	18	214	136	6
July	137	110	24	462	339	38	266	218	14
August	124	91	26	313	236	24	341	259	28
September	74	61	102	269	195	32	314	268	17
October	87	73	24	448	338	57	385	293	20
November	91	69	21	233	143	20	364	302	22
December	55	41	7	205	126	13	362	229	14
Total	1,262	967	344	4,194	3,060	379	3,831	2,853	195
1990									
January	85	67	17	289	173	24	388	290	21
February	67	54	20	248	155	18	389	262	16
March	122	86	17	291	181	17	714	468	29
April	93	82	18	204	137	11	425	231	22
May	82	71	17	367	213	26	553	378	32
June	45	39	10	297	224	22	468	349	42
July	34	28	7	202	144	20	362	254	21
August	52	29	13	205	139	24	359	221	13
1990 YTD	580	456	117	2,103	1,366	161	3,658	2,461	197
1989 YTD	955	723	190	3,039	2,258	257	2,406	1,761	122
1988 YTD	1,515	1,126	429	4,668	3,664	395	4,085	2,551	136

See footnotes at end of table.

Table 8. Well Determination Filings (Continued)
(Volume in Billion Cubic Feet)

Year and Month	Section 108 ^a			Total		
	Number of Filings ^b		Estimated Annual Volume ^f	Number of Filings ^b		Estimated Annual Volume ^f
	Total	With Volumes		Total	With Volumes	
1984 Total	12,653	7,633	124	48,524	36,301	4,531
1985 Total	9,740	5,304	74	45,628	33,629	4,174
1986 Total	7,215	4,115	50	29,903	21,566	2,383
1987 Total	5,061	3,179	58	19,820	13,756	1,309
1988						
January	686	542	5	1,575	1,213	68
February	420	242	3	1,751	1,175	99
March	554	475	4	2,010	1,446	137
April	372	233	3	1,613	1,022	94
May	572	448	8	2,042	1,572	123
June	179	102	3	1,842	1,412	111
July	139	80	1	1,007	653	63
August	259	154	2	1,609	1,124	294
September	346	50	1	1,427	728	95
October	162	89	2	1,176	769	64
November	160	106	1	919	611	64
December	171	81	1	1,298	883	98
Total	4,020	2,602	34	18,269	12,608	1,309
1989						
January	120	71	1	1,018	754	71
February	136	78	1	938	703	96
March	142	61	1	989	690	56
April	170	103	1	971	692	80
May	408	326	1	1,243	910	81
June	163	101	1	737	480	38
July	389	344	2	1,254	1,011	78
August	92	75	1	870	661	78
September	144	80	3	801	604	153
October	380	338	3	1,300	1,042	104
November	145	65	1	833	579	63
December	92	39	1	714	435	35
Total	2,381	1,681	16	11,668	8,561	934
1990						
January	344	311	7	1,106	849	69
February	89	54	1	793	525	55
March	50	30	0	1,177	765	63
April	330	308	3	1,052	758	54
May	66	26	0	1,068	688	75
June	76	32	0	886	644	74
July	116	63	3	714	489	51
August	40	24	0	656	413	50
1990 YTD	1,111	848	16	7,452	5,131	491
1989 YTD	1,620	1,159	9	8,020	5,901	578
1988 YTD	3,181	2,276	29	13,449	9,617	989

^a New natural gas and certain natural gas produced from the Outer Continental Shelf.

^b New onshore production wells.

^c High cost natural gas.

^d Stripper well natural gas.

^e Not all filings report estimated volumes. The "With Volumes" columns show number reporting volumes.

^f Annual volumes are often estimated by producers prior to actual operations or based on short periods of operation. For this reason the accuracy of estimates may vary.

Notes and Sources: See the last page of this section.

Table 9. Well Determination Filings by State, August 1990
(Volume in Million Cubic Feet)

State	Section 102 ^a			Section 103 ^b			Section 107 ^c		
	Number of Filings ^e		Estimated Annual Volume ^f	Number of Filings ^e		Estimated Annual Volume	Number of Filings ^e		Estimated Annual Volume
	Total	With Volumes		Total	With Volumes		Total	With Volumes	
California	0	0	0	1	1	153	0	0	0
Colorado	0	0	0	16	16	1,533	21	18	1,733
Kentucky	0	0	0	30	9	432	56	38	1,081
Louisiana	21	15	7,667	28	18	7,260	11	6	463
Maryland	0	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	6	6	162
Montana	0	0	0	0	0	0	0	0	0
New Mexico	2	2	320	19	4	2,257	91	18	5,570
North Dakota	0	0	0	1	1	25	0	0	0
Ohio	0	0	0	4	4	268	65	57	1,210
Oklahoma	11	0	0	24	20	2,482	0	0	0
Pennsylvania	1	1	50	10	9	197	18	18	358
Texas	17	11	4,520	53	39	8,045	18	9	1,412
West Virginia	0	0	0	18	17	398	73	51	1,154
Wyoming	0	0	0	1	1	515	0	0	0
Total	52	29	12,557	205	139	23,565	359	221	13,143

See footnotes at end of table.

Table 9. Well Determination Filings by State, August 1990 (Continued)
(Volume in Million Cubic Feet)

State	Section 108 ^d			Total		
	Number of Filings ^e		Estimated Annual Volume ^f	Number of Filings ^e		Estimated Annual Volume ^f
	Total	With Volumes		Total	With Volumes	
California	0	0	0	1	1	153
Colorado	0	0	0	37	34	3,266
Kentucky	0	0	0	86	47	1,513
Louisiana	0	0	0	60	39	15,390
Maryland	1	1	8	1	1	8
Michigan	0	0	0	6	6	162
Montana	4	1	20	4	1	20
New Mexico	8	4	7	120	28	8,154
North Dakota	0	0	0	1	1	25
Ohio	0	0	0	69	61	1,478
Oklahoma	16	11	158	51	31	2,640
Pennsylvania	0	0	0	29	28	605
Texas	5	2	47	93	61	14,024
West Virginia	6	5	53	97	73	1,605
Wyoming	0	0	0	1	1	515
Total	40	24	293	656	413	49,558

^a New natural gas and certain natural gas produced from the Outer Continental Shelf.

^b New onshore production wells.

^c High cost natural gas.

^d Stripper well natural gas.

^e Not all filings report estimated volumes. The "With Volumes" columns show number reporting volumes.

^f Annual volumes are often estimated by producers prior to actual operations or based on short periods of operation. For this reason the accuracy of estimates may vary.

Notes and Sources: See the last page of this section.

Table 10. Well Determination Filings by Category, August 1990
(Volumes in Million Cubic Feet)

NGPA Category	Total Filings	Filings Reporting Volume	Estimated Annual Volume ^{a b}
Section 102 ^c			
New OCS Lease	0	0	0
New Onshore Well (2.5 miles)	2	2	232
New Onshore Well (1,000 ft. deeper)	0	0	0
New Onshore Reservoir	44	21	9,012
New Reservoir on Old OCS Lease	5	5	2,893
Unspecified	1	1	420
Total	52	29	12,557
Section 103 ^d			
Less than 5,000 Feet Deep	85	44	5,170
5,000 Feet and Deeper	102	91	17,508
Depth Not Reported	18	4	888
Total	205	139	23,565
Section 107 ^e			
Deep	4	2	457
Geopressurized Brine	0	0	0
Coal Seam Gas	93	20	5,770
Devonian Shale	136	103	2,383
Production Enhancement	0	0	0
New Tight Formation	125	96	4,531
Recompletion Tight Formation	0	0	0
Unspecified	1	0	0
Total	359	221	13,143
Section 108 ^f			
Stripper Well	32	24	293
Seasonally Affected	0	0	0
Enhanced Recovery	3	0	0
Temporary Pressure Buildup	5	0	0
Unspecified	0	0	0
Total	40	24	293
Total All Sections	656	413	49,558

^a Includes all filings reporting volume.

^b Annual volumes are often estimated by producers prior to actual operations or based on short periods of operation. For this reason the accuracy of estimates may vary.

^c New natural gas and certain natural gas produced from the Outer Continental Shelf.

^d New onshore production wells.

^e High cost natural gas.

^f Stripper well natural gas.

Notes and Sources: See the last page of this section.

Table 11. Natural Gas Ceiling Prices by Category of Gas, Type of Sale, or Contract^a
(Dollars per Million Btu)

NGPA Category	Oct. 1990	Oct. 1989	Oct. 1988	Oct. 1987	Oct. 1986	Oct. 1985	Oct. 1984
Section 102 New Natural Gas, Certain OCS Gas ^b	5.913	5.459	5.023	4.690	4.376	4.091	3.797
Section 103 (b)(1) New Onshore Production Wells ^b	3.640	3.488	3.333	3.231	3.131	3.038	2.933
Section 103 (b)(2) New Onshore Production Wells ^b	--	--	3.333	--	3.754	3.565	--
Section 105 ^c Intrastate Existing Contracts	5.605	5.222	4.849	4.572	4.306	4.063	--
Section 106 (b)(1)(B) Alternate Maximum Lawful Price for Certain Intrastate Rollover Gas ^d	2.083	1.996	1.906	1.849	1.790	1.739	1.676
Section 107 Gas Produced from Tight Formations	7.280	6.976	6.666	6.462	6.262	6.076	5.866
Section 108 Stripper Gas	6.332	5.846	5.379	5.022	4.687	4.379	4.066
Section 109 Not Otherwise Covered	3.011	2.888	2.761	2.677	2.593	2.518	2.428
Section 104 and 106 (a) Post-1974 Gas: All Producers	3.011	2.888	2.761	2.677	2.593	2.518	2.428
1973-1974 Biennium Gas Small Producer	2.540	2.438	2.330	2.261	2.192	2.129	2.057
Large Producer	1.948	1.867	1.783	1.729	1.675	1.624	1.567
Interstate Rollover Gas: ^e Small Producer	1.117	1.072	1.024	.994	.964	.934	.901
Large Producer	1.117	1.072	1.024	.994	.964	.934	.901
Replacement Contract Gas or Recompletion Gas Small Producer	1.431	1.372	1.310	1.268	1.229	1.196	1.153
Large Producer	1.093	1.048	1.003	.975	.945	.915	.882
Flowing Gas: Small Producer	.722	.692	.662	.644	.623	.605	.584
Large Producer	.607	.583	.559	.544	.523	.511	.493
Certain Permian Basin Gas: Small Producer	.851	.817	.781	.754	.733	.712	.688
Large Producer	.754	.721	.688	.670	.649	.631	.607
Certain Rocky Mountain Gas: Small Producer	.851	.817	.781	.754	.733	.712	.688
Large Producer	.722	.692	.662	.644	.623	.605	.584
Certain Appalachian Basin Gas North Subarea Contracts dated a/for Oct. 7, 1969	.688	.658	.628	.613	.592	.574	.553
Other Contracts	.636	.609	.583	.568	.547	.529	.511
Minimum Rate Gas: All Producers (dollars per Mcf)	.373	.358	.346	.334	.325	.313	.301

^a See Appendix A, Explanatory Note 10 for discussion of Title I of the Natural Gas Policy Act.

^b Commencing January 1, 1985 and July 1, 1987, the price of some natural gas finally determined to be natural gas produced from a new, onshore production well under Section 103 is deregulated. Thus, for all months succeeding June 1987 publication of a maximum lawful price per MMBtu under NGPA Section 103(b)(2) is discontinued.

^c New category as of January 1, 1985.

^d Section 106(b) of the NGPA provides that for certain gas sold under an intrastate rollover contract, the maximum lawful price is the higher of the price paid under the expired contract, adjusted for inflation or an alternative Maximum Lawful Price specified in this table. This alternative Maximum Lawful Price for each month appears in this row.

^e The price for interstate rollover gas is the higher of the price listed in this table or the just and reasonable price under the expired contract as adjusted for inflation.

Not Applicable

Notes and Sources: See the last page of this section.

Table 12. Revenues, Expenses, and Income of Major Interstate Natural Gas Pipeline Companies
(Million Dollars)

Year and Month	Total Sales Volume ^a (Bcf)	Gas Operating Revenues	Gas Operating Expenses				Total Operating Income	Total Income Before Interest Charges and Extraordinary Expenses	Net Income ^c
			Operation and Maintenance	Depreciation, Depletion, and Amortization	Taxes ^b	Total Gas Operating Expenses			
1984 Total	12,596	53,629	42,250	1,693	630	50,467	3,168	5,279	3,227
1985 Total	11,286	48,470	42,071	1,655	666	45,835	2,582	4,303	1,791
1986 Total	8,130	34,541	28,538	1,672	602	32,250	2,335	3,761	1,490
1987 Total	6,758	27,469	21,871	1,520	552	25,151	2,333	3,493	1,414
1988									
January	1,152	3,860	3,147	137	56	3,500	360	485	306
February	939	3,337	2,711	155	54	3,033	304	423	255
March	606	2,414	1,855	133	50	2,151	263	441	240
April	378	1,720	1,312	126	48	1,648	185	339	160
May	317	1,550	1,193	118	46	1,376	174	325	163
June	308	1,515	1,468	123	46	1,568	-53	93	20
July	315	1,483	1,124	126	43	1,215	268	-62	-159
August	347	1,681	1,324	131	45	1,680	4	226	73
September	321	1,595	1,628	129	47	1,531	64	-67	-253
October	435	1,949	1,591	141	51	1,775	172	158	-43
November	504	2,395	2,387	133	48	2,467	-83	50	-148
December	792	3,138	2,900	127	48	2,996	145	939	752
Total	6,414	26,637	22,640	1,579	582	24,940	1,803	3,350	1,366
1989									
January	711	2,902	2,278	132	56	2,589	313	454	280
February	721	2,922	2,306	137	56	2,619	303	447	267
March	520	2,436	2,077	130	53	2,293	144	329	130
April	357	1,885	1,461	120	54	1,678	207	304	122
May	305	1,945	1,547	130	44	1,769	169	351	168
June	252	1,471	1,141	129	51	1,331	138	331	162
July	271	1,520	1,192	129	51	1,382	138	222	43
August	300	1,565	1,214	131	51	1,406	158	293	110
September	303	1,695	1,279	154	40	1,513	172	353	190
October	388	1,827	1,754	103	50	1,781	46	212	57
November	518	2,443	1,965	119	48	2,230	213	396	228
December	1,006	4,092	3,550	79	42	3,675	418	713	397
Total	5,652	26,703	21,764	1,493	596	24,266	2,419	4,420	2,154
1990									
January	710	3,106	2,495	130	59	2,783	323	492	326
February	584	2,501	1,977	121	57	2,240	262	401	243
March	440	2,200	1,638	96	56	1,899	301	456	355
April	343	1,733	1,329	124	53	1,550	183	365	208
May	278	1,525	1,183	111	52	1,371	154	294	141
June	246	1,460	1,110	108	52	1,270	189	398	234
July	349	1,492	1,173	123	53	1,359	133	215	62

^a Includes sales for resale and sales to ultimate consumers.

^b Excludes income taxes.

^c Total Income before Interest Charges and Extraordinary Expenses and Investment Tax Credits minus Income Taxes, Interest Charges, and Extraordinary Items.

Notes and Sources: See the last page of this section.

Table 13. Volumes and Prices of Natural Gas Sold by Major Interstate Natural Gas Pipeline Companies
(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Year and Month	To Industrial Users		To Other Ultimate Consumers		Total Sales to Ultimate Consumers		Sales For Resale		Total Sales of Natural Gas		Number of Companies
	Volume	Price ^a	Volume	Price ^a	Volume	Price ^a	Volume	Price ^a	Volume	Price ^a	
1984 Total	702,540	4.13	388,780	5.34	1,091,320	4.56	9,020,704	3.99	10,112,024	4.05	44
1985 Total	885,254	3.91	557,602	5.30	1,442,856	4.45	8,074,803	3.90	9,517,659	3.98	45
1986 Total	549,956	3.23	433,058	5.08	983,014	4.04	6,023,893	3.69	7,006,907	3.74	48
1987 Total	442,041	3.07	301,567	5.06	743,608	3.91	5,213,629	3.37	5,957,237	3.44	47
1988											
January	31,555	2.94	81,597	4.61	113,152	4.14	899,736	2.99	1,012,888	3.11	46
February	20,698	2.96	68,547	4.76	89,245	4.34	729,882	3.11	819,127	3.25	46
March	23,154	2.83	50,926	4.88	74,080	4.24	469,116	3.27	543,196	3.40	46
April	24,440	2.67	17,334	5.41	41,774	3.81	304,224	3.57	345,998	3.60	46
May	25,651	2.36	19,724	4.95	45,375	3.49	238,526	3.85	283,901	3.79	46
June	28,916	2.52	17,336	5.94	46,252	3.80	224,768	3.85	271,020	3.85	46
July	28,489	2.45	18,472	5.82	46,961	3.78	222,087	3.73	269,048	3.74	46
August	30,159	2.51	19,904	5.66	50,063	3.76	252,794	3.95	302,857	3.92	46
September	26,001	2.40	15,716	6.19	43,965	3.80	230,466	4.01	274,431	3.98	46
October	17,982	2.63	28,309	5.42	46,467	4.30	329,151	3.75	375,442	3.84	46
November	18,263	2.85	38,695	5.10	54,539	4.44	364,104	4.22	421,062	4.25	46
December	19,513	2.82	64,123	4.42	83,636	4.05	601,339	3.34	684,975	3.42	46
Total	294,821	2.65	440,683	4.99	735,509	4.05	4,866,193	3.47	5,603,945	3.55	46
1989											
January	23,906	2.80	64,345	4.83	88,251	4.28	540,346	3.32	628,597	3.45	46
February	57,581	2.45	69,901	4.73	127,474	3.74	556,103	3.37	683,577	3.44	46
March	34,247	2.29	56,503	4.96	90,750	3.95	379,148	3.47	469,898	3.57	47
April	31,606	2.69	34,276	5.40	65,882	4.10	248,753	3.80	314,469	3.85	48
May	32,223	2.66	21,016	5.59	53,239	3.82	205,407	4.19	258,454	4.11	49
June	27,766	2.68	14,648	6.19	42,414	3.89	171,725	4.19	214,139	4.13	49
July	41,014	2.44	17,461	5.57	58,475	3.37	^R 181,101	^R 4.24	^R 239,580	^R 4.04	48
August	32,280	2.51	18,844	4.92	51,124	3.40	221,426	3.40	272,550	3.40	49
September	33,768	2.50	16,516	5.76	50,284	3.57	225,373	3.35	275,657	3.38	50
October	29,222	2.62	25,710	5.61	54,932	4.02	289,586	3.26	344,518	3.38	50
November	25,864	2.70	41,965	5.06	67,829	4.16	408,232	3.40	476,061	3.51	50
December	23,366	3.03	84,407	4.49	107,773	4.18	795,655	3.30	903,428	3.41	50
Total	392,843	2.58	465,592	5.02	858,427	3.91	^R 4,222,855	^R 3.49	^R 5,080,928	^R 3.56	50
1990											
January	23,281	3.52	61,566	4.90	84,847	4.52	488,521	3.43	573,368	3.59	51
February	53,729	2.58	54,123	5.00	107,852	3.80	428,176	2.59	536,028	2.83	51
March	25,138	2.64	45,531	5.05	70,669	4.20	333,858	3.09	404,527	3.29	51
April	23,943	2.51	31,740	5.20	55,683	4.04	261,293	2.76	316,976	2.98	51
May	24,714	2.40	21,818	5.63	46,532	3.91	205,735	3.01	252,267	3.17	51
June	24,376	2.30	15,459	4.98	39,835	3.34	183,781	2.86	223,616	2.95	51
July	26,454	2.41	18,235	5.04	44,689	3.48	282,032	1.97	326,711	2.18	51

^a All prices are weighted averages.

^R Revised Data.

Notes and Sources: See the last page of this section.

Table 14. Volumes and Prices of Natural Gas Sold by Major Interstate Natural Gas Pipeline Companies, by Company, July 1990
(Volumes in Million Cubic Feet, Prices in Dollars per Thousand Cubic Feet)

Pipeline Company	To Industrial Users		To Other Ultimate Consumers		Total Sales to Ultimate Consumers		Sales For Resale		Total Sales of Natural Gas	
	Volume	Price*	Volume	Price*	Volume	Price*	Volume	Price*	Volume	Price*
Algonquin Gas	0	0.00	0	0.00	0	0.00	2,013	2.76	2,013	2.76
ANR	0	0.00	0	0.00	0	0.00	2,989	3.01	2,989	3.01
Arkla, Inc.	3,010	2.73	7,723	6.43	10,733	5.39	275	1.59	11,008	5.30
Boar Creek Storage	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Canyon Creek Transm Co	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Colorado Interstate	98	2.49	0	0.00	98	2.49	2,231	2.77	2,329	2.76
Columbia Gas Transm	0	0.00	0	0.00	0	0.00	98,613	2.25	98,613	2.25
Columbia Gulf	0	0.00	5	3.20	5	3.20	0	0.00	5	3.20
Consolidated Gas	5	2.60	0	0.00	5	2.60	1,283	2.20	1,288	2.21
East Tennessee	1,632	2.62	1	4.00	1,633	2.63	3,095	2.53	4,728	2.56
El Paso	2,236	2.35	0	0.00	2,236	2.35	3,375	2.21	5,611	2.26
Equitrans	0	0.00	0	0.00	0	0.00	1,525	4.39	1,525	4.39
Florida Gas	18,680	2.29	0	0.00	18,680	2.29	6,261	2.28	24,941	2.28
Groat Lakes Gas	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
High Island Offshore	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
K N Energy Inc.	47	3.06	6,350	3.72	6,397	3.72	1,060	3.06	7,457	3.62
Michigan Consolidated	274	4.68	4,042	4.55	4,316	4.56	1	2.00	4,317	4.56
Michigan Gas Storage	0	0.00	0	0.00	0	0.00	438	5.07	438	5.07
Midwestern	0	0.00	0	0.00	0	0.00	3,733	2.84	3,733	2.84
Mississippi River	138	2.82	0	0.00	138	2.82	2,814	4.56	2,952	4.48
Mountain Fuel Res	0	0.00	0	0.00	0	0.00	1,874	4.47	1,874	4.47
National Fuel	0	0.00	0	0.00	0	0.00	3,464	4.10	3,464	4.10
Natural Gas Pipeline	2	2.50	0	0.00	2	2.50	18,126	3.91	18,128	3.91
Northern Border	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Northern Natural	43	4.51	2	1.50	45	4.38	22,367	2.35	22,412	2.35
Northwest Alaskan	0	0.00	0	0.00	0	0.00	31,055	1.28	31,055	1.28
Northwest Pipeline	0	0.00	0	0.00	0	0.00	806	4.85	806	4.85
Overthrust Pipeline	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Pacific Gas Transm	0	0.00	0	0.00	0	0.00	28,540	2.55	28,540	2.55
Pacific Interstate	0	0.00	0	0.00	0	0.00	6,788	3.46	6,788	3.46
Panhandle Eastern	31	4.55	62	1.95	93	2.82	2,108	5.09	2,201	4.99
Sabine Pipeline Co	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Sea Robin Pipeline	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Southern Natural	14	3.71	0	0.00	14	3.71	4,858	3.23	4,872	3.24
Stingray Pipeline	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Tenneco, Inc.	113	2.86	0	0.00	113	2.86	2,247	3.55	2,360	3.52
Texas Eastern	0	0.00	0	0.00	0	0.00	13,687	4.54	13,687	4.54
Texas Gas Transm	0	0.00	0	0.00	0	0.00	6,369	4.77	6,369	4.77
Trailblazer Pipeline	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Transco Gas	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Transcontinental	0	0.00	0	0.00	0	0.00	20,395	2.60	20,395	2.60
Transwestern Pipeline	9	2.00	29	2.00	38	2.00	2,351	1.40	2,389	1.41
Trunkline Gas Co	0	0.00	0	0.00	0	0.00	8,122	3.72	8,122	3.72
Trunkline LNG	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
U-I Offshore	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
United Gas Pipeline	0	0.00	17	2.82	17	2.82	506	2.69	513	2.74
Valero Interstate Transm	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Viking Gas Company	0	0.00	0	0.00	0	0.00	178	1.85	178	1.85
Williams Natural	122	3.34	4	1.25	126	3.27	927	5.08	1,053	4.86
Williston Basin	0	0.00	0	0.00	0	0.00	73	3.33	73	3.33
Wyoming Interstate	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Total/Average Price*	26,454	2.41	18,235	5.04	44,689	3.48	304,547	2.07	349,226	2.25
Sales to Other Major Companies	--	--	--	--	--	--	22,515	3.40	22,515	3.40
Sales Excluding Sales to Major Companies	--	--	--	--	--	--	282,032	1.97	326,711	2.18

* All prices are computed weighted averages based on dollar and volume amounts reported, which may include or reflect out-of-period dollar or volume adjustments, restatements or revisions, or account reclassifications or provisions for ending regulatory adjustments. See Appendix A, Explanatory Note 9 for discussion of apparent anomalies.

-- Not Applicable

Notes and Sources: See the last page of this section

**Table 15. Natural and Other Gases Produced and Purchased by
Major Interstate Natural Gas Pipeline Companies
(Million Cubic Feet)**

Year and Month	Transported Gas ^a	Natural Gas ^b Production	Manufactured Gas, Liquefied Natural Gas, Gasified Coal, and Synthetic Gas Production	Purchased Natural Gas				Total
				From Producers	Intracompany Transfers	Imports	From Others	
1984 Total	7,652,245	365,796	2,121	9,190,510	NA	771,075	785,279	10,746,864
1985 Total	8,922,483	206,967	18,166	8,211,227	363,055	887,187	596,926	9,695,340
1986 Total	10,588,148	136,921	22,634	6,466,257	166,964	697,249	345,309	7,675,780
1987 Total	13,479,989	152,039	22,905	4,848,577	124,572	759,345	400,134	6,132,628
1988								
January	1,278,992	16,620	2,091	604,262	10,699	100,465	73,973	789,399
February	1,253,637	19,682	2,352	484,546	6,740	83,145	65,111	639,542
March	1,400,959	16,140	1,720	449,314	8,293	74,762	30,351	562,720
April	1,400,187	5,560	2,783	323,745	-283	75,279	8,917	407,658
May	1,291,115	7,126	2,288	324,784	4,750	67,846	13,869	411,249
June	1,230,313	9,760	2,071	308,585	7,046	68,915	8,376	392,922
July	1,222,281	11,270	993	314,460	4,886	79,748	13,860	412,954
August	1,245,290	10,678	1,635	307,875	5,057	86,241	21,116	420,289
September	1,178,750	9,996	1,854	285,403	4,054	80,533	17,737	389,579
October	1,378,349	10,478	1,814	325,497	4,363	71,791	11,894	411,011
November	1,406,500	11,449	1,789	341,016	6,544	89,842	34,112	471,514
December	1,664,134	10,862	2,570	446,633	4,730	83,816	75,667	610,846
Total	15,950,507	139,621	23,960	4,516,120	66,879	962,383	374,983	5,919,683
1989								
January	1,604,355	12,145	2,018	400,130	7,077	76,463	72,507	556,177
February	1,495,146	12,008	1,763	372,710	8,143	66,282	45,791	492,926
March	1,638,521	11,077	2,134	314,545	6,881	79,191	27,718	428,335
April	1,629,112	8,935	2,010	224,007	4,975	74,285	24,877	328,144
May	1,621,453	6,610	2,083	237,163	4,994	73,118	15,864	331,139
June	1,512,971	6,410	1,956	247,553	5,623	68,512	25,409	347,097
July	1,421,878	7,932	2,150	239,428	6,091	74,761	25,283	345,563
August	1,414,240	6,857	2,031	249,948	5,540	67,871	28,038	351,397
September	1,418,307	5,851	2,052	240,590	4,275	73,787	24,128	342,780
October	1,540,630	7,307	2,171	259,112	5,788	72,313	27,491	364,704
November	1,682,778	8,321	2,060	339,534	6,777	77,522	44,754	468,586
December	1,717,007	9,317	2,181	407,868	7,894	99,383	65,283	580,428
Total	18,696,398	102,770	24,609	3,532,588	74,058	903,488	427,143	4,937,276
1990								
January	1,843,090	9,249	2,064	487,025	7,656	102,640	73,255	670,576
February	1,653,276	7,301	1,948	356,499	5,752	77,018	27,028	466,297
March	1,777,624	8,806	2,295	297,445	6,243	79,441	23,978	407,107
April	1,660,666	6,844	2,095	221,754	4,621	81,523	24,224	332,122
May	1,666,594	6,608	2,141	248,608	5,278	79,549	19,329	352,764
June	1,500,305	6,476	1,971	237,229	4,376	78,303	20,390	340,298
July	1,530,684	7,192	2,118	231,879	7,479	80,772	25,705	345,835

^a Gas transported for other companies through the production, transmission, or distribution lines or compressor stations of the reporting pipelines.

^b Mixture of hydrocarbons existing in gaseous phase or in solution with crude oil in natural underground reservoirs.

^c Includes out-of-period adjustments to correct data in prior month.

NA Not Available.

Notes and Sources: See the last page of this section.

**Table 16. Natural and Other Gases Produced and Purchased
by Major Interstate Natural Gas Pipeline Companies, July 1990**
(Million Cubic Feet)

Pipeline Company	Transported Gas	Natural Gas Production	Manufactured Gas, Liquefied Natural Gas, Gasified Coal and Synthetic Gas Production	Purchased Natural Gas				
				From Producers	Intracompany Transfers	Imports	From Others	Total
Algonquin Gas	14,794	0	0	0	0	0	2,598	2,598
ANR	91,133	0	1,220	9,145	0	0	-42	9,103
Arkla, Inc.	43,053	0	0	3,383	0	0	9,249	12,632
Bear Creek Storage	0	0	0	0	0	0	0	0
Canyon Creek Transm Co	622	0	0	0	0	0	0	0
Colorado Interstate	27,957	4,048	0	5,323	4,048	0	0	9,371
Columbia Gas Transm	48,273	0	0	21,200	0	0	-12	21,188
Columbia Gulf	87,137	0	0	0	0	0	1,638	1,638
Consolidated Gas	21,069	1,124	0	7,320	1,366	0	1,360	10,046
East Tennessee	0	0	0	5,056	0	0	0	5,056
El Paso	105,976	* -102	0	8,302	0	0	* -1,336	6,966
Equitrans	3,393	0	0	3,456	0	0	0	3,456
Florida Gas	1,674	0	0	17,765	0	0	7,727	25,492
Groot Lakes Gas	45,826	0	0	0	0	2,341	0	2,341
High Island Offshore	35,216	0	0	0	0	0	0	0
K N Energy Inc	4,303	0	0	4,766	0	0	1,327	6,093
Michigan Consolidated	6,926	365	0	11,761	0	0	3,370	15,131
Michigan Gas Storage	15,553	0	0	0	0	0	349	349
Midwestern	14,378	0	0	3,797	0	0	39	3,836
Mississippi River	4,269	0	0	8,241	0	0	0	8,241
Mountain Fuel Res	11,888	0	0	1,083	0	0	822	1,905
National Fuel	9,729	364	0	7,553	364	0	0	7,917
Natural Gas Pipeline	105,884	1,315	898	15,102	1,315	1,709	554	18,680
Northern Border	35,616	0	0	0	0	0	0	0
Northern Natural	98,387	0	0	12,903	0	13,404	0	26,307
Northwest Alaskan	0	0	0	0	0	31,055	0	31,055
Northwest Pipeline	57,477	* -3	0	1,920	* -3	1,494	0	3,411
Overthrust Pipeline	1,767	0	0	0	0	0	0	0
Pacific Gas Transm	9,729	0	0	180	0	29,038	0	29,218
Pacific Interstate	0	0	0	0	0	0	7,456	7,456
Panhandle Eastern	35,551	0	0	6,313	0	0	30	6,343
Sabine Pipeline Co	10,765	0	0	0	0	0	0	0
Sea Robin Pipeline	19,019	0	0	64	0	0	0	64
Southern Natural	27,279	0	0	9,430	0	0	0	9,430
Stringray Pipeline	27,487	0	0	0	0	0	0	0
Tenneco, Inc	119,859	28	0	2,264	0	1,023	6,349	9,636
Texas Eastern	51,889	53	0	15,720	0	618	4,515	20,853
Texas Gas Transm	42,691	0	0	6,911	0	0	3,934	10,845
Trailblazer Pipeline	4,547	0	0	0	0	0	0	0
Transco Gas	0	0	0	0	0	0	0	0
Transcontinental	111,106	0	0	20,557	0	0	1,165	21,722
Transwestern Pipeline	26,766	0	0	1,688	0	0	0	1,688
Trunkline Gas Co	31,211	0	0	8,792	0	0	0	8,792
Trunkline LNG	0	0	0	0	0	0	0	0
U.T. Offshore	24,523	0	0	0	0	0	0	0
United Gas Pipeline	60,165	0	0	5,903	0	0	316	6,219
Valero Interstate Transm	2,769	0	0	0	0	0	0	0
Viking Gas Company	10,013	0	0	0	0	90	0	90
Williams Natural	15,328	0	0	4,067	0	0	154	4,221
Williston Basin	3,177	0	0	1,914	389	0	0	2,303
Wyoming Interstate	4,510	0	0	0	0	0	0	0
Total	1,530,684	7,192	2,118	231,879	7,479	80,772	51,560	371,690
Purchases from Other Major Companies				0	0	0	25,855	25,855
Purchases Excluding Purchases from Other Major Companies				231,879	7,479	80,772	25,705	345,835

* Includes out-of-period adjustments to correct data in prior month

- - - Not Applicable

Notes and Sources See the last page of this section.

**Table 17. Underground Natural Gas Storage
(All Operators)
(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 ^c
1984 Total^a	3,830	2,876	6,706	281	10.8	2,252	2,064	188
1985 Total^a	3,842	2,607	6,448	-270	-9.4	2,128	2,359	-231
1986 Total^a	3,819	2,749	6,567	142	5.5	1,952	1,812	140
1987 Total^a	3,792	2,756	6,548	7	.3	1,887	1,881	6
1988								
January	3,792	2,228	6,020	-52	-2.3	47	578	-531
February	3,791	1,827	5,618	-161	-8.1	50	456	-406
March	3,790	1,682	5,473	-197	-10.5	99	255	-156
April	3,790	1,769	5,559	-169	-8.7	162	92	71
May	3,790	2,027	5,818	-179	-8.1	282	46	236
June	3,792	2,293	6,085	-144	-5.9	274	36	238
July	3,793	2,567	6,359	-69	-2.6	294	42	252
August	3,791	2,835	6,626	-1	---	282	52	230
September	3,791	3,120	6,911	71	2.3	308	46	262
October	3,792	3,243	7,035	137	4.4	198	92	105
November	3,803	3,171	6,974	112	3.7	117	157	-40
December	3,800	2,850	6,650	94	3.4	62	391	-329
Total	--	--	--	--	--	2,174	2,244	-69
1989								
January	3,798	2,509	6,307	281	12.6	53	418	-365
February	3,801	1,994	5,796	168	9.2	32	602	-570
March	3,801	1,776	5,578	94	5.6	106	362	-256
April	3,801	1,823	5,624	54	3.0	181	138	43
May	3,802	2,062	5,863	34	1.7	321	44	277
June	3,802	2,374	6,176	82	3.6	375	20	355
July	3,802	2,644	6,446	77	3.0	371	29	341
August	3,802	2,938	6,740	103	3.6	356	29	328
September	3,802	3,187	6,990	67	2.2	320	39	281
October	3,792	3,268	7,061	25	.8	221	96	124
November	3,809	3,199	7,008	28	.9	105	223	-118
December	3,812	2,513	6,325	-337	-11.8	52	805	-752
Total	--	--	--	--	--	2,493	2,804	-311
1990								
January	3,818	2,265	6,083	-243	-9.7	91	339	-248
February	3,814	2,013	5,827	19	.9	70	324	-253
March	3,818	1,878	5,695	101	5.7	124	256	-131
April	3,839	1,932	5,771	109	6.0	183	140	43
May	3,873	2,159	5,982	97	4.7	289	45	245
June	3,844	2,454	6,297	79	3.3	327	42	285
July	3,850	2,747	6,597	103	3.9	325	27	298
August	3,851	2,995	6,846	57	1.9	321	37	283

^a Total as of December 31.

^b Total underground storage capacity at the end of each calendar Year (in billion cubic feet): 1984 - 8,043; 1985 - 8,087; 1986 - 8,145; 1987 and 1988 - 8,124; and 1989 - 8,124. Current total capacity is 8,125.

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

--- Not Applicable

Notes and Sources: See the last page of this section.

Figure 6. Underground Natural Gas Storage in the United States

Source: Form EIA-191, Form FERC-8, and Form EIA-176.

Table 18. Underground Natural Gas Storage
(Interstate Operators of Storage Fields)
(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 ^a	Volume	Percent	Injections	Withdrawals	Net ^c
1984 Total^a	2,511	2,094	4,605	257	14.0	1,090	1,522	174
1985 Total^a	2,517	1,905	4,422	-180	-9.0	1,590	1,758	-167
1986 Total^a	2,483	2,010	4,492	104	5.5	1,448	1,353	95
1987 Total^a	2,461	2,024	4,485	14	.7	1,304	1,347	17
1988								
January	2,461	1,620	4,081	-66	-3.9	27	430	-403
February	2,461	1,317	3,778	-158	-10.7	30	338	-303
March	2,460	1,226	3,686	-193	-13.6	78	173	-95
April	2,460	1,298	3,755	-167	-11.4	124	55	69
May	2,460	1,490	3,950	-171	-10.3	214	22	192
June	2,462	1,688	4,150	-138	-7.6	200	13	193
July	2,462	1,892	4,353	-69	-3.5	216	13	203
August	2,462	2,081	4,543	-26	-1.2	203	20	183
September	2,462	2,282	4,744	29	1.3	218	21	197
October	2,462	2,349	4,810	82	3.6	132	67	65
November	2,469	2,316	4,785	89	4.0	87	111	-24
December	2,469	2,092	4,561	68	3.3	47	269	-222
Total	---	---	---	---	---	1,587	1,532	55
1989								
January	2,469	1,881	4,350	261	16.1	41	271	-230
February	2,469	1,515	3,983	197	15.0	18	430	-413
March	2,469	1,343	3,812	117	9.5	71	278	-206
April	2,469	1,357	3,825	61	4.7	125	109	16
May	2,469	1,519	3,988	29	1.9	230	34	196
June	2,469	1,748	4,217	59	3.5	277	11	266
July	2,469	1,960	4,429	68	3.6	282	14	268
August	2,469	2,170	4,639	88	4.2	258	18	240
September	2,469	2,348	4,817	65	2.9	232	26	207
October	2,461	2,380	4,847	37	1.6	154	77	77
November	2,478	2,305	4,783	-11	-.5	73	175	-103
December	2,478	1,764	4,242	-328	-15.7	28	630	-602
Total	---	---	---	---	---	1,788	2,072	-285
1990								
January	2,479	1,597	4,076	-285	-15.1	72	240	-169
February	2,479	1,446	3,926	-69	-4.5	60	206	-146
March	2,479	1,371	3,850	28	2.1	101	176	-74
April	2,479	1,427	3,906	70	5.2	131	107	24
May	2,459	1,586	4,046	67	4.4	202	36	167
June	2,479	1,793	4,273	46	2.6	233	32	201
July	2,486	2,012	4,498	52	2.7	238	15	223
August	2,487	2,186	4,673	16	.7	227	18	210

^a Total as of December 31.

^b Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1984 - 5,557; 1985 - 5,602; 1986 - 5,642; 1987 and 1988 - 5,622, and 1989 - 5,622. Current total capacity is 5,622.

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

--- Not Applicable.

Notes and Sources: See the last page of this section.

Table 19. Underground Natural Gas Storage
(Intrastate Operators and Independent Producers)
(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 ^c
1984 Total^a	1,319	782	2,101	23	1.1	558	543	14
1985 Total^a	1,325	701	2,026	81	-10.3	538	602	64
1986 Total^a	1,336	739	2,075	38	5.4	504	459	45
1987 Total^a	1,331	732	2,063	-7	-1	522	533	-11
1988								
January	1,331	608	1,939	14	2.4	20	148	-128
February	1,331	509	1,840	-3	-0	14	118	-104
March	1,331	456	1,787	-4	-0.8	20	82	-62
April	1,330	474	1,804	2	.3	39	37	2
May	1,331	537	1,868	-8	-1.4	68	24	44
June	1,331	604	1,935	-8	-1.0	68	23	46
July	1,331	675	2,006	*	*	78	29	49
August	1,329	754	2,083	25	3.5	80	32	47
September	1,329	838	2,167	42	5.3	90	25	66
October	1,330	894	2,225	55	6.5	60	26	40
November	1,334	854	2,189	23	2.7	30	46	-16
December	1,331	758	2,089	26	3.6	14	122	-107
Total						587	711	-124
1989								
January	1,329	628	1,957	20	3.3	12	147	-135
February	1,332	480	1,812	-30	-5.8	14	172	-157
March	1,332	433	1,765	23	-5.1	35	84	-50
April	1,332	406	1,739	-7	-1.5	56	29	27
May	1,332	543	1,875	6	1.0	91	10	81
June	1,332	627	1,959	23	3.7	98	9	89
July	1,333	604	2,017	9	1.3	89	15	74
August	1,333	768	2,101	14	1.9	99	10	89
September	1,333	840	2,173	2	.2	88	13	74
October	1,331	883	2,214	12	1.3	67	19	47
November	1,331	893	2,225	39	4.6	32	47	-15
December	1,335	749	2,083	-9	-1.2	25	175	-150
Total						705	732	-26
1990								
January	1,338	669	2,007	41	6.6	20	99	-79
February	1,335	567	1,901	87	18.2	11	118	-107
March	1,338	507	1,845	74	17.0	23	80	-57
April	1,360	505	1,865	39	8.3	52	33	19
May	1,364	573	1,937	30	5.5	87	9	78
June	1,365	660	2,025	34	5.4	94	10	84
July	1,364	735	2,099	51	7.5	86	12	75
August	1,364	809	2,173	41	5.3	93	20	73

^a Total as of December 31

^b Total underground storage capacity at the end of each calendar year (in billion cubic feet): 1984 - 2,467; 1985 - 2,485; 1986 - 2,503; 1987 and 1988 - 2,502, and 1989 - 2,502. Current total capacity is 2,503.

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

* Not Applicable

^d Volume is less than 500 million cubic feet

Notes and Sources: See the last page of this section

**Table 20. Activities of Multi-State Underground Natural Gas Storage Operators,
August 1990**
(Volume in Million Cubic Feet)

Pipeline Company	Storage Capacity		Natural Gas in Underground Storage at End of Period			Change in Working Gas from Same Period Previous Year		Net Injections or Withdrawals*	
	By Individual State	Total	Base Gas	Working Gas	Total	Volume	Percent	Current Period	Same Period Previous Year
Arkla, Inc.	KS 2,393 OK 50,152	67,545	30,674	16,435	47,109	3,433	17.3	994	3,552
Colorado Interstate	CO 56,289 KS 24,800	81,089	46,302	22,113	68,415	1,579	7.7	4,811	5,097
Columbia Gas Transm	NY 18,285 PA 36,494 OH 434,695 WV 283,085	773,159	429,041	234,087	663,128	7,762	3.2	20,562	10,178
Consolidated Gas	NY 35,904 PA 497,077 WV 180,356	713,337	364,384	279,375	643,759	16,186	6.1	43,589	45,575
Equitrans Inc.	PA 23,286 WV 38,240	61,526	31,648	20,726	52,374	-3,466	-14.3	4,190	3,369
K N Energy Inc.	CO 5,692 NE 88,438 KS 5,845	90,975	33,158	61,198	94,357	2,229	3.5	456	401
Mississippi River	IL 4,100 LA 82,300	86,400	53,986	17,514	71,499	-1,202	-6.4	5,092	6,347
National Fuel	NY 56,400 PA 191,783	248,183	96,683	64,819	161,502	5,080	8.5	7,780	7,180
Natural Gas Pipeline	IL 220,400 OK 86,000 IA 191,000 TX 144,000	641,400	178,958	362,647	541,605	-14,017	-3.7	22,970	15,995
Northern Natural	IA 120,000 KS 107,000	227,000	130,500	34,955	165,455	-2,715	-7.2	8,973	7,488
Panhandle Eastern	IL 70,000 OK 21,600 MI 32,000	123,600	77,026	29,447	106,473	1,245	4.4	3,033	4,199
Phillips Petroleum	OK 2,150 UT 3,000 TX 2,065	7,215	1,623	5,759	7,382	2,559	30.0	201	117
Questar Pipeline Co	UT 111,980 WY 10,000	121,980	56,676	21,003	77,680	5,560	36.0	5,738	2,045
Texas Gas Transm	IN 11,272 KY 161,279	172,550	90,169	77,407	167,575	-3,527	-4.4	4,202	5,854
Transcontinental	LA 143,500 MS 8,361	151,861	57,567	61,165	118,732	-3,953	-6.1	9,595	8,923
United Gas Pipeline	LA 141,000 MS 5,550	146,550	75,024	42,956	117,980	5,490	14.7	3,457	4,232
Williams Natural	KS 112,983 OK 55,298	168,281	111,978	29,758	141,736	492	1.7	5,009	4,827
Williston Basin	MT 287,200 WY 66,610	353,810	75,202	211,883	287,084	-9,411	-4.3	2,830	1,235
Total		4,245,461	1,940,599	1,593,246	3,533,845	-13,525	-8	151,203	136,623

* Positive numbers indicate the volume of injections in excess of withdrawals. Negative numbers indicate the volume of withdrawals in excess of injections.
Not Applicable
Notes and Sources: See the last page of this section.

**Table 21. Activities of Single-State Underground Natural Gas Storage Operators,
by State, August 1990**
(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		Net Injections or Withdrawals ^a	
		Base Gas	Working Gas	Total	Volume	Percent	Current Period	Same Period Previous Year
Arkansas	31,447	19,202	9,818	29,020	-125	-1.3	481	155
California	466,819	243,944	178,963	422,906	10,561	6.3	3,043	10,624
Colorado	20,682	6,248	11,623	17,870	2,249	24.0	1,362	482
Illinois	657,780	418,544	185,432	603,976	8,495	4.8	28,445	25,058
Indiana	100,774	68,941	22,713	91,654	690	3.1	3,694	3,605
Kansas	81,905	37,390	23,754	61,144	-2,091	-8.1	1,946	1,349
Kentucky	45,325	21,351	14,235	35,586	-272	-1.9	3,183	3,591
Louisiana	177,219	79,751	49,352	129,103	-2,718	-5.2	89	4,261
Maryland	61,978	46,677	11,173	57,851	-807	-6.7	2,196	1,527
Michigan	950,362	380,927	464,363	845,290	66,399	16.7	65,152	73,071
Minnesota	7,000	4,655	2,235	6,890	18	8	44	49
Mississippi	94,297	41,138	46,171	87,310	1,511	3.4	3,075	3,407
Missouri	29,791	21,600	7,396	28,996	-107	-1.4	280	1,161
Montana	86,760	45,800	23,807	69,607	-26	-1	656	766
New Mexico	94,600	20,204	20,264	40,467	1,820	9.9	3,188	1,619
New York	45,670	19,995	18,463	38,458	393	2.2	3,371	2,706
Ohio	177,852	115,818	35,683	151,502	-234	-7	9,207	9,099
Oklahoma	149,688	93,089	42,561	135,650	-4,575	-9.7	3,797	5,047
Oregon	9,791	3,291	7,051	10,342	2,573	57.5	636	1,462
Pennsylvania	56,754	25,638	11,895	37,533	-144	-1.2	3,671	2,909
Texas	443,716	151,049	191,985	343,034	-10,549	-5.2	-9,389	1,929
Washington	36,400	21,300	8,352	29,652	-1,353	-13.9	2,693	1,985
West Virginia	20,851	9,793	8,385	18,178	-447	-5.1	755	1,203
Wyoming	27,221	13,990	6,466	20,456	76	1.2	309	118
Total	3,874,681	1,910,335	1,402,139	3,312,474	71,336	5.4	131,885	157,183

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

Notes and Sources: See the last page of this section.

Table 22. Natural Gas Deliveries to Residential Consumers by State
(Million Cubic Feet)

State	YTD 1990	YTD 1989	YTD 1988	July 1990	June 1990	May 1990
Alabama	33,600	32,458	35,409	1,432	1,683	2,751
Alaska	7,869	8,658	7,644	409	505	711
Arizona	20,778	18,803	20,161	873	1,119	1,394
Arkansas	27,688	29,029	30,692	1,154	1,384	2,188
California	319,403	335,858	329,726	22,560	24,342	30,041
Colorado	66,575	64,895	66,572	2,478	4,250	7,351
Connecticut	25,092	26,355	26,235	1,104	1,310	2,146
Delaware	5,372	5,356	5,398	183	260	448
District of Columbia	11,231	12,065	12,169	505	614	876
Florida	9,904	8,393	10,522	661	796	922
Georgia	56,229	58,972	70,067	2,895	3,268	3,919
Hawaii	350	345	343	49	49	46
Idaho	4,898	6,078	5,251	173	314	415
Illinois	240,053	302,389	304,277	9,883	10,913	20,716
Indiana	89,012	96,038	98,904	3,040	3,919	6,946
Iowa	49,612	52,549	52,779	1,648	2,432	4,139
Kansas	51,787	52,398	54,554	1,825	2,479	4,525
Kentucky	34,400	40,017	42,473	1,375	1,572	2,405
Louisiana	43,054	37,252	42,223	2,350	2,715	3,388
Maine	395	422	381	20	27	43
Maryland	47,420	50,549	51,550	2,240	2,696	3,607
Massachusetts	75,691	77,519	76,249	3,166	4,766	7,008
Michigan	210,849	232,044	238,288	7,823	10,750	18,679
Minnesota	65,286	75,339	74,867	2,355	3,104	5,208
Mississippi	24,501	17,372	18,967	1,173	1,299	1,784
Missouri	80,329	87,225	89,164	2,944	3,756	6,197
Montana	9,949	11,862	10,845	394	655	1,033
Nebraska	27,113	29,529	30,411	1,056	1,256	2,208
Nevada	10,559	11,270	10,672	562	706	785
New Hampshire	4,043	4,347	4,116	145	247	373
New Jersey	111,823	127,486	124,763	5,092	5,799	9,023
New Mexico	21,357	18,474	19,950	812	1,116	1,788
New York	228,435	244,083	241,609	10,055	13,313	19,979
North Carolina	24,357	26,189	26,395	765	953	1,596
North Dakota	5,910	6,794	6,291	191	314	541
Ohio	192,886	214,055	226,728	7,744	9,442	16,519
Oklahoma	47,726	49,845	52,106	1,697	2,234	4,076
Oregon	14,907	15,850	14,714	706	1,118	1,369
Pennsylvania	165,001	177,398	182,709	6,037	8,398	13,220
Rhode Island	12,178	12,398	12,170	482	737	1,179
South Carolina	13,029	13,741	14,533	367	447	750
South Dakota	6,352	7,449	7,453	231	326	565
Tennessee	31,356	33,312	33,690	988	1,258	2,044
Texas	168,248	144,547	144,665	10,398	10,600	13,406
Utah	27,088	31,329	29,106	1,314	1,758	2,409
Vermont	1,330	1,431	1,274	43	72	114
Virginia	34,350	39,895	39,262	1,450	1,712	2,373
Washington	24,265	26,391	23,524	1,048	1,770	2,344
West Virginia	23,017	24,251	25,658	723	1,070	1,772
Wisconsin	72,269	84,320	80,856	2,380	3,300	6,450
Wyoming	7,883	8,268	8,159	335	579	842
Total	2,886,804	3,092,893	3,136,517	129,329	159,504	244,610

See footnote at end of table.

Table 22. Natural Gas Deliveries to Residential Consumers by State (Continued)
(Million Cubic Feet)

State	April 1990	March 1990	February 1990	January 1990	Total 1989	December 1989
Alabama	4,290	5,441	6,724	11,279	47,932	7,212
Alaska	1,089	1,619	1,927	1,609	13,589	1,656
Arizona	2,146	3,940	5,452	5,854	27,084	3,945
Arkansas	3,858	4,686	5,627	8,791	42,312	6,356
California	36,475	58,592	71,374	76,019	514,276	63,104
Colorado	10,013	12,810	13,752	15,921	91,567	11,066
Connecticut	3,613	4,872	5,528	6,519	40,687	6,991
Delaware	796	1,006	1,068	1,611	7,595	1,085
District of Columbia	1,569	2,046	2,261	3,360	17,433	2,637
Florida	1,193	1,437	1,674	3,221	13,089	1,825
Georgia	6,631	10,462	12,224	16,830	103,657	22,132
Hawaii	50	55	52	49	565	46
Idaho	551	942	1,240	1,263	8,783	1,241
Illinois	33,056	45,917	56,789	62,779	496,487	93,702
Indiana	13,090	16,963	19,850	25,204	155,887	29,647
Iowa	7,278	9,528	10,579	14,008	77,403	12,401
Kansas	7,592	9,157	11,044	15,165	76,034	11,694
Kentucky	4,922	6,258	8,266	9,602	65,086	13,034
Louisiana	5,114	6,872	7,791	14,824	57,705	9,714
Maine	59	73	76	97	638	95
Maryland	6,956	8,918	9,095	13,908	75,138	12,076
Massachusetts	11,336	14,519	15,318	19,578	111,661	16,224
Michigan	30,628	42,094	46,674	54,201	361,667	60,266
Minnesota	8,961	12,805	15,065	17,788	116,909	20,120
Mississippi	3,108	3,936	4,661	8,540	26,312	4,241
Missouri	11,754	14,279	16,687	24,712	129,144	21,588
Montana	1,366	1,780	2,265	2,456	18,195	2,518
Nebraska	3,841	5,106	6,279	7,367	44,804	7,297
Nevada	1,027	2,013	2,743	2,723	16,765	2,359
New Hampshire	617	768	839	1,054	6,290	926
New Jersey	16,713	21,773	22,987	30,436	195,542	33,347
New Mexico	2,715	4,124	5,074	5,725	26,591	3,746
New York	34,161	45,852	49,967	55,108	364,713	57,291
North Carolina	3,281	4,381	4,886	8,495	38,658	6,866
North Dakota	883	1,094	1,341	1,546	9,825	1,411
Ohio	27,707	37,461	45,671	48,342	359,148	69,403
Oklahoma	6,727	8,370	10,346	14,276	71,793	11,039
Oregon	1,688	2,985	3,511	3,530	22,504	2,886
Pennsylvania	24,504	31,894	34,298	46,650	270,756	44,962
Rhode Island	1,806	2,375	2,449	3,150	18,283	2,744
South Carolina	1,565	2,292	2,636	4,972	20,472	3,911
South Dakota	904	1,218	1,441	1,667	11,342	1,764
Tennessee	4,252	5,379	6,285	11,150	49,136	8,590
Texas	18,929	28,530	33,445	52,940	230,100	43,770
Utah	3,074	5,330	6,499	6,704	45,168	5,923
Vermont	193	267	287	354	2,126	353
Virginia	4,539	6,679	7,086	10,511	61,712	11,473
Washington	3,018	4,859	5,811	5,415	38,359	5,091
West Virginia	3,451	4,233	4,757	7,011	37,128	6,382
Wisconsin	9,810	14,481	16,927	18,921	127,009	20,661
Wyoming	1,132	1,498	1,678	1,819	11,780	1,412
Total	394,034	543,967	630,307	785,053	4,776,838	790,223

See footnote at end of table.

Table 22. Natural Gas Deliveries to Residential Consumers by State (Continued)
(Million Cubic Feet)

State	November 1989	October 1989	September 1989	August 1989	July 1989	June 1989
Alabama	3,632	1,854	1,399	1,377	1,451	1,702
Alaska	1,474	895	536	370	432	638
Arizona	1,768	959	833	777	880	1,094
Arkansas	2,987	1,562	1,239	1,137	1,237	1,402
California	40,070	28,083	24,184	22,977	22,730	26,581
Colorado	6,975	3,750	2,601	2,279	2,778	3,947
Connecticut	3,221	1,986	1,138	996	1,114	1,296
Delaware	485	275	207	189	192	272
District of Columbia	1,099	655	494	483	507	649
Florida	974	637	641	617	674	707
Georgia	11,108	5,189	3,465	2,791	2,987	3,049
Hawaii	46	43	45	42	46	49
Idaho	768	329	221	146	160	306
Illinois	51,130	25,845	13,532	9,889	10,700	12,514
Indiana	15,182	8,195	3,956	2,868	2,893	3,831
Iowa	5,912	3,225	1,790	1,527	1,647	2,063
Kansas	5,398	2,901	1,955	1,687	1,845	2,203
Kentucky	6,141	3,109	1,446	1,337	1,332	1,809
Louisiana	4,166	2,513	2,035	2,026	2,189	2,321
Maine	46	35	21	19	12	27
Maryland	5,131	3,134	2,177	2,070	2,241	2,681
Massachusetts	7,495	4,839	2,901	2,683	3,006	4,053
Michigan	31,679	19,994	9,726	7,957	8,052	9,803
Minnesota	11,067	5,430	2,682	2,269	2,388	3,121
Mississippi	1,933	1,043	894	829	864	929
Missouri	9,441	5,047	3,111	2,732	3,008	3,615
Montana	1,728	1,084	568	435	426	680
Nebraska	3,788	1,972	1,212	1,007	1,078	1,137
Nevada	1,400	703	555	478	531	748
New Hampshire	448	274	169	127	155	210
New Jersey	15,715	8,933	5,283	4,778	5,231	6,101
New Mexico	1,975	899	765	734	829	910
New York	28,576	16,060	9,514	9,189	10,098	13,364
North Carolina	2,823	1,338	745	695	744	1,020
North Dakota	816	398	240	166	213	309
Ohio	37,970	20,647	9,812	7,262	7,332	7,759
Oklahoma	4,798	2,571	1,886	1,654	1,858	2,169
Oregon	1,835	804	581	549	696	950
Pennsylvania	22,443	13,222	6,717	6,014	6,401	8,128
Rhode Island	1,325	855	497	464	500	590
South Carolina	1,526	620	346	327	395	468
South Dakota	1,076	535	298	221	245	340
Tennessee	3,551	1,681	1,043	960	1,040	1,345
Texas	16,927	9,777	7,869	7,211	7,726	8,127
Utah	3,640	1,718	1,322	1,235	1,374	1,763
Vermont	165	97	43	37	40	61
Virginia	4,799	2,831	1,374	1,340	1,479	1,713
Washington	3,484	1,622	969	801	1,002	1,501
West Virginia	3,240	1,738	824	695	741	1,001
Wisconsin	10,581	6,052	3,173	2,220	2,736	3,777
Wyoming	973	518	350	259	344	517
Total	404,930	228,478	139,383	120,932	128,582	155,351

See footnote at end of table.

Table 22. Natural Gas Deliveries to Residential Consumers by State (Continued)
(Million Cubic Feet)

State	May 1989	April 1989	March 1989	February 1989	January 1989	Total 1988
Alabama	2,845	4,703	7,363	7,017	7,377	48,913
Alaska	858	1,223	1,566	2,148	1,793	12,529
Arizona	1,205	1,670	2,937	4,913	6,104	28,206
Arkansas	1,927	3,835	6,736	7,118	6,774	42,867
California	31,161	37,832	53,779	75,817	87,968	497,138
Colorado	5,694	8,580	13,652	15,278	14,966	92,888
Connecticut	2,231	3,694	5,717	5,891	6,412	39,485
Delaware	466	793	1,223	1,153	1,257	7,586
District of Columbia	1,025	1,663	2,762	2,556	2,903	17,471
Florida	817	1,207	1,834	1,445	1,709	14,891
Georgia	4,628	7,210	9,600	16,386	15,112	108,125
Hawaii	47	50	50	52	51	563
Idaho	368	747	1,206	1,672	1,619	7,683
Illinois	24,410	40,291	63,870	76,331	74,273	462,339
Indiana	7,658	12,797	20,943	23,932	23,984	153,609
Iowa	3,943	7,244	12,215	12,643	12,794	76,111
Kansas	3,436	6,518	11,948	13,762	12,686	76,420
Kentucky	3,161	5,319	8,293	10,403	9,700	64,027
Louisiana	2,816	4,724	8,377	8,546	8,279	59,707
Maine	49	66	92	84	92	568
Maryland	4,320	7,032	11,186	10,880	12,209	74,918
Massachusetts	7,552	11,858	16,940	16,517	17,593	108,631
Michigan	20,415	34,224	51,163	52,409	55,928	348,512
Minnesota	5,523	9,806	16,511	19,064	18,926	109,669
Mississippi	1,282	2,195	4,077	4,030	3,995	26,389
Missouri	5,793	11,192	19,809	22,300	21,508	128,317
Montana	965	1,666	2,544	2,778	2,803	16,900
Nebraska	1,968	3,687	6,742	7,911	7,006	43,502
Nevada	829	1,106	1,957	2,971	3,128	15,275
New Hampshire	422	686	926	904	1,044	5,927
New Jersey	10,547	17,680	27,754	29,095	31,078	181,506
New Mexico	1,111	1,960	3,345	4,696	5,623	27,846
New York	23,868	35,963	51,981	52,502	56,307	357,260
North Carolina	1,899	3,723	6,202	5,655	6,946	38,384
North Dakota	506	1,040	1,476	1,590	1,660	9,147
Ohio	18,482	31,700	42,862	56,594	49,326	350,612
Oklahoma	3,043	5,784	12,277	13,137	11,577	71,970
Oregon	1,141	2,054	3,351	4,026	3,632	20,819
Pennsylvania	15,826	26,312	37,888	40,318	42,525	268,038
Rhode Island	1,223	1,828	2,711	2,682	2,864	17,678
South Carolina	879	1,875	3,327	3,029	3,768	20,790
South Dakota	562	1,036	1,639	1,865	1,762	10,687
Tennessee	2,217	4,305	7,951	8,141	8,313	47,668
Texas	9,324	15,648	29,982	40,274	33,466	209,957
Utah	2,215	3,585	5,786	8,290	8,316	42,241
Vermont	122	227	314	314	353	1,868
Virginia	2,881	5,421	9,042	9,446	9,913	58,539
Washington	1,822	3,625	5,730	6,660	6,051	34,981
West Virginia	2,263	3,608	5,179	5,621	5,838	37,690
Wisconsin	7,875	12,003	18,950	19,607	19,372	121,335
Wyoming	743	1,180	1,597	1,964	1,923	11,650
Total	256,364	414,175	645,362	742,465	750,594	4,630,330

Notes and Sources: See the last page of this section.

Table 23. Natural Gas Deliveries to Commercial Consumers by State
(Million Cubic Feet)

State	YTD 1990	YTD 1989	YTD 1988	July 1990	June 1990	May 1990
Alabama	16,079	17,299	17,387	1,196	993	1,628
Alaska	12,430	13,296	12,529	1,061	1,087	1,396
Arizona	18,730	18,375	18,431	1,686	1,835	2,424
Arkansas	16,953	18,041	19,174	1,031	1,073	1,407
California	153,537	154,602	150,562	18,246	15,463	16,715
Colorado	46,759	46,280	47,783	2,162	3,162	5,181
Connecticut	17,300	19,751	17,491	1,352	1,314	1,564
Delaware	2,748	2,802	2,776	140	170	233
District of Columbia	9,030	10,349	10,062	528	686	933
Florida	23,268	21,321	23,817	2,564	2,857	3,058
Georgia	32,300	31,456	35,410	2,365	2,638	3,001
Hawaii	1,268	1,252	1,227	195	181	174
Idaho	4,946	6,038	5,404	293	357	439
Illinois	121,884	119,995	138,350	5,765	5,741	10,096
Indiana	41,217	44,701	45,894	1,659	1,914	3,111
Iowa	28,737	30,685	30,585	1,217	1,549	2,330
Kansas	37,855	36,728	39,349	5,111	3,185	3,456
Kentucky	19,299	22,061	23,331	1,033	1,132	1,575
Louisiana	19,236	16,914	18,559	1,551	1,763	1,915
Maine	985	1,056	947	52	62	95
Maryland	16,347	18,332	17,314	1,075	1,116	1,535
Massachusetts	32,821	34,583	32,909	2,020	2,378	3,227
Michigan	102,077	113,766	113,298	4,743	5,495	8,936
Minnesota	46,307	53,554	53,347	1,997	2,245	3,801
Mississippi	16,742	11,096	12,149	1,262	1,404	1,695
Missouri	39,685	41,823	43,304	1,980	2,289	3,292
Montana	7,032	8,496	7,688	326	448	706
Nebraska	23,536	22,570	25,291	4,829	1,399	1,561
Nevada	9,600	9,598	9,595	928	953	989
New Hampshire	3,308	3,598	3,375	153	207	288
New Jersey	66,159	76,439	68,343	4,912	4,685	6,298
New Mexico	16,415	18,818	21,219	825	1,082	1,508
New York	112,852	123,241	121,307	9,634	9,936	10,058
North Carolina	18,469	21,278	20,734	1,302	1,342	1,649
North Dakota	6,222	7,111	6,604	314	353	567
Ohio	91,492	98,347	103,084	3,948	4,721	7,256
Oklahoma	31,770	26,218	31,780	1,312	1,886	2,826
Oregon	12,167	13,604	12,379	817	1,046	1,147
Pennsylvania	78,943	84,179	84,378	4,441	4,994	6,637
Rhode Island	4,861	5,362	5,480	413	234	549
South Carolina	10,258	10,592	10,988	843	903	1,123
South Dakota	5,140	5,714	5,691	221	281	461
Tennessee	27,691	30,521	30,708	1,644	1,906	2,371
Texas	139,447	115,795	112,556	18,805	18,170	15,571
Utah	11,819	11,648	12,905	373	630	932
Vermont	1,235	1,325	1,244	46	63	108
Virginia	26,239	28,433	27,414	1,832	1,771	2,332
Washington	23,761	25,716	24,234	1,637	1,857	2,594
West Virginia	13,012	14,432	14,445	752	903	1,169
Wisconsin	41,881	45,868	45,076	1,757	1,918	3,620
Wyoming	5,846	5,908	6,139	265	420	643
Total	1,667,688	1,720,960	1,744,041	124,610	124,195	156,179

See footnote at end of table.

Table 23. Natural Gas Deliveries to Commercial Consumers by State (Continued)
(Million Cubic Feet)

State	April 1990	March 1990	February 1990	January 1990	Total 1989	December 1989
Alabama	2,162	2,624	3,006	4,470	26,438	3,503
Alaska	1,734	2,329	2,477	2,346	21,738	2,429
Arizona	2,347	3,169	3,564	3,705	28,580	3,106
Arkansas	2,238	2,825	3,390	4,989	27,284	3,943
California	21,015	25,379	27,802	28,917	259,118	26,192
Colorado	6,989	8,743	9,668	10,854	67,477	8,102
Connecticut	2,673	3,146	3,426	3,825	30,781	3,891
Delaware	408	517	516	764	4,184	630
District of Columbia	1,358	1,755	1,822	1,948	15,741	2,052
Florida	3,272	3,509	3,573	4,435	35,105	3,620
Georgia	4,166	5,368	6,229	8,533	53,114	8,393
Hawaii	173	181	181	183	2,129	177
Idaho	559	917	1,177	1,204	8,994	1,172
Illinois	17,945	22,690	27,016	32,631	196,133	33,840
Indiana	5,933	7,759	9,144	11,697	73,613	13,611
Iowa	4,122	5,532	6,165	7,822	46,142	7,110
Kansas	5,228	5,548	6,715	8,612	58,554	6,763
Kentucky	2,690	3,464	4,229	5,176	36,145	6,648
Louisiana	2,511	2,928	3,243	5,325	26,617	3,454
Maine	154	186	200	236	1,660	269
Maryland	2,444	3,016	3,074	4,087	26,920	3,647
Massachusetts	4,997	6,077	6,250	7,872	51,508	6,864
Michigan	14,889	20,094	21,945	25,975	176,181	28,269
Minnesota	6,363	9,273	10,712	11,916	85,183	13,661
Mississippi	2,246	2,442	2,936	4,757	17,568	2,727
Missouri	5,617	6,848	7,987	11,672	63,039	9,903
Montana	921	1,295	1,573	1,763	13,141	1,781
Nebraska	2,959	3,535	4,234	5,019	37,351	4,196
Nevada	1,165	1,710	1,929	1,926	15,116	1,690
New Hampshire	485	579	753	843	5,371	817
New Jersey	10,120	12,388	12,426	15,330	117,385	16,342
New Mexico	2,173	3,068	3,694	4,065	28,459	3,830
New York	16,232	20,638	22,087	24,267	196,380	27,650
North Carolina	2,520	3,165	3,444	5,047	33,145	4,396
North Dakota	966	1,145	1,342	1,535	10,609	1,506
Ohio	13,011	19,785	19,091	23,680	161,516	30,143
Oklahoma	4,238	5,176	6,955	9,377	38,493	5,871
Oregon	1,402	2,317	2,740	2,698	20,249	2,363
Pennsylvania	12,117	14,718	15,928	20,108	132,500	21,010
Rhode Island	816	851	860	1,138	8,767	1,014
South Carolina	1,344	1,678	1,755	2,612	16,525	1,964
South Dakota	722	998	1,151	1,306	8,826	1,374
Tennessee	3,634	4,359	5,524	8,253	47,573	7,414
Texas	17,824	21,194	20,678	27,205	184,179	24,013
Utah	1,304	2,462	3,013	3,105	16,522	2,304
Vermont	183	250	269	316	2,081	307
Virginia	4,413	4,943	5,003	5,945	44,181	6,474
Washington	3,128	4,275	5,387	4,883	38,502	4,433
West Virginia	1,947	2,240	2,520	3,481	23,257	3,704
Wisconsin	5,305	8,524	9,180	11,577	70,090	11,182
Wyoming	843	1,110	1,228	1,337	8,551	1,022
Total	234,006	298,725	329,210	400,763	2,718,716	390,776

See footnote at end of table.

Table 23. Natural Gas Deliveries to Commercial Consumers by State (Continued)
(Million Cubic Feet)

State	November 1989	October 1989	September 1989	August 1989	July 1989	June 1989
Alabama	1,953	1,381	1,187	1,115	1,672	1,213
Alaska	2,144	1,577	1,202	1,091	1,042	1,287
Arizona	2,294	1,633	1,596	1,578	1,804	1,950
Arkansas	1,949	1,246	1,097	1,008	1,020	1,357
California	21,665	19,856	19,452	17,351	15,319	21,469
Colorado	5,441	3,232	2,303	2,119	2,328	3,082
Connecticut	2,324	1,685	1,551	1,579	1,528	1,625
Delaware	294	182	144	133	128	166
District of Columbia	1,090	775	712	763	692	803
Florida	2,868	2,444	2,484	2,369	2,525	2,570
Georgia	4,836	3,477	2,590	2,361	2,412	2,341
Hawaii	172	179	175	173	182	175
Idaho	783	433	320	249	300	353
Illinois	20,169	11,091	6,176	4,862	5,444	5,974
Indiana	7,576	3,850	2,217	1,659	1,579	1,904
Iowa	3,738	2,129	1,247	1,234	1,190	1,380
Kansas	4,386	2,785	3,081	4,812	3,366	2,547
Kentucky	3,327	1,147	1,147	991	1,099	1,167
Louisiana	1,995	1,537	1,405	1,314	1,372	1,449
Maine	128	96	60	50	51	63
Maryland	1,801	1,220	978	941	968	1,154
Massachusetts	3,647	2,720	1,799	1,894	1,726	2,150
Michigan	15,776	8,855	5,047	4,467	4,570	5,954
Minnesota	8,764	4,718	2,475	2,011	2,112	2,416
Mississippi	1,350	939	754	701	718	739
Missouri	4,716	2,798	2,021	1,780	1,829	2,359
Montana	1,235	806	442	381	330	478
Nebraska	2,602	2,109	1,634	4,240	3,381	1,757
Nevada	1,257	954	811	805	790	890
New Hampshire	393	248	176	140	154	188
New Jersey	9,150	6,297	4,638	4,520	4,881	5,087
New Mexico	2,441	1,191	1,034	1,146	913	1,211
New York	16,631	11,741	8,812	8,305	8,382	8,747
North Carolina	2,639	1,843	1,534	1,454	1,475	1,568
North Dakota	951	464	340	238	269	335
Ohio	15,949	8,946	4,397	3,735	3,565	3,927
Oklahoma	2,541	1,527	1,241	1,097	1,180	1,278
Oregon	1,624	972	882	804	823	989
Pennsylvania	11,588	7,185	4,378	4,161	4,272	4,649
Rhode Island	654	657	560	518	471	457
South Carolina	1,324	970	866	808	908	891
South Dakota	851	434	255	197	203	276
Tennessee	3,774	2,358	1,845	1,661	1,804	1,918
Texas	12,961	10,462	9,509	11,439	12,862	10,829
Utah	1,313	522	390	346	357	472
Vermont	189	130	73	57	57	66
Virginia	3,612	2,192	1,985	1,485	1,866	2,129
Washington	3,366	2,083	1,357	1,548	1,671	1,851
West Virginia	2,036	1,373	859	853	785	881
Wisconsin	6,386	3,437	1,718	1,499	1,562	2,012
Wyoming	724	396	268	233	285	368
Total	231,374	152,108	113,222	110,276	110,221	120,901

See footnote at end of table.

Table 23. Natural Gas Deliveries to Commercial Consumers by State (Continued)
(Million Cubic Feet)

State	May 1989	April 1989	March 1989	February 1989	January 1989	Total 1988
Alabama	1,717	2,366	3,391	3,510	3,430	25,562
Alaska	1,569	1,949	2,258	2,691	2,500	20,842
Arizona	1,992	2,274	2,843	3,570	3,942	28,299
Arkansas	1,261	2,181	3,963	4,338	3,921	27,457
California	19,249	18,656	21,880	29,564	28,465	248,397
Colorado	4,160	6,135	9,208	10,845	10,522	68,515
Connecticut	2,106	2,897	3,937	3,749	3,909	27,411
Delaware	249	398	624	605	632	4,041
District of Columbia	999	1,635	2,066	2,021	2,133	15,012
Florida	2,670	3,083	3,545	3,435	3,493	37,834
Georgia	2,983	3,922	5,166	7,502	7,130	55,963
Hawaii	181	175	174	178	187	2,049
Idaho	408	690	1,156	1,569	1,562	8,252
Illinois	9,306	15,896	25,958	29,585	27,832	215,257
Indiana	3,296	5,767	9,612	11,374	11,169	71,709
Iowa	2,216	4,133	6,928	7,466	7,372	44,955
Kansas	3,660	5,433	6,870	7,697	7,155	61,120
Kentucky	1,766	2,839	4,545	5,506	5,139	35,718
Louisiana	1,754	2,315	3,394	3,298	3,332	27,475
Maine	106	160	221	226	229	1,461
Maryland	1,701	2,586	4,247	3,700	3,976	25,879
Massachusetts	3,703	5,392	7,234	6,984	7,394	48,915
Michigan	10,150	16,375	24,717	25,448	26,552	167,900
Minnesota	3,980	6,916	11,411	13,607	13,112	79,989
Mississippi	947	1,407	2,411	2,502	2,372	18,108
Missouri	2,799	5,246	9,192	10,280	10,118	63,839
Montana	687	1,208	1,841	1,923	2,029	12,041
Nebraska	1,648	2,505	4,252	4,825	4,202	39,388
Nevada	1,004	1,100	1,533	2,125	2,156	14,879
New Hampshire	339	551	771	753	842	5,034
New Jersey	7,587	10,928	15,624	15,506	16,826	101,325
New Mexico	1,517	2,059	3,377	4,499	5,242	31,032
New York	12,079	18,494	25,344	24,630	25,565	188,037
North Carolina	2,022	3,046	4,367	4,016	4,784	32,464
North Dakota	508	1,027	1,514	1,669	1,789	9,827
Ohio	8,237	13,360	21,187	24,435	23,636	158,790
Oklahoma	1,600	2,867	6,195	7,031	6,067	47,870
Oregon	1,140	1,724	2,761	3,283	2,884	18,406
Pennsylvania	8,264	11,996	16,983	18,693	19,322	127,382
Rhode Island	565	855	1,003	979	1,032	8,352
South Carolina	1,094	1,489	2,098	1,936	2,176	17,472
South Dakota	413	776	1,253	1,454	1,339	8,396
Tennessee	2,532	4,059	6,390	6,849	6,969	45,852
Texas	11,404	15,884	20,327	23,084	21,405	175,368
Utah	653	1,227	2,280	3,376	3,283	17,911
Vermont	105	199	283	300	315	1,941
Virginia	2,446	4,051	5,721	6,056	6,164	42,013
Washington	2,194	3,672	5,424	5,561	5,343	36,674
West Virginia	1,476	2,041	2,807	3,265	3,177	22,416
Wisconsin	3,882	6,662	10,168	10,987	10,595	66,939
Wyoming	521	852	1,111	1,414	1,357	8,700
Total	158,845	233,458	341,563	379,899	376,073	2,670,465

Notes and Sources: See the last page of this section.

Table 24. Natural Gas Deliveries to Industrial Consumers by State
(Million Cubic Feet)

State	YTD 1990	YTD 1989	YTD 1988	July 1990	June 1990	May 1990
Alabama	82,773	86,391	82,797	10,939	10,524	10,734
Alaska	27,759	36,711	40,227	4,004	3,972	2,767
Arizona	11,798	12,112	13,343	1,680	1,585	1,423
Arkansas	70,045	76,626	59,600	9,021	8,293	8,796
California	246,306	274,514	255,336	39,019	35,697	34,516
Colorado	29,571	29,234	22,648	3,770	3,933	3,475
Connecticut	14,074	11,467	11,497	2,003	1,904	2,055
Delaware	9,865	9,233	9,074	1,208	1,362	1,396
District of Columbia	0	0	0	0	0	0
Florida	47,966	45,732	45,624	6,819	6,792	7,020
Georgia	91,689	89,164	86,151	10,682	11,577	13,260
Hawaii	0	0	0	0	0	0
Idaho	12,037	13,500	12,412	1,394	1,413	1,653
Illinois	161,738	161,529	162,548	18,804	18,674	20,229
Indiana	130,900	130,700	132,215	15,985	16,120	18,868
Iowa	57,026	54,204	60,007	6,300	7,842	8,252
Kansas	68,548	62,435	64,078	10,945	8,890	10,513
Kentucky	36,697	38,063	34,662	4,419	4,558	4,899
Louisiana	515,250	507,623	461,104	76,180	71,753	73,662
Maine	976	772	674	148	145	155
Maryland	35,493	41,045	38,312	3,971	4,347	4,053
Massachusetts	21,673	21,250	17,402	3,285	2,982	2,910
Michigan	112,374	119,419	117,870	11,671	12,599	14,202
Minnesota	48,688	47,133	45,345	6,383	5,790	6,624
Mississippi	58,981	56,367	54,161	9,198	8,810	8,917
Missouri	33,270	36,975	32,979	4,196	3,717	4,226
Montana	4,266	5,158	4,678	571	462	584
Nebraska	15,548	19,995	19,687	1,076	2,823	2,165
Nevada	4,261	4,439	4,236	587	567	592
New Hampshire	1,540	1,296	1,082	157	209	325
New Jersey	47,528	48,992	47,695	6,139	6,250	6,528
New Mexico	9,135	10,600	8,359	1,418	1,259	1,317
New York	52,902	56,417	57,029	6,426	6,268	7,142
North Carolina	46,126	48,912	41,662	6,086	5,909	6,814
North Dakota	2,229	2,605	2,227	239	250	312
Ohio	155,002	165,552	165,176	16,434	18,966	20,335
Oklahoma	99,597	102,836	96,758	15,483	12,979	13,349
Oregon	29,778	24,486	22,816	5,174	3,348	3,695
Pennsylvania	133,731	144,907	135,614	17,007	17,241	17,726
Rhode Island	2,382	2,763	2,756	189	314	400
South Carolina	45,675	42,450	40,841	8,846	6,542	6,299
South Dakota	2,888	2,919	2,787	417	434	336
Tennessee	62,579	62,857	61,090	8,705	8,273	9,041
Texas	1,108,014	1,008,361	956,450	168,467	163,703	180,217
Utah	19,238	19,398	17,779	2,372	2,433	2,566
Vermont	1,293	1,183	1,050	204	164	185
Virginia	33,900	36,295	30,997	6,434	5,238	4,761
Washington	44,521	41,939	41,645	6,028	6,502	6,182
West Virginia	25,222	28,704	23,182	4,099	3,269	3,724
Wisconsin	69,363	76,356	73,827	7,415	7,440	8,753
Wyoming	10,165	9,116	9,066	1,569	1,519	1,348
Total	3,952,376	3,930,735	3,728,551	553,567	535,040	569,299

See footnotes at end of table

Table 24. Natural Gas Deliveries to Industrial Consumers by State (Continued)
(Million Cubic Feet)

State	April 1990	March 1990	February 1990	January 1990	Total 1989	December 1989
Alabama	12,064	12,713	12,148	13,051	149,047	13,173
Alaska	4,312	4,486	4,072	4,146	59,341	4,501
Arizona	1,632	2,010	1,747	1,721	20,705	1,580
Arkansas	11,135	11,088	10,503	11,209	129,333	11,015
California	38,538	29,922	31,962	37,252	507,948	47,723
Colorado	3,872	4,702	4,969	4,850	51,348	4,589
Connecticut	2,472	2,127	2,013	1,500	19,724	1,644
Delaware	1,376	1,546	1,285	1,692	15,141	1,217
District of Columbia	0	0	0	0	0	0
Florida	6,342	6,705	6,470	7,818	75,485	6,625
Georgia	13,108	14,383	13,758	14,921	152,516	10,125
Hawaii	0	0	0	0	0	0
Idaho	1,611	1,974	1,880	2,112	22,903	2,228
Illinois	23,645	26,850	25,092	28,444	278,826	32,148
Indiana	18,881	20,501	18,883	21,662	219,952	21,374
Iowa	8,308	8,537	8,444	9,343	89,347	7,055
Kansas	9,226	9,810	9,404	9,760	100,623	8,892
Kentucky	5,356	5,631	5,631	6,203	64,003	6,970
Louisiana	74,393	73,753	71,670	73,839	897,754	89,418
Maine	250	78	121	79	1,374	125
Maryland	5,108	5,767	6,336	5,911	66,271	5,800
Massachusetts	4,138	2,977	2,520	2,861	35,588	2,620
Michigan	16,743	18,242	18,260	20,657	192,981	19,149
Minnesota	7,242	7,741	7,358	7,550	81,479	7,506
Mississippi	7,586	7,740	8,045	8,685	99,790	8,790
Missouri	4,793	5,199	5,125	6,014	62,680	6,612
Montana	555	582	645	867	9,903	1,070
Nebraska	2,237	2,471	2,450	2,326	30,545	2,175
Nevada	615	636	597	667	7,859	646
New Hampshire	296	166	179	208	2,241	179
New Jersey	7,524	8,268	6,629	6,190	84,771	6,897
New Mexico	1,413	1,229	1,202	1,297	18,710	1,943
New York	7,273	8,476	8,429	8,888	96,864	10,813
North Carolina	6,909	7,341	6,533	6,534	82,629	5,036
North Dakota	329	357	362	380	4,525	484
Ohio	23,172	24,336	24,805	26,954	278,205	28,523
Oklahoma	13,986	13,596	14,213	15,991	180,182	17,255
Oregon	3,594	4,105	5,424	4,438	43,752	4,090
Pennsylvania	20,274	20,253	20,411	20,819	242,526	21,766
Rhode Island	460	361	295	363	4,624	310
South Carolina	6,312	6,474	5,442	5,760	74,534	4,052
South Dakota	431	422	452	396	4,962	491
Tennessee	8,900	9,201	8,973	9,486	106,860	9,399
Texas	167,962	148,195	130,931	148,539	1,787,888	170,883
Utah	2,687	2,990	3,070	3,120	33,963	3,784
Vermont	198	184	162	196	1,901	119
Virginia	4,121	4,319	4,311	4,716	57,761	3,419
Washington	5,753	6,492	6,390	7,174	73,239	6,863
West Virginia	3,568	3,747	3,444	3,371	49,943	4,604
Wisconsin	9,695	11,773	11,547	12,740	127,439	15,030
Wyoming	1,405	1,385	1,366	1,573	16,217	1,713
Total	581,798	571,838	545,959	594,875	6,816,200	642,602

See footnotes at end of table

Table 24. Natural Gas Deliveries to Industrial Consumers by State (Continued)
(Million Cubic Feet)

State	November 1989	October 1989	September 1989	August 1989	July 1989	June 1989
Alabama	13,629	12,883	11,482	11,536	10,909	11,843
Alaska	3,996	4,442	4,738	4,954	5,297	5,573
Arizona	1,919	1,874	1,566	1,655	1,590	1,753
Arkansas	11,959	12,052	8,338	9,342	10,474	9,003
California	42,439	49,435	47,977	45,858	42,363	41,341
Colorado	4,180	4,163	3,891	5,291	3,308	3,456
Connecticut	2,103	1,841	1,396	1,272	1,223	1,480
Delaware	1,358	1,221	1,155	957	1,044	1,332
District of Columbia	0	0	0	0	0	0
Florida	6,066	5,978	5,530	5,554	5,734	6,021
Georgia	13,754	14,404	11,965	13,104	11,723	12,573
Hawaii	0	0	0	0	0	0
Idaho	2,093	1,974	1,723	1,385	1,437	1,770
Illinois	26,153	22,453	18,976	17,567	16,750	16,046
Indiana	19,190	17,752	15,434	15,502	15,883	16,315
Iowa	7,643	7,221	6,884	6,339	5,957	6,757
Kansas	8,446	7,334	6,188	7,328	8,107	7,904
Kentucky	5,767	5,108	4,052	4,043	3,903	4,596
Louisiana	87,933	74,882	68,000	69,899	68,123	70,236
Maine	131	114	120	111	102	110
Maryland	5,245	4,790	4,682	4,709	4,703	5,102
Massachusetts	2,919	3,184	2,832	2,782	2,544	2,933
Michigan	16,297	13,650	12,624	11,841	12,084	13,442
Minnesota	7,834	6,820	5,988	6,111	5,924	5,549
Mississippi	9,223	8,932	7,789	8,689	7,676	8,323
Missouri	5,379	5,230	4,282	4,203	4,096	4,321
Montana	1,061	1,084	843	685	594	658
Nebraska	2,058	1,428	2,680	2,208	2,062	2,574
Nevada	768	674	631	700	627	625
New Hampshire	157	256	200	153	157	198
New Jersey	6,758	7,853	7,499	6,774	6,174	6,996
New Mexico	1,690	1,491	1,397	1,589	1,294	1,313
New York	8,467	7,488	7,157	6,523	6,335	6,930
North Carolina	7,736	7,689	6,442	6,814	6,116	6,812
North Dakota	482	439	291	223	238	305
Ohio	24,562	22,017	18,720	18,830	17,728	19,118
Oklahoma	15,500	15,821	13,959	14,811	16,539	14,439
Oregon	4,015	3,914	3,657	3,588	3,280	3,102
Pennsylvania	20,721	19,022	17,914	18,196	17,642	18,101
Rhode Island	279	400	412	461	325	440
South Carolina	6,988	7,407	6,317	7,320	6,703	7,174
South Dakota	472	454	316	309	300	363
Tennessee	9,190	9,017	8,109	8,288	8,002	8,403
Texas	154,501	144,846	151,964	157,335	155,422	147,747
Utah	3,015	2,745	2,510	2,510	1,949	2,599
Vermont	203	179	115	101	96	122
Virginia	4,647	4,633	4,437	4,330	4,380	5,132
Washington	6,642	6,344	6,024	5,427	5,921	5,357
West Virginia	4,190	4,289	4,156	3,911	3,851	3,584
Wisconsin	11,861	9,475	7,388	7,328	6,674	7,528
Wyoming	1,593	1,497	1,255	1,044	1,012	1,107
Total	603,204	568,180	531,985	539,493	525,048	529,173

See footnotes at end of table

Table 24. Natural Gas Deliveries to Industrial Consumers by State (Continued)
(Million Cubic Feet)

State	May 1989	April 1989	March 1989	February 1989	January 1989	Total 1988
Alabama	12,378	12,704	13,348	12,184	13,025	140,536
Alaska	5,123	5,517	5,018	4,071	4,912	67,805
Arizona	1,887	1,613	1,681	1,619	1,975	24,185
Arkansas	9,751	11,392	13,424	11,511	10,411	104,808
California	42,425	34,434	42,904	29,322	42,725	464,008
Colorado	3,932	4,517	4,057	4,794	4,570	38,197
Connecticut	1,610	1,927	1,929	1,641	1,7	19,430
Delaware	1,581	1,647	1,218	1,230	1,181	14,803
District of Columbia	0	0	0	0	0	0
Florida	6,725	6,379	7,003	6,746	7,124	75,518
Georgia	12,878	13,035	14,088	11,824	13,045	150,448
Hawaii	0	0	0	0	0	0
Idaho	2,024	1,995	2,127	1,973	2,165	20,710
Illinois	20,708	22,567	27,758	29,809	27,831	269,226
Indiana	18,391	18,725	21,073	20,547	19,766	218,769
Iowa	8,880	7,837	8,850	8,943	8,980	102,013
Kansas	8,458	8,929	10,005	8,078	9,994	108,108
Kentucky	4,929	5,309	6,273	6,485	6,568	60,136
Louisiana	72,135	70,526	75,115	73,998	77,490	779,171
Maine	130	130	101	104	95	1,162
Maryland	5,333	6,106	6,932	6,527	6,342	64,194
Massachusetts	3,714	3,350	3,429	2,598	2,881	31,577
Michigan	14,840	17,999	20,718	19,949	20,387	191,159
Minnesota	5,857	6,607	8,147	7,329	7,720	77,710
Mississippi	8,080	8,487	7,083	7,554	9,162	92,910
Missouri	4,759	5,393	6,140	6,328	5,938	54,243
Montana	678	756	766	756	950	8,360
Nebraska	2,754	2,721	3,201	3,001	3,082	32,299
Nevada	647	649	623	582	686	7,218
New Hampshire	239	259	144	141	158	1,971
New Jersey	7,213	7,499	8,045	6,167	6,898	77,518
New Mexico	1,765	1,527	1,303	1,487	1,911	14,709
New York	6,790	8,376	9,782	8,752	9,452	90,883
North Carolina	7,299	7,624	7,217	6,588	7,256	74,874
North Dakota	362	383	426	403	488	3,901
Ohio	21,669	25,018	27,485	27,034	27,500	280,059
Oklahoma	13,217	14,003	15,565	14,199	14,874	163,069
Oregon	3,501	3,490	4,052	3,268	3,793	39,771
Pennsylvania	20,570	20,953	23,120	22,363	22,158	228,619
Rhode Island	515	462	351	325	345	4,453
South Carolina	6,823	6,577	6,194	4,688	4,311	69,177
South Dakota	373	418	447	493	525	4,668
Tennessee	7,933	9,304	9,354	9,728	10,133	103,349
Texas	140,214	144,112	139,485	139,004	142,377	1,675,324
Utah	2,518	2,718	3,088	3,153	3,373	30,354
Vermont	140	187	211	193	234	1,741
Virginia	4,832	6,248	5,474	4,980	5,240	53,107
Washington	5,834	5,962	6,494	5,992	6,379	69,418
West Virginia	4,038	4,134	4,053	4,339	4,705	40,415
Wisconsin	8,609	10,971	13,630	14,915	14,029	121,819
Wyoming	1,254	1,238	1,374	1,448	1,683	15,472
Total	544,317	582,716	601,503	569,695	598,283	6,383,382

Notes and Sources: See the last page of this section.

Table 25. Natural Gas Deliveries to Electrical Utility^a Consumers by State
(Million Cubic Feet)

State	YTD 1990	YTD 1989	YTD 1988	July 1990	June 1990	May 1990
Alabama	2,120	1,110	1,272	520	542	318
Alaska	19,257	18,595	17,200	2,819	2,049	2,570
Arizona	18,733	28,273	13,900	3,813	4,130	2,583
Arkansas	16,097	15,885	13,286	6,019	4,491	2,612
California	251,461	274,135	358,228	59,280	40,590	31,820
Colorado	2,970	5,628	4,822	503	518	469
Connecticut	924	1,574	870	681	72	108
Delaware	5,660	3,942	1,870	1,279	1,081	680
District of Columbia	0	0	0	0	0	0
Florida	106,538	109,148	99,588	18,277	14,856	17,557
Georgia	586	520	820	222	204	74
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	4,782	4,435	3,380	1,077	1,125	681
Indiana	3,004	2,466	1,398	202	243	634
Iowa	1,620	1,367	3,164	373	440	301
Kansas	14,935	10,910	11,423	5,052	4,052	3,071
Kentucky	171	259	160	25	26	12
Louisiana	142,767	129,504	149,403	33,089	32,409	21,448
Maine	0	0	0	0	0	0
Maryland	5,406	11,592	2,721	2,055	1,147	556
Massachusetts	27,514	25,743	11,880	7,320	4,901	7,819
Michigan	12,882	12,831	8,751	1,772	2,211	1,718
Minnesota	2,609	2,342	2,982	658	467	376
Mississippi	29,592	24,864	18,405	10,831	4,612	3,585
Missouri	988	756	931	304	395	83
Montana	202	198	150	29	48	27
Nebraska	1,379	1,514	1,274	144	239	370
Nevada	14,673	12,231	5,993	3,731	2,754	2,458
New Hampshire	0	12	19	0	0	0
New Jersey	18,584	37,869	36,145	7,332	3,853	1,594
New Mexico	15,812	15,258	12,317	3,011	3,366	2,751
New York	108,610	109,136	94,477	23,069	20,603	18,466
North Carolina	1,314	878	490	404	390	163
North Dakota	0	0	0	0	0	0
Ohio	379	459	385	73	80	49
Oklahoma	97,222	103,601	103,365	19,293	17,968	13,624
Oregon	3,106	5,313	0	1,375	0	0
Pennsylvania	1,296	2,619	1,440	247	181	156
Rhode Island	2,152	994	186	602	403	629
South Carolina	2,274	1,473	1,970	1,798	404	28
South Dakota	37	109	166	9	24	1
Tennessee	346	0	117	223	113	0
Texas	571,760	593,886	600,133	106,069	122,624	100,463
Utah	494	464	169	7	81	122
Vermont	275	0	0	99	55	49
Virginia	1,679	3,406	867	980	660	25
Washington	93	7,524	1,732	69	1	9
West Virginia	93	70	47	9	7	10
Wisconsin	1,439	1,260	1,195	218	284	280
Wyoming	38	43	97	5	6	7
Total	1,513,857	1,584,197	1,589,180	324,965	295,305	239,415

See footnotes at end of table.

Table 25. Natural Gas Deliveries to Electrical Utility^a Consumers by State (Continued)
(Million Cubic Feet)

State	April 1990	March 1990	February 1990	January 1990	Total 1989	December 1989
Alabama	288	213	130	109	1,707	152
Alaska	2,535	2,860	2,920	2,904	32,746	2,711
Arizona	2,092	2,219	1,974	1,922	50,807	3,252
Arkansas	745	617	973	640	29,462	1,864
California	34,310	31,463	24,795	29,203	517,700	26,365
Colorado	375	499	258	354	8,375	659
Connecticut	0	1	1	1	3,291	1
Delaware	523	927	819	351	7,999	359
District of Columbia	0	0	0	0	0	0
Florida	16,239	15,353	12,531	11,725	186,814	9,698
Georgia	34	29	12	11	684	37
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	508	547	407	417	6,967	648
Indiana	561	499	433	432	4,075	550
Iowa	176	138	101	91	2,402	117
Kansas	925	1,121	819	895	18,741	923
Kentucky	26	36	32	14	328	21
Louisiana	16,432	16,420	11,415	11,554	227,082	13,132
Maine	0	0	0	0	0	0
Maryland	692	592	163	201	19,184	250
Massachusetts	5,734	1,165	557	18	48,448	6
Michigan	1,185	2,118	1,650	2,228	18,782	1,187
Minnesota	311	318	206	243	4,321	221
Mississippi	3,331	3,071	2,016	2,146	44,927	2,485
Missouri	52	61	43	50	1,242	104
Montana	31	22	19	26	336	31
Nebraska	336	185	46	59	2,593	71
Nevada	2,117	1,599	828	1,186	23,210	1,291
New Hampshire	0	0	0	0	23	0
New Jersey	3,273	1,631	686	215	54,778	724
New Mexico	2,213	1,931	997	1,543	27,365	1,814
New York	17,054	17,193	6,973	5,252	182,000	3,242
North Carolina	109	102	76	70	1,673	105
North Dakota	0	0	0	0	1	0
Ohio	73	34	30	40	983	168
Oklahoma	12,146	11,907	10,589	11,695	178,021	14,601
Oregon	0	0	1,496	235	12,942	2,185
Pennsylvania	222	161	156	173	4,022	456
Rhode Island	408	85	0	25	2,147	0
South Carolina	13	12	11	8	2,705	107
South Dakota	1	1	0	1	132	3
Tennessee	0	10	0	0	18	0
Texas	71,271	66,922	46,978	57,433	1,023,793	79,807
Utah	130	153	0	1	636	93
Vermont	46	3	2	21	37	1
Virginia	13	0	0	1	3,796	19
Washington	0	2	9	3	8,320	241
West Virginia	16	1	18	31	124	20
Wisconsin	281	177	101	98	2,076	246
Wyoming	5	5	5	5	85	9
Total	196,830	182,435	131,273	143,634	2,767,903	169,975

See footnotes at end of table.

Table 25. Natural Gas Deliveries to Electrical Utility^a Consumers by State (Continued)
(Million Cubic Feet)

State	November 1989	October 1989	September 1989	August 1989	July 1989	June 1989
Alabama	83	113	119	130	202	249
Alaska	2,981	2,849	2,835	2,777	2,616	2,366
Arizona	4,774	3,436	5,313	5,758	7,551	4,713
Arkansas	2,656	2,388	1,792	4,877	3,422	2,153
California	44,914	61,601	57,614	53,074	61,693	42,285
Colorado	473	659	526	432	462	264
Connecticut	19	858	700	141	5	232
Delaware	369	940	1,034	1,355	1,185	560
District of Columbia	0	0	0	0	0	0
Florida	13,249	16,371	19,164	19,183	19,071	18,536
Georgia	18	52	24	33	156	160
Hawaii	0	0	0	0	0	0
Idaho	0	0	0	0	0	0
Illinois	450	336	452	646	794	1,081
Indiana	431	270	228	129	260	60
Iowa	116	363	239	201	244	183
Kansas	713	641	1,303	4,252	4,247	2,338
Kentucky	3	16	11	18	86	50
Louisiana	14,228	21,027	22,293	26,898	26,452	24,374
Maine	0	0	0	0	0	0
Maryland	377	3,079	1,480	2,406	1,876	2,454
Massachusetts	1,522	8,538	6,832	5,808	7,075	6,054
Michigan	1,063	881	1,503	1,316	1,921	1,727
Minnesota	396	366	357	640	694	326
Mississippi	2,099	4,068	4,529	6,883	6,241	5,083
Missouri	56	73	78	176	229	172
Montana	28	35	14	29	25	20
Nebraska	357	295	167	189	392	113
Nevada	1,610	2,048	2,545	3,484	3,328	2,012
New Hampshire	0	1	5	6	4	3
New Jersey	1,521	2,901	4,558	7,203	9,002	9,075
New Mexico	2,223	2,702	2,775	2,592	2,905	2,276
New York	10,283	18,102	19,425	21,814	22,458	21,761
North Carolina	118	88	246	237	286	344
North Dakota	0	0	0	0	0	0
Ohio	41	63	64	189	154	159
Oklahoma	12,468	13,771	15,095	18,485	17,523	14,333
Oregon	1,747	1,877	1,546	274	946	2,086
Pennsylvania	256	164	240	288	399	367
Rhode Island	68	407	242	436	398	276
South Carolina	179	198	377	371	550	653
South Dakota	14	1	1	6	39	0
Tennessee	11	0	2	5	0	0
Texas	65,143	80,672	89,939	114,347	110,323	87,945
Utah	77	2	0	0	1	2
Vermont	36	0	0	0	0	0
Virginia	35	32	51	252	779	1,189
Washington	39	6	221	289	1,669	134
West Virginia	6	16	7	5	9	11
Wisconsin	127	173	105	166	325	158
Wyoming	6	17	5	6	6	7
Total	187,381	252,494	266,052	307,804	318,005	258,343

See footnotes at end of table.

Table 25. Natural Gas Deliveries to Electrical Utility^a Consumers by State (Continued)
(Million Cubic Feet)

State	May 1989	April 1989	March 1989	February 1989	January 1989	Total 1988
Alabama	205	93	100	157	104	2,574
Alaska	2,488	2,527	2,773	2,746	3,079	30,841
Arizona	4,387	6,188	2,632	1,129	1,673	25,328
Arkansas	1,300	3,384	3,853	1,450	323	22,075
California	28,043	36,696	37,880	36,214	31,324	552,938
Colorado	474	787	574	1,202	1,865	8,488
Connecticut	761	463	112	0	1	1,260
Delaware	145	809	737	389	117	2,824
District of Columbia	0	0	0	0	0	0
Florida	18,055	16,129	14,914	10,794	11,649	154,550
Georgia	42	70	46	15	31	1,569
Hawaii	0	0	0	0	0	2
Idaho	0	0	0	0	0	0
Illinois	673	404	486	532	465	5,706
Indiana	464	412	424	401	445	3,455
Iowa	199	181	246	132	182	5,459
Kansas	989	986	793	764	793	18,890
Kentucky	26	28	15	25	29	452
Louisiana	24,177	15,948	16,150	11,604	10,799	250,323
Maine	0	0	0	0	0	0
Maryland	2,518	3,410	1,134	69	131	5,336
Massachusetts	5,123	5,279	2,050	54	98	19,874
Michigan	1,844	2,015	1,535	1,911	1,878	15,027
Minnesota	195	314	285	263	265	5,217
Mississippi	5,984	3,022	2,482	1,076	976	33,261
Missouri	110	74	59	68	44	1,623
Montana	30	24	37	34	28	286
Nebraska	89	428	189	249	54	2,046
Nevada	1,890	2,147	1,359	692	803	10,658
New Hampshire	1	0	1	2	1	55
New Jersey	5,522	5,913	5,930	1,360	1,067	51,066
New Mexico	2,280	2,349	2,078	1,679	1,691	21,064
New York	22,442	20,996	14,860	4,189	2,430	148,493
North Carolina	82	36	42	35	53	1,068
North Dakota	0	0	0	0	0	2
Ohio	39	33	22	29	23	974
Oklahoma	18,549	15,212	12,633	12,840	12,511	177,222
Oregon	385	1,896	0	0	0	0
Pennsylvania	335	324	516	411	267	2,649
Rhode Island	235	85	0	0	0	185
South Carolina	87	86	66	27	4	2,378
South Dakota	11	8	49	1	1	223
Tennessee	0	0	0	0	0	225
Texas	97,663	82,601	78,761	76,466	60,127	1,043,910
Utah	107	136	134	80	4	196
Vermont	0	0	0	0	0	0
Virginia	770	601	20	16	31	1,096
Washington	0	916	3,162	1,640	3	1,753
West Virginia	13	5	9	19	4	73
Wisconsin	122	94	191	201	169	2,739
Wyoming	6	6	3	4	11	183
Total	248,869	233,116	209,343	170,969	145,552	2,635,616

^a Includes all steam electric utility generating plants with a combined capacity of 50 megawatts or greater.
Notes and Sources: See the last page of this section.

Table 26. Natural Gas Deliveries to All Consumers by State
(Million Cubic Feet)

State	YTD 1990	YTD 1989	YTD 1988	July 1990	June 1990	May 1990
Alabama	134,574	137,257	136,864	14,087	13,742	15,431
Alaska	67,313	77,260	77,600	8,293	8,213	7,443
Arizona	70,037	77,559	66,833	8,052	8,669	7,823
Arkansas	130,789	139,584	122,753	17,226	15,240	15,004
California	970,708	1,039,110	1,093,848	139,105	115,493	113,093
Colorado	145,877	146,036	141,826	8,912	11,863	16,475
Connecticut	57,393	59,146	56,093	5,141	4,600	5,934
Delaware	23,645	21,332	19,115	2,810	2,873	2,757
District of Columbia	20,264	22,412	22,231	1,033	1,301	1,809
Florida	187,677	184,597	179,551	28,321	25,301	28,557
Georgia	180,804	180,112	192,446	16,164	17,686	20,254
Hawaii	1,618	1,595	1,569	244	230	220
Idaho	21,881	25,615	23,067	1,860	2,085	2,507
Illinois	528,439	588,350	608,554	35,529	36,454	51,721
Indiana	264,134	273,904	278,410	20,886	22,196	29,559
Iowa	136,994	138,804	146,536	9,538	12,264	15,022
Kansas	173,124	162,468	169,401	22,933	18,605	20,564
Kentucky	90,567	100,402	100,623	6,853	7,288	8,891
Louisiana	720,305	691,292	671,290	113,170	108,640	100,411
Maine	2,354	2,251	2,000	219	233	293
Maryland	104,662	121,519	109,897	9,342	9,305	9,751
Massachusetts	157,697	159,096	138,440	15,791	15,026	20,964
Michigan	438,178	478,062	478,206	26,008	31,054	43,535
Minnesota	162,893	178,368	176,543	11,393	11,606	16,009
Mississippi	129,816	109,702	103,680	22,463	16,125	15,981
Missouri	154,274	166,774	166,377	9,425	10,158	13,797
Montana	21,448	25,715	23,360	1,320	1,612	2,350
Nebraska	67,574	73,606	76,661	7,104	5,716	6,303
Nevada	39,093	37,539	30,496	5,808	4,980	4,824
New Hampshire	8,891	9,250	8,591	454	663	986
New Jersey	244,093	290,786	276,948	23,475	20,587	23,443
New Mexico	62,720	63,150	61,841	6,065	6,823	7,364
New York	502,798	532,874	514,421	49,184	50,120	55,645
North Carolina	90,264	97,260	89,283	8,556	8,593	10,222
North Dakota	14,361	16,512	15,123	743	917	1,420
Ohio	439,759	478,411	495,374	28,199	33,209	44,159
Oklahoma	276,313	282,497	284,007	37,784	35,066	33,875
Oregon	59,958	59,255	49,907	8,072	5,513	6,211
Pennsylvania	378,971	409,102	404,140	27,732	30,815	37,739
Rhode Island	21,574	21,515	20,593	1,686	1,688	2,757
South Carolina	71,236	68,258	68,333	11,854	8,296	8,199
South Dakota	14,418	16,188	16,098	878	1,065	1,363
Tennessee	121,973	126,691	125,607	11,560	11,551	13,456
Texas	1,987,467	1,862,588	1,813,804	303,738	315,096	309,657
Utah	58,639	62,840	59,958	4,066	4,901	6,030
Vermont	4,134	3,939	3,567	393	354	456
Virginia	96,168	108,029	98,542	10,696	9,381	9,492
Washington	92,638	101,570	91,133	8,781	10,130	11,129
West Virginia	61,343	67,457	63,331	5,583	5,248	6,674
Wisconsin	184,951	207,804	200,953	11,770	12,943	19,102
Wyoming	23,931	23,335	23,458	2,173	2,524	2,840
Total	10,020,726	10,328,785	10,198,290	1,132,471	1,114,044	1,209,503

See footnotes at end of tables.

Table 26. Natural Gas Deliveries to All Consumers by State (Continued)
(Million Cubic Feet)

State	April 1990	March 1990	February 1990	January 1990	Total 1989	December 1989
Alabama	18,804	20,992	22,008	29,510	225,124	24,040
Alaska	9,669	11,294	11,396	11,005	127,414	11,296
Arizona	8,217	11,338	12,737	13,201	127,177	11,883
Arkansas	17,976	19,217	20,492	25,628	228,392	23,178
California	130,338	145,357	155,932	171,390	1,799,042	163,384
Colorado	21,249	26,753	28,646	31,979	218,766	24,416
Connecticut	8,758	10,146	10,969	11,845	94,484	12,527
Delaware	3,103	3,996	3,688	4,418	34,919	3,290
District of Columbia	2,928	3,801	4,084	5,308	33,174	4,689
Florida	27,047	27,004	24,248	27,199	310,493	21,767
Georgia	23,939	30,243	32,224	40,294	309,970	40,687
Hawaii	223	236	233	232	2,694	224
Idaho	2,721	3,832	4,297	4,579	40,679	4,641
Illinois	75,155	96,004	109,304	124,272	978,413	160,338
Indiana	38,466	45,722	48,310	58,995	453,526	65,183
Iowa	19,884	23,734	25,289	31,263	215,294	26,682
Kansas	22,971	25,637	27,982	34,432	253,952	28,272
Kentucky	12,994	15,390	18,158	20,993	165,562	26,673
Louisiana	98,450	99,973	94,119	105,542	1,209,158	115,718
Maine	464	336	397	412	3,672	490
Maryland	15,199	18,292	18,667	24,106	187,512	21,772
Massachusetts	26,204	24,737	24,645	30,330	247,205	25,714
Michigan	63,445	82,547	88,529	103,060	749,612	108,871
Minnesota	22,877	30,168	33,342	37,498	287,891	41,598
Mississippi	16,271	17,189	17,658	24,129	188,597	18,242
Missouri	22,216	26,388	29,842	42,448	256,105	38,207
Montana	2,872	3,679	4,502	5,113	41,575	5,400
Nebraska	9,373	11,297	13,009	14,772	115,293	13,739
Nevada	4,924	5,958	6,097	6,502	62,950	5,986
New Hampshire	1,398	1,514	1,771	2,105	13,925	1,922
New Jersey	37,630	44,060	42,727	52,171	452,476	57,310
New Mexico	8,517	10,353	10,968	12,630	101,126	11,333
New York	74,719	92,159	87,456	93,515	839,957	98,996
North Carolina	12,819	14,989	14,939	20,146	156,105	16,403
North Dakota	2,178	2,597	3,045	3,461	24,959	3,401
Ohio	63,963	81,615	89,597	99,017	799,852	128,237
Oklahoma	37,097	39,049	42,102	51,340	468,488	48,765
Oregon	6,683	9,407	13,171	10,901	99,448	11,524
Pennsylvania	57,116	67,026	70,792	87,751	649,804	88,193
Rhode Island	3,491	3,671	3,605	4,676	33,821	4,068
South Carolina	9,234	10,456	9,845	13,352	114,237	10,035
South Dakota	2,058	2,639	3,045	3,370	25,263	3,633
Tennessee	16,786	18,949	20,782	28,889	203,588	25,403
Texas	275,986	264,841	232,032	286,117	3,225,961	318,473
Utah	7,194	10,936	12,582	12,930	96,288	12,103
Vermont	620	704	720	887	6,145	781
Virginia	13,085	15,940	16,400	21,174	167,450	21,385
Washington	11,900	15,628	17,596	17,474	158,420	16,628
West Virginia	8,981	10,223	10,739	13,895	110,452	14,800
Wisconsin	25,091	34,954	37,755	43,336	326,613	47,119
Wyoming	3,385	3,997	4,278	4,734	36,633	4,157
Total	1,406,669	1,596,965	1,636,749	1,924,325	17,079,057	1,993,577

See footnotes at end of tables.

Table 26. Natural Gas Deliveries to All Consumers by State (Continued)
(Million Cubic Feet)

State	November 1989	October 1989	September 1989	August 1989	July 1989	June 1989
Alabama	19,291	16,211	14,167	14,159	14,233	15,007
Alaska	10,594	9,762	9,311	9,192	9,388	9,864
Arizona	10,755	7,901	9,308	9,768	11,824	9,509
Arkansas	19,551	17,248	12,466	16,364	16,153	14,576
California	149,088	158,974	149,227	139,259	142,104	131,676
Colorado	17,069	11,804	9,320	10,121	8,876	10,749
Connecticut	7,666	6,370	4,785	3,988	3,870	4,633
Delaware	2,506	2,618	2,539	2,634	2,549	2,330
District of Columbia	2,189	1,430	1,207	1,246	1,199	1,452
Florida	23,157	25,431	27,819	27,722	28,004	27,835
Georgia	29,715	23,123	18,044	18,289	17,278	18,123
Hawaii	217	222	220	215	228	223
Idaho	3,644	2,737	2,264	1,779	1,897	2,439
Illinois	97,901	59,725	39,136	32,963	33,688	35,615
Indiana	42,379	30,067	21,834	20,158	20,615	22,109
Iowa	17,409	12,939	10,160	9,300	9,039	10,382
Kansas	18,944	13,661	12,528	18,079	17,624	14,992
Kentucky	15,238	10,204	6,656	6,389	6,420	7,622
Louisiana	108,321	99,958	93,732	100,137	98,136	98,380
Maine	305	244	202	181	165	199
Maryland	12,553	12,223	9,318	10,127	9,789	11,391
Massachusetts	15,583	19,281	14,363	13,168	14,351	15,191
Michigan	64,815	43,380	28,901	25,582	26,627	30,927
Minnesota	28,061	17,333	11,500	11,030	11,119	11,412
Mississippi	14,605	14,981	13,966	17,102	15,502	15,074
Missouri	19,591	13,148	9,493	8,891	9,162	10,466
Montana	4,052	3,010	1,867	1,530	1,375	1,836
Nebraska	8,805	5,804	5,693	7,645	7,513	5,581
Nevada	5,035	4,380	4,542	5,467	5,276	4,276
New Hampshire	998	779	549	426	471	599
New Jersey	33,144	25,984	21,978	23,275	25,289	27,259
New Mexico	8,329	6,283	5,970	6,062	5,941	5,710
New York	63,958	53,391	44,908	45,831	47,273	50,801
North Carolina	13,316	10,958	8,968	9,200	8,621	9,744
North Dakota	2,249	1,302	871	626	721	950
Ohio	78,522	51,673	32,994	30,016	28,779	30,962
Oklahoma	35,307	33,690	32,180	36,047	37,100	32,218
Oregon	9,220	7,568	6,666	5,215	5,745	7,128
Pennsylvania	55,008	39,594	29,248	28,658	28,714	31,244
Rhode Island	2,327	2,320	1,711	1,879	1,694	1,762
South Carolina	10,016	9,195	7,906	8,827	8,556	9,186
South Dakota	2,413	1,424	870	733	786	978
Tennessee	16,526	13,056	11,000	10,914	10,846	11,667
Texas	249,532	245,758	259,280	290,332	286,332	254,648
Utah	8,045	4,987	4,222	4,091	3,680	4,836
Vermont	593	406	230	196	193	248
Virginia	13,093	9,689	7,847	7,407	8,512	10,164
Washington	13,531	10,055	8,572	8,064	10,263	8,843
West Virginia	9,471	7,416	5,845	5,463	5,387	5,476
Wisconsin	28,957	19,137	12,383	11,213	11,298	13,476
Wyoming	3,296	2,427	1,878	1,542	1,647	1,998
Total	1,426,889	1,201,260	1,050,642	1,078,505	1,081,855	1,063,769

See footnotes at end of tables.

Table 26. Natural Gas Deliveries to All Consumers by State (Continued)
(Million Cubic Feet)

State	May 1989	April 1989	March 1989	February 1989	January 1989	Total 1988
Alabama	17,145	19,867	24,202	22,867	23,936	217,586
Alaska	10,037	11,215	12,215	12,257	12,284	132,017
Arizona	9,472	11,745	10,092	11,224	13,693	106,017
Arkansas	14,239	20,793	27,976	24,418	21,429	197,208
California	120,879	127,618	156,443	169,917	190,473	1,762,480
Colorado	14,259	20,019	28,091	32,118	31,924	208,087
Connecticut	6,708	8,981	11,694	11,282	11,978	87,592
Delaware	2,441	3,648	3,801	3,377	3,186	29,253
District of Columbia	2,024	3,298	4,827	4,576	5,036	32,483
Florida	28,267	26,799	27,296	22,420	23,976	282,792
Georgia	20,531	24,237	28,898	35,726	35,319	316,105
Hawaii	228	225	224	230	237	2,614
Idaho	2,800	3,431	4,489	5,214	5,345	36,646
Illinois	55,098	79,159	118,072	136,317	130,401	952,529
Indiana	29,809	37,702	52,051	56,255	55,363	447,542
Iowa	13,237	19,394	28,239	29,184	29,329	228,538
Kansas	16,543	21,865	29,617	31,200	30,627	264,539
Kentucky	9,882	13,496	19,127	22,420	21,435	160,332
Louisiana	100,883	93,512	103,035	97,447	99,899	1,116,676
Maine	285	357	414	415	416	3,191
Maryland	13,872	19,134	23,499	21,175	22,659	170,326
Massachusetts	20,103	25,879	29,653	26,152	27,767	208,998
Michigan	47,249	70,614	98,133	99,766	104,746	722,598
Minnesota	15,554	23,643	36,354	40,262	40,024	272,585
Mississippi	16,294	15,111	16,054	15,163	16,504	171,168
Missouri	13,461	21,904	35,199	38,975	37,607	248,022
Montana	2,361	3,653	5,188	5,492	5,810	37,587
Nebraska	6,459	9,341	14,384	15,985	14,343	117,234
Nevada	4,370	5,002	5,472	6,370	6,773	48,031
New Hampshire	1,000	1,495	1,842	1,799	2,044	12,987
New Jersey	30,869	42,019	57,353	52,128	55,869	411,415
New Mexico	6,674	7,895	10,102	12,361	14,467	94,650
New York	65,178	83,829	101,967	90,072	93,754	784,673
North Carolina	11,302	14,430	17,829	16,295	19,039	146,790
North Dakota	1,375	2,449	3,417	3,662	3,938	22,876
Ohio	48,427	70,110	91,556	108,092	100,485	790,436
Oklahoma	36,408	37,865	46,669	47,207	45,030	460,130
Oregon	6,168	9,164	10,164	10,577	10,309	78,996
Pennsylvania	44,995	59,585	78,507	81,785	84,272	626,688
Rhode Island	2,538	3,230	4,065	3,986	4,240	30,668
South Carolina	8,884	10,028	11,685	9,659	10,260	109,817
South Dakota	1,359	2,238	3,387	3,813	3,627	23,974
Tennessee	12,682	17,669	23,695	24,717	25,415	197,095
Texas	258,605	258,245	268,556	278,827	257,375	3,104,559
Utah	5,494	7,666	11,289	14,899	14,976	90,702
Vermont	367	613	809	807	902	5,551
Virginia	10,928	16,322	20,257	20,498	21,348	154,756
Washington	9,851	14,176	20,809	19,853	17,775	142,825
West Virginia	7,791	9,788	12,048	13,244	13,723	100,595
Wisconsin	20,487	29,730	42,939	45,710	44,164	312,832
Wyoming	2,524	3,276	4,086	4,830	4,974	36,005
Total	1,208,396	1,443,464	1,797,771	1,863,027	1,870,503	16,319,791

Notes and Sources: See the last page of this section.

Table 27. Average City Gate Price by State
(Dollars per Thousand Cubic Feet)

State	YTD 1990	YTD 1989	YTD 1988	July 1990	June 1990	May 1990	April 1990	March 1990
Alabama	3.07	2.97	3.19	2.95	3.09	2.96	2.93	3.03
Alaska	.33	.33	.33	.33	.33	.33	.33	.33
Arizona	2.71	2.63	2.47	2.70	2.67	2.39	2.54	2.51
Arkansas	2.45	2.47	2.42	2.29	2.34	2.34	2.36	2.50
California	2.90	2.73	2.53	3.23	2.90	2.83	2.79	2.70
Colorado	2.92	3.02	3.09	3.40	3.46	3.19	2.88	2.79
Connecticut	3.57	3.43	3.22	3.78	3.47	3.10	3.21	3.50
Delaware	2.72	2.97	2.88	2.42	2.44	2.97	2.41	2.91
District of Columbia	---	---	---	---	---	---	---	---
Florida	2.63	2.62	2.47	2.31	2.37	2.45	2.48	2.57
Georgia	3.48	3.65	3.73	3.16	3.24	2.74	3.19	3.62
Hawaii	6.87	6.48	6.36	5.85	6.24	7.29	6.96	7.24
Idaho	2.11	2.14	2.31	2.20	2.77	2.15	2.09	1.92
Illinois	3.11	3.06	2.70	2.57	2.75	2.48	2.85	3.28
Indiana	3.17	3.24	3.09	3.38	3.50	3.12	2.80	3.09
Iowa	2.93	2.85	2.98	2.98	3.06	2.79	2.48	2.62
Kansas	2.82	2.05	2.03	2.27	2.25	2.42	2.87	3.09
Kentucky	3.28	3.11	2.99	2.73	3.05	3.28	3.29	3.34
Louisiana	2.97	2.96	3.01	2.73	2.64	2.84	2.82	2.85
Maine	3.03	3.26	2.90	2.72	3.05	2.79	2.69	3.06
Maryland	3.01	3.25	3.04	3.99	3.99	3.45	2.80	2.60
Massachusetts	3.24	3.11	2.91	2.81	3.28	2.84	2.96	3.28
Michigan	3.16	3.36	3.37	3.14	3.04	2.52	3.11	3.48
Minnesota	2.86	2.75	2.83	3.09	3.22	2.66	2.35	2.60
Mississippi	2.92	3.10	3.32	2.65	2.77	2.64	2.67	2.81
Missouri	3.19	2.92	2.86	3.57	3.54	3.40	2.71	3.16
Montana	3.53	3.59	3.74	3.35	4.24	3.72	4.01	3.20
Nebraska	2.98	2.95	3.05	3.10	3.20	2.85	2.59	2.78
Nevada	2.97	3.47	2.74	3.00	2.68	2.38	2.64	3.14
New Hampshire	3.56	3.27	3.14	3.32	3.12	2.91	3.06	3.44
New Jersey	3.16	3.14	2.96	3.14	3.11	2.81	2.88	3.07
New Mexico	2.71	2.59	2.54	3.06	3.41	3.40	2.40	2.37
New York	3.02	3.01	2.77	2.77	2.76	2.63	2.92	2.98
North Carolina	2.86	3.10	2.82	2.86	2.93	2.92	2.64	2.60
North Dakota	3.35	3.27	3.47	3.17	4.01	3.75	3.54	3.22
Ohio	3.07	3.27	3.15	3.03	3.12	3.03	2.74	3.16
Oklahoma	2.04	2.07	2.26	1.73	1.86	1.83	2.01	2.03
Oregon	2.51	2.58	2.95	2.61	2.90	2.51	2.55	2.43
Pennsylvania	3.40	3.27	3.06	4.17	3.74	3.51	3.39	3.18
Rhode Island	3.69	3.64	3.34	4.21	4.06	3.79	3.32	3.61
South Carolina	3.22	3.57	3.40	2.65	3.15	3.24	3.12	3.20
South Dakota	3.20	3.15	3.19	3.47	3.89	3.31	2.84	2.91
Tennessee	2.84	2.75	2.68	2.89	2.79	2.65	2.54	2.71
Texas	3.10	3.30	2.97	2.88	2.86	2.93	3.01	3.12
Utah	3.82	3.48	3.02	5.27	5.23	4.75	4.55	3.75
Vermont	2.87	2.60	2.62	3.49	3.42	2.84	2.70	2.86
Virginia	3.09	3.13	2.77	3.35	3.68	2.97	2.61	2.67
Washington	1.97	2.26	2.38	1.87	1.83	1.71	1.82	1.84
West Virginia	3.57	3.70	3.17	5.29	4.89	3.95	3.52	3.03
Wisconsin	3.33	3.71	3.57	3.90	3.87	3.22	3.05	3.10
Wyoming	3.15	3.02	3.16	3.28	3.65	4.76	2.97	2.88
Total	3.02	3.01	2.87	3.03	3.00	2.81	2.84	2.95

See footnotes at end of table.

Table 27. Average City Gate Price by State (Continued)
(Dollars per Thousand Cubic Feet)

State	February 1990	January 1990	Total 1989	December 1989	November 1989	October 1989	September 1989	August 1989
Alabama	3.22	3.15	3.00	3.09	3.14	2.95	2.95	3.00
Alaska	.33	.33	.33	.33	.33	.33	.33	.33
Arizona	2.60	3.13	2.67	2.72	2.74	2.64	2.82	2.73
Arkansas	2.50	2.55	2.47	2.50	2.45	2.44	2.40	2.45
California	2.87	3.02	2.75	2.85	2.83	2.59	2.62	2.84
Colorado	2.80	2.85	2.96	2.79	2.73	2.94	3.09	3.31
Connecticut	3.79	3.86	3.46	3.34	3.53	3.38	3.89	3.81
Delaware	3.16	2.84	2.82	3.29	2.98	2.09	2.29	2.66
District of Columbia	---	---	---	---	---	---	---	---
Florida	2.98	3.05	2.63	2.90	2.64	2.49	2.41	2.59
Georgia	3.84	3.73	3.54	3.56	3.36	3.08	3.20	3.32
Hawaii	7.27	7.18	6.49	6.65	6.55	6.32	6.34	6.56
Idaho	1.98	2.10	2.17	2.06	2.10	2.35	2.49	2.93
Illinois	3.72	3.91	2.99	3.24	2.92	2.64	2.67	2.71
Indiana	2.93	3.57	3.13	3.24	2.67	3.04	2.94	2.96
Iowa	2.77	3.55	2.80	3.00	2.49	2.32	2.84	3.03
Kansas	2.83	3.09	2.28	3.12	2.70	2.45	1.86	2.36
Kentucky	3.35	3.46	3.01	3.00	3.10	2.74	2.66	2.76
Louisiana	3.20	3.29	2.98	3.01	2.97	2.87	3.12	3.08
Maine	3.59	3.13	3.23	2.71	3.70	2.94	3.41	3.52
Maryland	3.04	2.90	3.20	3.18	3.00	2.78	3.55	3.59
Massachusetts	3.73	3.51	3.20	3.55	3.61	2.89	3.25	3.31
Michigan	3.43	3.36	3.24	2.98	3.11	3.31	3.09	3.01
Minnesota	2.72	3.40	2.72	2.85	2.39	2.41	2.98	3.21
Mississippi	3.11	3.30	3.08	2.96	2.98	3.13	3.20	3.23
Missouri	3.21	3.24	3.00	3.20	3.05	3.03	3.04	2.96
Montana	3.54	3.36	3.43	3.24	3.24	3.03	3.11	2.96
Nebraska	2.76	3.50	2.91	2.90	2.64	2.67	3.15	3.22
Nevada	3.05	3.23	3.33	3.22	3.31	2.71	3.03	3.26
New Hampshire	4.12	4.02	3.28	3.36	3.60	2.90	3.05	3.26
New Jersey	3.47	3.57	3.17	3.41	3.09	3.19	3.12	3.10
New Mexico	2.54	2.72	2.66	2.72	2.60	2.72	3.25	3.07
New York	3.23	3.37	3.07	3.41	3.23	2.80	2.94	3.03
North Carolina	2.94	3.09	3.01	2.98	2.71	2.77	2.91	3.06
North Dakota	3.19	3.27	3.12	3.03	2.83	2.61	2.75	2.92
Ohio	3.16	3.10	3.31	3.32	3.34	3.16	4.36	3.61
Oklahoma	2.14	2.19	2.07	2.29	2.02	1.87	1.79	1.84
Oregon	2.38	2.53	2.67	2.49	3.09	2.60	2.59	3.80
Pennsylvania	3.28	3.36	3.26	3.01	3.14	3.41	3.79	3.91
Rhode Island	3.71	3.68	3.68	3.49	3.51	3.55	4.63	4.91
South Carolina	3.45	3.54	3.46	3.53	3.35	3.22	3.02	3.15
South Dakota	3.02	3.52	3.04	3.00	2.62	2.61	3.11	3.53
Tennessee	2.71	3.19	2.81	3.00	2.81	2.76	2.88	2.92
Texas	3.26	3.33	3.33	3.49	3.58	2.96	3.17	3.43
Utah	3.33	3.37	3.59	3.41	3.53	3.89	4.58	5.02
Vermont	2.77	2.70	2.50	2.47	2.67	2.57	2.67	2.72
Virginia	3.16	3.40	3.13	3.22	3.00	3.06	3.19	3.25
Washington	2.05	2.32	2.20	2.15	1.92	2.20	2.19	2.19
West Virginia	3.54	3.32	3.75	3.27	3.53	3.95	6.88	7.30
Wisconsin	3.38	3.40	3.40	2.28	3.05	3.49	4.31	5.12
Wyoming	2.97	2.85	2.99	2.86	2.86	3.13	3.11	3.04
Total	3.10	3.25	3.01	3.10	2.98	2.84	2.99	3.04

See footnotes at end of table.

Table 27. Average City Gate Price by State (Continued)
(Dollars per Thousand Cubic Feet)

State	July 1989	June 1989	May 1989	April 1989	March 1989	February 1989	January 1989	Total 1988
Alabama	3.09	2.99	2.83	2.83	2.93	3.05	3.05	3.16
Alaska	.33	.33	.33	.33	.33	.33	.33	.33
Arizona	2.74	2.69	2.52	2.47	2.52	2.77	2.65	2.51
Arkansas	2.39	2.54	2.43	2.43	2.47	2.49	2.40	2.43
California	2.77	2.68	2.87	2.49	2.53	2.95	2.88	2.60
Colorado	4.16	3.60	3.36	3.19	2.92	2.85	2.83	3.07
Connecticut	4.29	4.21	3.54	3.18	3.24	3.34	3.27	3.27
Delaware	3.53	2.14	2.90	2.38	3.14	3.17	3.95	2.90
District of Columbia	---	---	---	---	---	---	---	---
Florida	2.59	2.63	2.62	2.63	2.49	2.61	2.77	2.46
Georgia	3.93	3.67	3.35	3.10	3.52	3.76	3.95	3.80
Hawaii	6.06	7.15	7.00	6.52	6.83	5.92	5.42	6.21
Idaho	2.62	2.55	2.57	2.41	2.06	2.04	1.95	2.14
Illinois	2.80	2.79	2.60	2.60	2.96	3.34	4.19	2.74
Indiana	3.20	3.38	3.32	3.08	3.04	3.21	3.43	3.13
Iowa	3.06	3.16	2.29	2.74	2.06	2.80	3.20	2.92
Kansas	1.75	1.60	1.68	1.81	2.33	2.40	2.10	2.05
Kentucky	2.92	3.09	3.15	3.12	3.10	3.11	3.19	2.94
Louisiana	3.03	2.95	3.04	2.83	2.82	2.89	3.19	3.04
Maine	3.53	3.35	2.98	3.28	3.20	3.60	2.93	3.00
Maryland	4.53	3.77	3.56	2.85	3.02	3.21	3.26	3.15
Massachusetts	3.15	3.10	3.62	2.43	2.99	3.68	3.20	3.00
Michigan	3.20	3.21	3.19	3.44	3.47	3.59	3.45	3.41
Minnesota	3.35	3.14	2.66	2.40	2.57	2.66	3.00	2.79
Mississippi	3.37	3.22	3.13	3.43	2.90	2.92	3.11	3.29
Missouri	3.26	2.77	3.11	2.93	2.90	2.80	3.00	2.87
Montana	3.35	3.35	3.86	3.64	3.57	3.58	3.59	3.69
Nebraska	3.39	3.34	2.98	2.68	2.86	2.76	3.18	3.03
Nevada	3.51	3.50	4.02	3.12	4.18	2.94	3.45	2.87
New Hampshire	3.21	3.11	2.91	2.91	3.31	3.65	3.78	3.04
New Jersey	3.44	3.16	3.18	2.73	3.01	3.56	3.06	3.03
New Mexico	3.00	3.03	2.54	2.53	2.59	2.56	2.49	2.58
New York	3.07	2.96	2.84	2.87	2.87	3.09	3.24	2.91
North Carolina	3.50	3.04	2.94	2.88	3.07	3.17	3.19	2.87
North Dakota	3.13	3.10	3.11	3.28	3.20	3.33	3.36	3.42
Ohio	3.61	2.49	2.70	3.41	3.06	3.47	3.44	3.26
Oklahoma	1.72	1.89	1.94	2.10	1.99	2.17	2.23	2.24
Oregon	2.57	3.01	2.82	3.00	2.49	2.31	2.55	3.01
Pennsylvania	3.84	4.01	3.37	3.56	3.05	3.06	3.13	3.15
Rhode Island	5.42	4.85	3.91	3.22	3.36	3.47	3.47	3.43
South Carolina	3.29	3.17	3.23	3.23	3.31	3.91	4.32	3.46
South Dakota	3.91	3.47	3.05	2.92	3.09	2.99	3.34	3.18
Tennessee	2.97	3.05	2.86	2.64	2.40	2.70	2.94	2.77
Texas	3.35	3.19	3.22	3.07	3.37	3.41	3.26	2.99
Utah	5.17	4.95	4.09	3.64	3.27	3.23	3.17	3.14
Vermont	2.75	2.70	2.78	2.60	2.47	2.58	2.63	2.59
Virginia	2.95	3.01	2.87	2.59	3.14	3.44	3.48	2.87
Washington	2.32	2.33	2.49	2.13	2.10	2.33	2.27	2.32
West Virginia	7.17	4.88	4.93	3.67	3.30	3.19	3.39	3.43
Wisconsin	4.77	4.52	4.00	3.66	3.21	3.64	3.80	3.62
Wyoming	3.48	3.32	3.00	3.12	2.89	2.96	2.96	3.15
Total	3.08	2.98	2.94	2.83	2.89	3.10	3.17	2.92

--- Not Applicable.

Notes and Sources: See the last page of this section.

Table 28. Average Price of Natural Gas Delivered to Residential Consumers by State
(Dollars per Thousand Cubic Feet)

State	YTD 1990	YTD 1989	YTD 1988	July 1990	June 1990	May 1990	April 1990	March 1990
Alabama	6.20	6.02	6.37	8.49	8.15	7.11	6.38	6.12
Alaska	3.79	3.81	3.36	4.30	4.10	3.93	3.79	3.71
Arizona	6.66	6.79	6.76	9.10	8.37	7.77	7.02	6.38
Arkansas	4.85	4.69	4.67	6.64	6.24	5.39	4.84	4.81
California	5.72	5.58	5.49	6.07	6.22	5.95	5.07	5.63
Colorado	4.47	4.50	4.32	5.85	5.04	4.55	4.37	4.27
Connecticut	8.49	8.11	7.72	10.09	9.91	9.25	8.39	8.22
Delaware	6.33	6.32	5.80	8.09	7.74	6.84	6.35	6.18
District of Columbia	7.52	7.40	6.75	6.98	6.81	7.37	7.21	8.05
Florida	8.05	7.88	7.14	9.65	9.35	8.97	8.35	8.18
Georgia	6.83	6.21	6.25	8.15	7.78	7.40	6.38	6.75
Hawaii	15.85	15.40	15.72	14.96	15.68	16.32	16.28	16.12
Idaho	4.91	4.96	5.57	6.32	5.47	5.34	5.17	4.83
Illinois	5.07	5.00	4.56	6.15	5.79	5.17	4.88	4.98
Indiana	5.72	5.77	5.13	6.77	6.60	5.98	5.56	5.50
Iowa	4.93	4.59	4.74	6.66	5.61	4.89	4.51	4.62
Kansas	4.42	4.00	3.94	5.64	5.17	4.63	4.40	4.34
Kentucky	4.88	4.65	4.39	6.46	5.84	5.50	4.78	4.61
Louisiana	5.73	5.59	5.39	7.49	7.32	6.09	6.11	5.01
Maine	7.76	6.95	7.26	8.31	7.56	7.77	8.27	8.08
Maryland	6.28	6.21	5.72	7.93	7.40	6.78	6.11	6.17
Massachusetts	7.70	7.06	6.28	7.87	6.95	6.73	6.39	8.12
Michigan	4.91	5.20	5.17	6.65	5.88	5.26	4.86	4.76
Minnesota	4.56	4.54	4.58	5.07	4.77	4.40	4.13	4.20
Mississippi	5.17	5.12	5.89	5.43	5.37	5.57	5.01	5.30
Missouri	5.06	4.71	4.67	6.65	6.11	5.30	5.07	5.02
Montana	4.43	4.38	4.37	5.75	4.94	4.62	4.46	4.34
Nebraska	4.50	4.42	4.39	5.26	5.04	4.54	4.23	4.22
Nevada	5.52	5.45	5.66	7.08	6.48	6.35	6.03	5.46
New Hampshire	7.38	6.75	6.03	8.32	7.51	7.08	7.77	7.63
New Jersey	6.51	6.38	6.18	8.59	8.08	7.35	6.69	6.46
New Mexico	5.47	5.53	4.86	7.58	6.95	6.02	5.51	5.23
New York	7.22	7.08	6.19	8.95	8.20	7.58	7.08	7.05
North Carolina	5.99	6.52	6.10	8.33	7.90	6.79	5.83	5.81
North Dakota	4.59	4.62	5.16	6.48	5.45	4.85	4.54	4.50
Ohio	5.21	5.40	5.09	6.48	5.93	5.21	5.28	4.97
Oklahoma	4.61	4.26	4.45	6.66	6.20	5.21	4.62	4.47
Oregon	6.19	6.10	6.64	7.01	6.55	6.40	6.24	6.06
Pennsylvania	6.43	5.95	5.57	8.48	7.57	6.98	6.44	6.27
Rhode Island	7.06	7.06	6.46	8.34	7.73	7.34	7.07	6.88
South Carolina	7.01	6.66	6.70	8.74	8.29	7.32	6.98	6.92
South Dakota	4.97	4.79	4.83	6.81	5.93	5.12	4.72	4.67
Tennessee	4.98	4.72	4.52	6.29	5.90	5.34	4.98	4.98
Texas	5.63	5.49	5.17	7.13	6.86	6.49	5.98	5.62
Utah	5.19	5.01	5.03	5.81	5.30	5.28	5.44	5.15
Vermont	5.58	5.57	5.59	7.00	6.20	5.84	5.58	5.47
Virginia	6.47	6.51	5.53	8.70	7.49	7.14	6.19	6.02
Washington	5.07	5.42	5.39	6.49	5.61	5.28	5.09	4.91
West Virginia	6.32	5.49	5.45	8.30	7.37	6.83	6.31	6.25
Wisconsin	5.71	5.66	5.88	6.59	6.00	5.62	5.54	5.79
Wyoming	4.76	4.62	4.38	5.50	4.79	4.89	4.76	4.71
Total	5.70	5.59	5.33	6.99	6.55	5.97	5.62	5.58

See footnotes at end of table.

Table 28. Average Price of Natural Gas Delivered to Residential Consumers by State (Continued)
(Dollars per Thousand Cubic Feet)

State	February 1990	January 1990	Total 1989	December 1989	November 1989	October 1989	September 1989	August 1989
Alabama	5.92	5.53	6.27	5.88	6.72	7.87	8.52	8.47
Alaska	3.08	3.70	3.63	3.55	3.57	3.71	3.94	4.19
Arizona	6.20	6.17	6.94	6.08	7.25	8.68	9.30	9.55
Arkansas	4.66	4.41	4.85	4.44	5.09	6.15	6.57	6.79
California	5.77	5.72	5.59	5.38	5.12	6.11	6.10	5.90
Colorado	4.46	4.30	4.03	4.49	4.75	5.27	5.81	6.07
Connecticut	8.24	8.17	8.25	7.90	8.22	9.06	10.09	10.48
Delaware	6.15	5.95	6.42	6.16	6.76	7.38	7.48	7.49
District of Columbia	7.84	7.37	7.44	7.31	7.61	8.04	8.60	6.70
Florida	8.01	6.95	8.06	7.18	8.34	9.52	9.39	9.67
Georgia	6.89	6.45	6.24	5.62	6.40	7.28	7.47	7.97
Hawaii	15.79	15.81	15.66	15.89	15.99	15.99	15.98	10.47
Idaho	4.68	4.64	5.05	4.81	5.30	5.67	5.95	6.50
Illinois	5.25	4.75	4.92	4.54	4.56	5.00	5.81	6.43
Indiana	5.54	5.75	5.51	4.84	4.91	5.14	6.16	6.87
Iowa	4.95	5.05	4.70	4.60	4.74	5.12	6.17	6.63
Kansas	4.32	4.21	4.17	4.24	4.42	4.93	5.35	5.67
Kentucky	4.75	4.68	4.68	4.39	4.68	5.12	5.98	6.12
Louisiana	5.90	5.18	5.97	6.01	6.83	7.36	7.63	7.65
Maine	7.95	7.00	7.16	7.08	7.59	7.79	8.59	8.47
Maryland	6.29	5.81	6.30	5.74	6.45	7.29	8.11	7.89
Massachusetts	8.02	7.25	7.16	7.31	7.77	6.31	7.99	8.20
Michigan	4.72	4.66	5.19	4.68	4.94	5.51	6.60	7.15
Minnesota	4.57	4.98	4.57	4.56	4.45	4.69	5.19	5.40
Mississippi	5.25	4.97	5.10	4.73	5.28	5.35	5.47	5.54
Missouri	4.90	4.73	4.84	4.65	5.03	5.49	6.35	6.73
Montana	4.24	4.23	4.37	4.25	4.29	4.35	4.58	4.67
Nebraska	4.44	4.66	4.48	4.37	4.47	4.80	5.22	5.46
Nevada	5.05	5.07	5.55	5.18	5.53	6.39	6.89	7.22
New Hampshire	7.60	6.76	6.85	6.83	7.28	6.86	7.43	7.94
New Jersey	6.43	5.63	6.51	6.19	6.62	7.28	8.28	8.54
New Mexico	5.20	5.10	5.73	5.28	5.88	7.40	7.93	7.99
New York	7.26	6.72	7.22	6.77	7.58	7.98	9.18	9.36
North Carolina	5.77	5.69	6.55	5.99	6.61	7.44	8.68	8.97
North Dakota	4.39	4.38	4.68	4.34	4.65	5.22	5.98	6.64
Ohio	5.06	5.15	5.32	4.90	5.21	5.29	6.28	6.54
Oklahoma	4.38	4.18	4.50	4.35	5.09	5.97	6.34	6.55
Oregon	6.07	6.06	6.19	6.16	6.22	6.76	7.13	7.21
Pennsylvania	6.22	6.07	6.14	6.01	6.48	6.92	7.84	8.06
Rhode Island	6.93	6.83	7.13	6.84	7.10	7.49	8.55	8.65
South Carolina	6.86	6.86	6.73	6.68	6.79	7.02	7.88	8.19
South Dakota	4.82	4.98	4.85	4.83	4.67	5.00	5.73	6.26
Tennessee	4.99	4.70	4.83	4.77	5.09	5.54	6.03	6.11
Texas	5.36	4.96	5.55	5.03	5.65	6.46	6.73	7.18
Utah	5.05	5.08	5.14	5.17	5.39	5.85	5.80	5.80
Vermont	5.45	5.40	5.62	5.43	5.69	5.99	6.88	7.08
Virginia	6.53	6.22	6.59	6.19	6.48	7.09	9.13	8.78
Washington	4.86	4.92	5.49	5.09	5.45	6.25	7.08	7.52
West Virginia	6.19	5.99	5.73	6.17	5.96	5.91	6.86	7.24
Wisconsin	5.81	5.54	5.64	5.38	5.63	5.58	6.21	6.76
Wyoming	4.70	4.64	4.71	4.61	4.77	5.11	5.49	5.84
Total	5.63	5.42	5.64	5.30	5.56	6.06	6.80	7.07

See footnotes at end of table.

Table 28. Average Price of Natural Gas Delivered to Residential Consumers by State (Continued)
(Dollars per Thousand Cubic Feet)

State	July 1989	June 1989	May 1989	April 1989	March 1989	February 1989	January 1989	Total 1988
Alabama	8.32	7.83	6.73	6.01	5.55	5.71	5.65	6.51
Alaska	4.07	3.84	3.72	3.61	3.56	3.51	3.53	3.46
Arizona	9.04	8.36	8.12	7.46	6.65	6.25	6.23	6.99
Arkansas	6.58	6.11	5.75	4.97	4.35	4.31	4.33	4.81
California	6.07	6.09	5.69	4.62	5.21	5.63	5.84	5.64
Colorado	5.70	5.20	4.82	4.54	4.33	4.30	4.30	4.42
Connecticut	10.01	9.94	8.76	8.27	7.78	7.80	7.69	7.87
Delaware	7.96	7.52	6.81	6.33	6.06	6.10	6.06	6.00
District of Columbia	7.11	5.91	7.13	7.50	7.72	7.43	7.49	6.96
Florida	9.41	9.31	8.91	7.92	7.12	7.55	7.26	7.49
Georgia	7.91	7.75	7.03	6.23	6.14	5.81	5.77	6.22
Hawaii	16.37	16.23	15.75	15.49	15.12	14.31	14.67	15.69
Idaho	6.38	5.66	5.56	5.30	4.92	4.71	4.69	5.49
Illinois	5.85	5.60	5.11	4.99	5.08	4.96	4.70	4.60
Indiana	6.88	6.76	6.19	5.66	5.62	5.48	5.72	5.16
Iowa	6.38	5.78	4.77	4.32	4.25	4.49	4.67	4.79
Kansas	5.52	5.26	4.84	4.05	3.80	3.77	3.73	4.02
Kentucky	5.98	5.50	5.03	4.71	4.46	4.49	4.48	4.48
Louisiana	7.23	7.11	6.43	5.78	4.90	5.23	5.40	5.74
Maine	8.06	7.96	7.21	7.01	6.72	6.77	6.71	7.20
Maryland	7.70	7.26	6.57	6.20	6.01	6.06	5.92	5.90
Massachusetts	7.88	7.44	6.69	7.12	7.02	7.06	6.99	6.47
Michigan	6.86	6.37	5.48	5.13	5.02	5.02	5.03	5.34
Minnesota	5.34	5.08	4.64	4.32	4.31	4.50	4.68	4.64
Mississippi	5.49	5.43	5.57	5.14	4.93	5.10	5.02	5.65
Missouri	6.56	6.23	5.35	4.75	4.48	4.47	4.45	4.76
Montana	4.72	4.57	4.52	4.41	4.35	4.33	4.29	4.30
Nebraska	5.34	5.65	4.70	4.30	4.15	4.31	4.45	4.46
Nevada	6.90	6.28	6.12	5.82	5.34	5.09	5.10	5.87
New Hampshire	7.50	7.00	6.32	6.91	6.75	6.75	6.66	6.28
New Jersey	8.27	7.86	6.96	6.44	6.15	6.14	5.95	6.32
New Mexico	7.82	7.42	7.08	5.86	5.21	5.01	5.10	5.23
New York	9.01	8.31	7.11	6.87	7.46	6.66	6.60	6.50
North Carolina	8.71	8.02	6.99	6.80	6.29	6.30	6.17	6.25
North Dakota	6.08	5.51	5.09	4.59	4.44	4.46	4.47	5.15
Ohio	6.55	6.26	5.31	5.42	5.25	5.33	5.33	5.21
Oklahoma	6.35	6.06	5.45	4.60	3.98	3.85	3.88	4.52
Oregon	6.80	6.56	6.36	6.03	5.85	5.85	6.30	6.79
Pennsylvania	7.91	6.77	6.26	5.94	5.78	5.75	5.73	5.79
Rhode Island	8.44	8.25	7.26	7.13	6.98	7.00	6.56	6.60
South Carolina	7.75	7.44	6.64	6.54	6.66	6.63	6.53	6.73
South Dakota	6.01	5.53	5.03	4.65	4.54	4.67	4.86	4.91
Tennessee	5.99	5.50	5.08	4.84	4.53	4.60	4.57	4.65
Texas	6.97	6.80	6.53	5.83	5.21	5.10	5.11	5.37
Utah	5.51	5.17	5.27	5.26	5.01	4.88	4.85	5.11
Vermont	6.96	6.43	5.83	5.54	5.44	5.44	5.41	5.65
Virginia	8.67	8.26	6.52	6.51	6.35	6.38	6.17	5.81
Washington	7.02	6.40	6.12	5.47	5.19	5.15	5.18	5.50
West Virginia	7.07	6.64	5.80	5.48	5.35	5.31	5.29	5.50
Wisconsin	6.43	6.04	5.59	5.57	5.55	5.70	5.61	5.89
Wyoming	5.53	5.04	4.85	4.62	4.52	4.49	4.49	4.48
Total	6.92	6.58	5.93	5.54	5.45	5.38	5.41	5.47

Notes and Sources: See the last page of this section.

Table 29. Average Price of Natural Gas Sold to Commercial Consumers by State
(Dollars per Thousand Cubic Feet)

State	YTD 1990	YTD 1989	YTD 1988	July 1990	June 1990	May 1990	April 1990	March 1990
Alabama	5.25	5.09	5.33	5.50	5.91	5.45	5.20	5.14
Alaska	2.64	2.67	2.53	2.44	2.52	2.55	2.62	2.71
Arizona	4.78	4.77	4.95	4.73	4.66	4.67	4.79	4.78
Arkansas	4.37	4.32	4.31	4.67	4.68	4.46	4.34	4.39
California	5.20	4.90	5.00	4.40	4.37	4.54	5.29	5.64
Colorado	3.94	4.01	3.85	4.24	4.09	3.95	3.89	3.85
Connecticut	6.42	6.04	5.74	5.05	5.15	5.88	6.09	6.76
Delaware	5.43	5.38	4.82	5.67	5.60	5.54	5.43	5.51
District of Columbia	5.76	5.33	5.07	5.12	5.21	5.09	5.11	6.51
Florida	4.88	4.85	4.54	4.64	4.66	4.68	4.72	4.94
Georgia	5.81	5.44	5.52	5.56	5.46	5.49	5.38	6.10
Hawaii	11.76	11.29	11.63	10.76	11.51	11.94	12.36	12.17
Idaho	4.05	4.16	4.59	4.53	4.32	4.34	4.25	3.96
Illinois	4.79	4.64	4.20	5.23	5.20	4.71	4.55	4.88
Indiana	4.98	5.04	4.62	4.85	5.00	5.61	4.90	4.88
Iowa	4.16	3.88	4.08	3.95	3.71	3.73	3.72	3.97
Kansas	3.58	3.13	3.09	2.85	3.04	3.41	3.62	3.86
Kentucky	4.52	4.34	4.18	4.96	4.73	4.68	4.37	4.39
Louisiana	5.16	5.02	4.87	5.42	5.45	5.02	5.28	4.61
Maine	6.99	6.19	6.36	6.43	6.25	6.57	7.50	7.40
Maryland	5.46	5.38	5.09	5.28	5.23	5.07	5.11	5.68
Massachusetts	6.37	5.98	6.20	4.78	4.89	5.27	6.79	7.06
Michigan	4.64	4.88	4.89	5.48	5.07	4.75	4.56	4.57
Minnesota	4.00	4.00	4.03	3.63	3.74	3.56	3.57	3.69
Mississippi	4.41	4.83	5.21	3.98	3.93	4.20	4.14	4.49
Missouri	4.60	4.29	4.10	4.54	4.49	4.45	4.60	4.69
Montana	4.28	4.40	4.34	4.62	4.59	4.36	4.32	4.23
Nebraska	3.81	3.80	3.77	3.53	3.67	3.93	3.57	3.81
Nevada	4.36	4.44	4.64	4.33	4.32	4.39	4.42	4.43
New Hampshire	6.85	6.18	5.51	6.50	6.41	6.23	7.29	7.30
New Jersey	5.49	5.27	5.26	5.05	5.14	5.10	5.41	5.55
New Mexico	4.41	3.70	3.20	4.44	4.71	4.40	4.32	4.37
New York	5.77	5.75	5.29	4.87	5.08	5.88	5.92	5.94
North Carolina	4.70	5.19	4.93	4.63	4.68	4.67	4.48	4.63
North Dakota	4.18	4.20	4.56	4.53	4.33	4.15	4.06	4.19
Ohio	4.63	4.97	4.67	4.32	4.69	4.46	4.67	4.04
Oklahoma	3.99	3.87	4.14	3.96	3.91	3.75	3.99	4.13
Oregon	4.88	4.82	5.28	5.06	4.86	4.83	4.82	4.86
Pennsylvania	5.97	5.23	4.99	6.28	6.39	6.09	5.96	5.91
Rhode Island	6.30	6.57	5.90	4.85	7.09	5.65	5.75	6.81
South Carolina	5.63	5.66	5.64	5.12	5.25	5.24	5.67	5.65
South Dakota	4.15	3.99	4.11	4.39	4.27	4.01	3.90	3.97
Tennessee	4.85	4.42	4.35	4.70	4.74	4.62	4.76	5.09
Texas	4.21	4.08	4.18	3.69	3.71	4.33	4.10	4.52
Utah	4.25	4.09	4.05	4.30	4.10	4.21	4.43	4.26
Vermont	4.95	4.72	4.72	5.41	5.39	4.86	4.75	4.87
Virginia	4.78	4.98	4.36	4.78	4.48	4.40	4.30	4.89
Washington	4.20	4.69	4.54	4.24	4.68	3.87	4.16	4.24
West Virginia	6.04	5.01	5.15	7.45	7.44	6.51	6.16	6.02
Wisconsin	4.59	4.52	4.65	4.59	4.45	4.30	4.42	4.72
Wyoming	4.42	4.32	4.02	4.87	4.72	4.37	4.36	4.39
Total	4.87	4.76	4.64	4.46	4.59	4.64	4.83	4.94

See footnotes at end of table

Table 29. Average Price of Natural Gas Sold to Commercial Consumers by State (Continued)
(Dollars per Thousand Cubic Feet)

State	February 1990	January 1990	Total 1989	December 1989	November 1989	October 1989	September 1989	August 1989
Alabama	5.20	5.10	5.17	5.23	5.45	5.26	5.37	5.34
Alaska	2.74	2.67	2.57	2.53	2.48	2.38	2.30	2.27
Arizona	4.89	4.83	4.76	4.75	4.60	4.85	4.74	5.03
Arkansas	4.34	4.25	4.38	4.21	4.45	4.78	4.92	4.99
California	5.64	5.56	4.88	5.49	5.13	4.35	4.39	4.57
Colorado	3.95	3.93	4.05	4.04	4.10	4.19	4.31	4.36
Connecticut	6.85	6.95	6.08	6.79	6.30	5.88	5.34	4.98
Delaware	5.36	5.32	5.39	5.35	5.45	5.56	5.48	5.46
District of Columbia	5.73	6.04	5.30	5.01	5.19	5.05	5.08	4.58
Florida	5.23	5.08	4.85	5.00	4.87	4.76	4.69	4.85
Georgia	6.26	5.78	5.46	5.29	5.72	5.78	5.49	5.55
Hawaii	11.94	11.73	11.44	11.52	11.84	11.54	11.65	11.72
Idaho	3.91	3.87	4.20	4.02	4.45	4.46	4.46	4.57
Illinois	5.00	4.58	4.55	4.38	4.20	4.39	4.88	5.19
Indiana	4.94	5.13	4.78	4.37	4.32	4.36	4.70	4.73
Iowa	4.32	4.63	3.91	4.14	3.83	3.64	3.85	3.90
Kansas	3.91	3.87	3.14	3.79	3.24	3.13	2.64	2.62
Kentucky	4.50	4.54	4.35	4.23	4.39	4.43	4.66	4.76
Louisiana	5.40	5.12	5.26	5.67	5.80	5.55	5.64	5.61
Maine	7.42	6.46	6.30	6.43	6.57	6.47	6.68	6.43
Maryland	5.83	5.78	5.43	5.36	5.48	5.78	5.83	5.70
Massachusetts	7.13	6.24	5.87	6.04	6.06	5.05	5.28	4.68
Michigan	4.61	4.55	4.85	4.54	4.66	5.04	5.68	5.99
Minnesota	4.06	4.66	4.00	4.19	3.83	3.74	3.83	3.88
Mississippi	4.62	4.67	4.73	4.55	4.67	4.49	4.55	4.57
Missouri	4.70	4.56	4.34	4.41	4.36	4.44	4.52	4.74
Montana	4.22	4.19	4.36	4.26	4.31	4.28	4.36	4.36
Nebraska	3.79	4.27	3.77	3.99	3.75	3.62	3.58	3.59
Nevada	4.34	4.32	4.44	4.57	4.40	4.44	4.28	4.37
New Hampshire	7.18	6.38	6.23	6.39	6.58	6.00	6.07	6.18
New Jersey	5.62	5.74	5.30	5.65	5.30	5.01	4.94	4.97
New Mexico	4.44	4.39	3.72	3.68	3.53	4.30	4.02	3.81
New York	6.21	5.66	5.62	5.48	5.32	5.16	5.46	5.55
North Carolina	4.67	4.89	5.14	5.16	4.92	4.96	5.06	5.05
North Dakota	4.17	4.18	4.19	4.05	4.12	4.61	3.93	4.54
Ohio	4.96	4.93	4.90	4.73	4.80	4.83	4.92	5.25
Oklahoma	3.99	3.99	3.94	3.96	4.20	4.12	4.11	4.65
Oregon	4.89	4.89	4.80	4.81	4.73	4.74	4.81	4.85
Pennsylvania	5.90	5.90	5.35	5.51	5.61	5.58	5.72	5.64
Rhode Island	6.74	6.63	6.41	6.42	5.83	5.15	7.00	7.11
South Carolina	5.78	5.94	5.65	6.11	5.52	5.32	5.43	5.23
South Dakota	4.15	4.40	3.99	4.14	3.81	3.80	3.99	4.15
Tennessee	4.91	4.84	4.49	4.72	4.52	4.50	4.50	4.54
Texas	4.54	4.56	4.11	4.32	4.25	4.09	4.15	3.80
Utah	4.21	4.23	4.16	4.30	4.43	4.54	4.30	4.23
Vermont	4.99	4.97	4.74	4.96	4.65	4.49	4.71	4.92
Virginia	5.10	4.99	4.93	5.26	4.58	4.67	4.18	4.59
Washington	4.06	4.34	4.68	4.45	4.63	4.45	5.67	4.66
West Virginia	5.93	5.62	5.25	5.59	5.59	5.45	6.20	6.21
Wisconsin	4.79	4.54	4.44	4.23	4.30	4.16	4.54	4.74
Wyoming	4.37	4.38	4.33	4.33	4.36	4.36	4.45	4.45
Total	5.05	4.99	4.74	4.81	4.71	4.61	4.67	4.61

See footnotes at end of table

Table 29. Average Price of Natural Gas Sold to Commercial Consumers by State (Continued)
(Dollars per Thousand Cubic Feet)

State	July 1989	June 1989	May 1989	April 1989	March 1989	February 1989	January 1989	Total 1988
Alabama	5.40	5.28	5.12	5.01	4.94	5.09	5.14	5.28
Alaska	2.59	2.63	2.61	2.69	2.68	2.74	2.65	2.60
Arizona	4.77	4.77	4.99	4.82	4.75	4.81	4.59	4.97
Arkansas	4.98	4.45	4.71	4.59	4.22	4.13	4.16	4.34
California	4.63	4.07	4.28	5.16	5.27	5.25	5.28	4.68
Colorado	4.32	4.19	4.09	4.02	3.96	3.95	3.95	3.86
Connecticut	5.26	5.61	5.54	6.15	6.04	6.29	6.31	5.62
Delaware	5.65	5.61	5.50	5.43	5.33	5.27	5.33	4.93
District of Columbia	4.95	4.64	4.95	5.11	5.74	5.47	5.55	5.03
Florida	4.79	4.86	4.89	4.85	4.83	4.83	4.88	4.54
Georgia	5.62	5.55	5.49	5.38	5.53	5.46	5.27	5.45
Hawaii	11.91	12.05	11.46	11.55	11.09	10.59	10.43	11.52
Idaho	4.50	4.49	4.49	4.45	4.11	4.02	3.99	4.52
Illinois	5.10	4.84	4.62	4.61	4.77	4.66	4.42	4.19
Indiana	4.83	4.98	5.30	5.13	5.03	4.89	5.11	4.60
Iowa	3.83	3.71	3.62	3.61	3.75	3.99	4.17	4.03
Kansas	2.83	2.69	2.84	2.96	3.32	3.34	3.27	3.03
Kentucky	4.63	4.48	4.48	4.30	4.32	4.28	4.30	4.21
Louisiana	5.26	5.47	4.87	5.01	4.72	4.96	5.18	5.14
Maine	6.56	6.46	6.28	6.25	6.12	6.11	6.11	6.25
Maryland	5.85	5.52	5.42	5.47	5.14	5.44	5.34	5.09
Massachusetts	5.28	5.26	5.37	6.04	6.16	6.23	6.21	6.11
Michigan	5.75	5.31	4.90	4.79	4.81	4.84	4.87	5.00
Minnesota	3.93	3.92	3.79	3.80	3.88	4.05	4.26	4.03
Mississippi	4.66	4.63	4.93	4.72	4.80	4.94	4.90	5.02
Missouri	4.79	4.64	4.47	4.22	4.22	4.25	4.21	4.20
Montana	4.46	4.45	4.43	4.41	4.37	4.40	4.39	4.30
Nebraska	3.49	3.78	3.73	3.67	3.74	3.95	4.05	3.75
Nevada	4.47	4.60	4.57	4.63	4.58	4.29	4.27	4.62
New Hampshire	6.16	5.92	5.70	6.31	6.25	6.28	6.20	5.66
New Jersey	4.97	5.08	5.05	5.23	5.40	5.43	5.28	5.24
New Mexico	4.20	3.78	3.50	3.83	3.52	3.64	3.78	3.31
New York	5.51	5.54	5.70	5.86	5.95	5.70	5.66	5.39
North Carolina	5.04	4.95	4.95	5.31	5.28	5.25	5.19	4.94
North Dakota	4.46	4.32	4.31	4.18	4.15	4.18	4.21	4.48
Ohio	5.15	4.98	4.70	5.01	4.86	5.05	5.03	4.75
Oklahoma	4.26	4.18	4.08	4.12	3.86	3.71	3.75	4.07
Oregon	4.79	4.76	4.70	4.72	4.71	4.73	5.14	5.36
Pennsylvania	5.67	5.37	5.26	5.21	5.20	5.20	5.16	5.09
Rhode Island	6.91	7.31	6.63	6.32	6.51	6.77	6.38	5.80
South Carolina	5.38	4.85	5.81	5.51	5.82	5.93	5.73	5.59
South Dakota	4.10	4.05	3.96	3.89	3.87	3.04	4.19	4.10
Tennessee	4.51	4.47	4.20	4.41	4.35	4.51	4.46	4.38
Texas	3.74	3.97	3.96	3.93	4.12	4.30	4.25	4.19
Utah	4.13	4.00	4.17	4.30	4.13	4.03	4.03	4.08
Vermont	5.01	5.13	4.99	4.73	4.70	4.88	4.34	4.67
Virginia	4.52	4.34	4.92	4.81	5.04	5.23	5.17	4.45
Washington	4.77	4.91	4.83	4.70	4.51	4.74	4.67	4.59
West Virginia	6.40	6.10	5.31	5.03	4.87	4.81	4.82	5.18
Wisconsin	4.54	4.40	4.23	4.46	4.50	4.64	4.59	4.68
Wyoming	4.40	4.31	4.35	4.31	4.30	4.31	4.31	4.11
Total	4.65	4.57	4.64	4.77	4.79	4.80	4.81	4.63

Notes and Sources: See the last page of this section.

Table 30. Average Price of Natural Gas Sold to Industrial Consumers by State
(Dollars per Thousand Cubic Feet)

State	YTD 1990	YTD 1989	YTD 1988	July 1990	June 1990	May 1990	April 1990	March 1990
Alabama	3.09	2.95	3.03	2.76	2.85	3.01	3.12	3.05
Alaska	1.07	1.13	1.02	1.03	.95	1.18	1.15	1.06
Arizona	3.78	3.87	3.74	4.30	4.23	4.11	3.70	3.48
Arkansas	3.03	3.09	3.10	2.81	2.81	2.84	2.88	3.17
California	3.88	3.94	3.71	3.65	3.64	3.67	3.65	4.30
Colorado	2.30	2.59	3.50	2.17	2.10	2.16	2.28	2.40
Connecticut	4.82	4.62	4.18	3.84	3.96	4.01	4.70	5.27
Delaware	3.47	3.44	3.21	3.32	3.08	3.29	3.04	3.53
District of Columbia	--	--	--	--	--	--	--	--
Florida	3.15	3.09	2.84	2.81	2.91	2.95	2.97	3.06
Georgia	3.59	3.68	3.70	3.09	3.40	3.33	3.56	3.77
Hawaii	--	--	--	--	--	--	--	--
Idaho	2.53	2.57	4.09	2.97	2.87	2.83	2.84	2.83
Illinois	4.18	3.90	3.43	3.85	4.33	4.16	4.05	4.19
Indiana	3.93	4.00	3.77	3.09	3.25	3.49	3.95	4.19
Iowa	2.81	2.55	3.25	2.31	2.29	2.44	2.61	2.77
Kansas	2.87	2.98	2.38	2.57	3.02	2.92	2.49	2.85
Kentucky	3.92	3.77	3.43	3.89	3.68	3.75	3.93	3.95
Louisiana	2.04	2.00	1.99	1.71	1.76	1.80	1.82	2.20
Maine	5.18	4.55	4.80	4.10	4.05	4.22	5.64	6.35
Maryland	4.60	4.70	4.26	4.44	4.55	4.40	4.41	4.53
Massachusetts	4.31	4.21	4.36	2.98	2.91	3.77	4.12	5.39
Michigan	4.20	4.30	4.25	4.48	4.04	4.17	4.11	4.15
Minnesota	3.04	2.85	2.81	2.72	2.66	2.66	2.77	2.84
Mississippi	2.52	2.55	2.54	2.32	2.24	2.34	2.35	2.51
Missouri	4.49	4.13	3.80	3.88	4.25	4.69	4.41	4.67
Montana	3.11	2.88	3.07	2.70	2.88	2.92	2.93	3.11
Nebraska	3.04	2.95	2.82	2.74	2.67	2.47	2.88	3.03
Nevada	4.22	4.92	3.89	4.36	4.12	5.05	4.11	3.80
New Hampshire	4.41	4.14	3.84	3.61	3.37	3.27	4.11	5.92
New Jersey	4.26	4.12	3.90	3.46	3.53	3.64	4.03	4.42
New Mexico	3.68	3.13	3.26	3.39	3.38	3.65	3.87	4.18
New York	4.86	4.96	4.45	4.16	4.36	4.24	4.87	5.26
North Carolina	3.38	3.60	3.61	2.94	3.12	3.19	3.21	3.45
North Dakota	3.39	3.39	3.29	3.00	2.97	2.99	3.09	3.25
Ohio	3.99	4.28	4.04	3.66	3.66	3.70	3.91	3.88
Oklahoma	1.69	1.90	1.94	1.62	1.71	1.71	1.69	1.83
Oregon	3.35	3.62	3.72	2.80	2.89	3.40	3.31	3.45
Pennsylvania	4.25	3.86	3.71	4.13	3.91	4.23	4.22	4.18
Rhode Island	5.32	5.30	4.82	5.03	4.47	4.43	4.77	5.84
South Carolina	3.14	3.46	3.44	2.43	2.86	3.02	3.16	3.33
South Dakota	3.29	3.11	3.19	3.03	2.92	2.97	3.07	3.19
Tennessee	3.36	3.37	3.23	2.91	3.06	3.01	3.27	3.33
Texas	2.28	2.28	2.17	1.92	1.98	1.99	2.09	2.09
Utah	3.67	3.21	3.05	3.28	3.24	3.28	3.48	3.48
Vermont	3.09	2.99	3.07	2.29	2.64	2.72	2.95	3.43
Virginia	3.77	3.1	3.16	3.66	3.42	3.34	3.64	3.74
Washington	2.71	3.00	3.02	2.58	2.47	2.43	2.63	2.59
West Virginia	3.38	2.81	2.85	3.07	3.07	3.17	3.22	3.49
Wisconsin	3.69	3.80	4.11	3.47	3.18	3.34	3.39	3.81
Wyoming	3.05	3.28	3.32	3.27	3.15	3.13	3.18	2.50
Total	2.98	3.02	2.90	2.47	2.55	2.67	2.84	3.08

See footnotes at end of table.

Table 30. Average Price of Natural Gas Sold to Industrial Consumers by State (Continued)
(Dollars per Thousand Cubic Feet)

State	February 1990	January 1990	Total 1989	December 1989	November 1989	October 1989	September 1989	August 1989
Alabama	3.24	3.45	3.02	3.55	3.00	2.98	2.94	3.04
Alaska	1.08	1.08	1.08	1.06	1.04	.97	.99	.94
Arizona	3.59	3.66	3.67	4.13	3.07	3.06	3.35	3.62
Arkansas	3.22	3.29	3.09	3.12	3.12	3.06	3.02	3.09
California	4.55	3.84	3.75	3.88	4.72	3.07	3.35	3.53
Colorado	2.41	2.41	2.53	2.65	2.56	2.59	2.53	2.11
Connecticut	5.59	6.00	4.51	5.55	4.41	3.90	3.91	3.67
Delaware	3.82	4.00	3.45	3.70	3.23	3.37	3.39	3.66
District of Columbia	--	--	--	--	--	--	--	--
Florida	3.48	3.65	3.13	3.40	3.22	3.06	3.10	3.10
Georgia	4.21	3.70	3.73	4.13	3.74	3.75	3.55	3.60
Hawaii	--	--	--	--	--	--	--	--
Idaho	2.83	2.43	2.92	2.73	2.76	4.12	3.27	2.69
Illinois	4.17	4.34	3.73	3.70	3.49	3.29	3.41	3.31
Indiana	4.08	4.48	3.89	4.04	3.69	3.59	3.64	3.32
Iowa	3.09	3.49	2.54	3.25	2.58	2.25	2.19	2.27
Kansas	3.00	3.26	3.06	3.27	3.07	3.44	2.75	3.15
Kentucky	3.93	4.01	3.69	3.47	3.56	3.41	3.64	3.64
Louisiana	2.56	2.51	1.97	2.12	1.90	1.81	1.87	1.90
Maine	6.89	5.58	4.57	5.68	4.78	4.11	4.23	4.09
Maryland	4.59	4.86	4.81	5.14	4.78	4.72	4.66	4.57
Massachusetts	5.99	5.42	4.07	5.33	4.18	3.31	3.35	3.38
Michigan	4.22	4.27	4.22	3.83	3.93	4.16	4.49	4.56
Minnesota	3.25	3.67	2.86	3.26	2.85	2.61	2.69	2.68
Mississippi	2.78	2.99	2.54	2.87	2.60	2.45	2.33	2.38
Missouri	4.42	4.62	4.13	4.33	4.07	4.11	4.01	3.99
Montana	3.45	3.63	2.98	3.76	3.84	2.68	2.55	2.49
Nebraska	3.20	3.60	2.92	3.19	2.84	2.73	2.72	2.76
Nevada	4.37	4.04	4.98	4.48	4.98	4.33	6.15	6.52
New Hampshire	6.09	5.54	4.20	6.04	5.14	3.64	3.27	3.74
New Jersey	4.89	5.03	3.98	4.40	3.89	3.45	3.38	3.44
New Mexico	4.27	4.34	3.12	3.20	3.33	3.15	3.01	2.96
New York	5.22	4.94	4.83	5.10	4.61	4.31	3.99	4.53
North Carolina	3.53	3.72	3.64	4.18	3.63	3.59	3.51	3.53
North Dakota	4.13	3.67	3.55	5.13	3.30	3.09	3.18	3.19
Ohio	4.28	4.22	4.19	4.21	4.17	3.97	3.84	3.78
Oklahoma	1.48	1.81	1.97	2.11	1.89	2.15	2.04	2.02
Oregon	3.71	3.66	3.52	3.67	3.41	3.16	3.22	3.39
Pennsylvania	4.39	4.41	3.90	4.17	3.82	3.82	3.94	3.83
Rhode Island	6.23	6.36	5.16	6.17	5.70	4.39	4.35	4.29
South Carolina	3.62	3.93	3.46	4.17	3.54	3.29	3.22	3.24
South Dakota	3.56	3.82	3.09	3.33	3.02	2.87	2.96	2.97
Tennessee	3.70	3.94	3.37	3.71	3.39	3.21	3.23	3.20
Texas	2.64	3.13	2.26	2.68	2.26	2.08	2.02	2.12
Utah	4.93	3.45	3.30	3.38	3.40	3.41	3.18	3.98
Vermont	4.02	3.63	3.01	3.35	3.09	2.87	3.00	3.07
Virginia	4.25	4.03	3.91	4.17	3.68	4.22	3.48	4.15
Washington	2.93	3.12	2.93	3.03	3.06	2.75	2.70	2.65
West Virginia	3.65	3.67	2.92	3.62	3.01	2.72	2.82	2.84
Wisconsin	3.97	3.94	3.73	3.53	3.84	3.58	3.56	3.72
Wyoming	3.24	3.15	3.23	3.07	3.17	3.11	2.91	3.41
Total	3.40	3.52	2.97	3.32	2.98	2.75	2.67	2.71

See footnotes at end of table.

Table 30. Average Price of Natural Gas Sold to Industrial Consumers by State (Continued)
(Dollars per Thousand Cubic Feet)

State	July 1989	June 1989	May 1989	April 1989	March 1989	February 1989	January 1989	Total 1988
Alabama	3.06	2.93	2.88	2.81	2.83	2.98	3.17	3.00
Alaska	1.02	1.07	1.06	1.06	1.12	1.26	1.29	1.07
Arizona	3.49	3.41	3.64	3.73	4.49	4.41	4.50	3.78
Arkansas	3.10	2.99	3.05	3.11	3.10	3.14	3.10	3.06
California	3.44	3.31	3.46	4.07	4.36	4.46	4.48	3.76
Colorado	2.47	2.76	2.63	2.56	2.48	2.70	2.54	3.45
Connecticut	4.02	3.82	4.12	4.46	5.08	5.19	5.12	4.05
Delaware	3.26	3.34	3.27	3.26	3.56	3.74	3.82	3.22
District of Columbia	---	---	---	---	---	---	---	---
Florida	3.03	3.15	3.17	3.17	2.91	2.97	3.25	2.84
Georgia	3.71	3.59	3.61	3.48	3.68	3.90	3.74	3.61
Hawaii	---	---	---	---	---	---	---	---
Idaho	2.69	2.87	2.89	2.91	2.90	2.87	2.84	4.26
Illinois	3.50	3.49	3.66	3.81	4.23	4.23	3.74	3.42
Indiana	3.17	2.94	4.06	4.37	4.56	4.06	4.70	3.75
Iowa	2.22	2.25	2.32	2.37	2.45	2.82	3.15	3.11
Kansas	3.18	2.93	3.32	3.08	3.23	2.86	2.44	2.36
Kentucky	3.77	3.67	3.70	3.76	3.85	3.85	3.76	3.44
Louisiana	1.91	1.90	1.82	1.79	2.00	2.30	2.33	1.99
Maine	4.03	4.11	4.21	4.61	4.99	5.00	5.07	4.51
Maryland	4.61	4.60	4.61	4.74	4.87	4.94	4.84	4.30
Massachusetts	3.39	3.34	3.37	4.44	4.32	5.61	5.57	4.03
Michigan	4.72	4.34	4.18	4.19	4.24	4.31	4.36	4.36
Minnesota	2.72	2.59	2.55	2.74	2.79	3.04	3.20	2.81
Mississippi	2.34	2.48	2.41	2.42	2.37	2.83	2.95	2.54
Missouri	4.10	4.09	4.09	4.06	4.15	4.18	4.17	3.81
Montana	1.79	3.02	2.55	2.77	2.85	3.01	3.83	3.08
Nebraska	2.74	2.71	2.69	2.73	2.94	3.29	3.24	2.85
Nevada	6.15	6.70	5.93	4.70	4.65	4.31	3.96	3.83
New Hampshire	3.62	3.48	3.63	3.91	5.14	4.97	5.02	3.72
New Jersey	3.58	3.40	4.24	4.03	4.40	4.54	4.30	3.87
New Mexico	3.56	3.10	2.90	2.91	3.08	3.34	3.26	3.39
New York	3.97	4.55	4.59	5.01	5.37	5.23	5.05	4.69
North Carolina	3.42	3.47	3.50	3.38	3.61	3.78	3.79	3.57
North Dakota	3.16	3.12	3.17	3.19	3.46	3.62	3.55	3.41
Ohio	3.91	3.84	4.11	4.21	4.26	4.51	4.57	4.10
Oklahoma	2.10	1.92	1.69	1.76	1.85	2.10	1.85	1.76
Oregon	3.42	3.35	3.45	3.37	3.66	4.19	3.56	3.72
Pennsylvania	3.83	3.58	3.77	3.99	3.89	3.95	3.85	3.63
Rhode Island	4.25	4.47	4.62	5.09	5.94	6.29	6.10	4.83
South Carolina	3.13	3.30	3.39	3.22	3.38	4.03	4.12	3.43
South Dakota	2.98	2.91	2.86	2.90	3.10	3.32	3.40	3.18
Tennessee	3.25	3.26	3.24	3.19	3.30	3.58	3.65	3.26
Texas	2.18	2.20	2.28	2.18	2.19	2.38	2.57	2.19
Utah	2.99	2.96	2.98	3.17	3.15	3.11	3.73	3.10
Vermont	3.10	3.14	3.08	2.94	2.77	2.65	3.31	2.97
Virginia	3.88	3.20	3.74	3.28	4.23	4.38	4.46	3.35
Washington	2.70	2.74	2.85	2.93	3.15	3.38	3.18	2.97
West Virginia	2.81	2.82	2.79	2.65	2.88	2.84	2.88	2.86
Wisconsin	3.80	3.32	3.67	3.74	3.82	3.93	3.90	4.08
Wyoming	3.38	3.28	3.24	3.20	3.27	3.28	3.35	3.36
Total	2.70	2.69	2.80	2.91	3.12	3.33	3.39	2.95

--- Not Applicable.

Notes and Sources: See the last page of this section.

**Table 31. Average Price of Natural Gas Delivered to Electric Utility^a
Consumers by State
(Dollars per Thousand Cubic Feet)**

State	June 1990	May 1990	April 1990	March 1990	February 1990	January 1990	Total 1989	December 1989
Alabama	2.03	1.99	1.97	2.16	2.65	3.11	2.27	2.68
Alaska	NA	--	--	--	--	--	1.36	--
Arizona	2.30	2.30	2.34	2.25	2.84	3.30	2.32	2.95
Arkansas	1.45	1.51	1.37	1.33	1.94	1.93	1.69	2.21
California	2.93	3.10	3.06	3.02	3.66	3.82	3.04	4.00
Colorado	2.22	2.13	2.13	2.12	2.30	2.37	2.23	2.26
Connecticut	2.13	2.19	--	--	6.51	6.27	2.59	6.23
Delaware	2.13	2.17	3.15	2.95	3.51	3.48	2.73	3.50
District of Columbia	--	--	--	--	--	--	--	--
Florida	1.91	2.19	2.10	2.36	2.63	3.29	2.49	2.99
Georgia	3.29	3.34	3.52	3.73	3.80	3.75	3.23	3.78
Hawaii	--	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--	--
Illinois	2.47	2.77	2.99	3.39	3.90	3.48	3.32	3.32
Indiana	2.29	2.35	2.46	2.61	2.82	3.25	2.70	3.37
Iowa	2.68	2.09	3.00	3.46	3.71	4.36	2.69	3.79
Kansas	1.62	1.65	1.97	1.98	2.23	2.33	1.92	2.35
Kentucky	3.12	3.19	3.14	3.65	3.55	3.37	2.73	3.14
Louisiana	1.72	1.65	1.62	1.64	1.73	2.01	1.78	2.03
Maine	--	--	--	--	--	--	--	--
Maryland	2.34	2.53	2.75	3.00	3.38	2.84	2.72	3.56
Massachusetts	2.29	2.29	2.30	2.36	2.75	5.13	2.49	6.08
Michigan	.51	.50	.37	.34	.49	.31	.19	.22
Minnesota	1.95	1.81	1.90	1.92	2.46	3.12	2.16	2.73
Mississippi	1.76	1.76	1.74	1.82	2.14	2.52	1.88	2.45
Missouri	2.26	2.32	2.79	2.48	2.79	3.19	2.50	3.25
Montana	5.18	1.60	1.27	1.51	3.16	1.40	1.38	1.53
Nebraska	2.12	1.67	1.66	1.74	2.68	3.35	2.26	3.14
Nevada	2.05	1.80	1.72	1.73	2.76	3.18	2.17	2.73
New Hampshire	--	--	--	--	--	--	3.16	--
New Jersey	2.13	2.29	2.19	2.59	3.02	3.78	2.54	2.88
New Mexico	1.91	1.84	1.89	1.90	2.14	2.71	2.20	2.70
New York	2.11	2.21	2.31	2.50	2.95	3.47	2.42	3.17
North Carolina	NA	--	--	--	--	--	3.57	--
North Dakota	--	--	--	--	--	--	4.61	--
Ohio	3.21	3.28	4.00	3.67	4.10	4.14	3.15	4.07
Oklahoma	3.11	3.06	3.61	3.52	3.62	3.34	3.05	3.20
Oregon	--	--	--	--	--	--	--	--
Pennsylvania	3.02	2.95	2.92	2.86	3.47	3.34	3.58	3.59
Rhode Island	2.02	2.07	2.22	2.35	--	--	2.49	--
South Carolina	1.83	3.95	4.70	4.53	4.49	4.37	2.27	2.97
South Dakota	NA	--	--	--	--	--	2.62	--
Tennessee	NA	--	--	--	--	--	2.83	--
Texas	2.00	1.96	1.96	2.12	2.46	2.76	2.23	2.56
Utah	NA	--	5.04	--	--	--	3.38	--
Vermont	NA	--	--	--	--	--	--	--
Virginia	1.68	--	--	--	--	--	2.57	.44
Washington	NA	--	--	--	--	--	5.19	--
West Virginia	6.58	6.45	6.63	5.99	4.82	4.76	4.59	4.81
Wisconsin	2.95	2.95	2.81	2.83	3.40	3.64	3.11	3.02
Wyoming	3.28	3.23	3.24	3.93	3.92	3.88	3.61	3.61
Total	2.16	2.19	2.29	2.37	2.76	3.01	2.43	2.85

See footnotes at end of table.

Table 31. Average Price of Natural Gas Delivered to Electric Utility^a
Consumers by State (Continued)
(Dollars per Thousand Cubic Feet)

State	November 1989	October 1989	September 1989	August 1989	July 1989	June 1989	May 1989	April 1989
Alabama	2.29	2.31	2.05	2.14	2.25	2.23	2.07	2.08
Alaska	---	---	---	---	---	---	---	---
Arizona	2.49	2.26	2.26	2.27	2.31	2.26	2.21	2.15
Arkansas	1.82	1.75	1.62	1.88	1.64	1.54	1.40	1.50
California	3.28	2.87	3.05	3.00	2.86	2.95	3.17	2.75
Colorado	2.78	2.81	2.27	2.37	2.40	2.48	2.47	2.18
Connecticut	2.67	2.56	2.37	2.46	3.11	2.56	2.66	2.81
Delaware	3.01	2.53	2.43	2.72	2.88	3.91	3.01	2.61
District of Columbia	---	---	---	---	---	---	---	---
Florida	2.42	2.52	2.21	2.30	2.59	2.54	2.79	2.63
Georgia	3.67	3.50	3.51	3.49	3.33	2.84	3.39	2.76
Hawaii	---	---	---	---	---	---	---	---
Idaho	---	---	---	---	---	---	---	---
Illinois	2.85	2.92	3.33	3.26	2.88	3.61	3.47	3.00
Indiana	2.61	2.23	2.52	2.32	2.38	3.30	2.89	2.58
Iowa	3.30	2.02	2.21	2.85	2.72	2.59	2.24	2.61
Kansas	2.33	2.31	2.05	1.70	1.70	1.75	2.25	2.27
Kentucky	2.84	2.76	2.50	2.61	2.49	2.43	3.10	2.98
Louisiana	1.66	1.69	1.71	1.79	1.86	1.85	1.32	1.66
Maine	---	---	---	---	---	---	---	---
Maryland	3.20	2.61	2.59	2.63	3.02	2.68	2.83	2.60
Massachusetts	2.77	2.45	2.32	2.42	2.46	2.61	2.76	2.39
Michigan	.25	.19	.17	.20	.18	.15	.18	.18
Minnesota	2.22	2.11	2.10	2.01	1.94	2.09	2.05	1.78
Mississippi	2.04	1.80	1.77	1.89	1.91	1.93	1.84	1.68
Missouri	2.39	2.42	1.94	2.24	2.40	2.32	2.35	2.36
Montana	1.49	1.25	2.26	1.42	1.62	1.91	1.25	1.38
Nebraska	2.06	1.79	2.23	2.32	2.19	2.50	2.79	2.28
Nevada	2.43	2.24	2.13	2.16	2.10	2.28	2.19	1.72
New Hampshire	---	---	---	---	---	---	---	---
New Jersey	2.93	2.49	2.40	2.43	2.47	2.51	2.64	2.58
New Mexico	2.28	2.12	2.05	2.16	2.27	2.23	2.20	1.93
New York	2.67	2.37	2.20	2.31	2.39	2.45	2.44	2.37
North Carolina	---	---	---	---	---	---	---	---
North Dakota	4.08	---	---	---	---	4.84	---	4.20
Ohio	3.84	3.85	3.04	3.29	2.73	3.22	2.67	3.70
Oklahoma	3.15	3.32	2.86	2.81	3.08	3.11	3.06	2.96
Oregon	---	---	---	---	---	---	---	---
Pennsylvania	3.63	3.57	3.21	2.93	3.25	3.44	3.80	3.78
Rhode Island	2.61	2.48	2.34	2.30	2.41	2.56	2.76	2.73
South Carolina	2.44	2.23	2.19	2.19	2.23	2.22	3.96	2.31
South Dakota	---	---	---	---	---	---	---	---
Tennessee	---	---	---	---	---	---	---	---
Texas	2.24	2.10	2.07	2.28	2.25	2.19	2.13	2.13
Utah	---	---	---	---	---	---	---	---
Vermont	---	---	---	---	---	---	---	---
Virginia	6.53	7.51	1.45	2.69	2.45	2.37	2.81	2.74
Washington	---	---	---	---	---	---	---	---
West Virginia	5.09	4.48	4.72	4.60	4.60	4.55	4.52	4.76
Wisconsin	3.24	2.78	2.44	3.16	3.14	2.96	3.15	3.17
Wyoming	3.63	3.63	3.42	3.42	3.42	3.41	3.43	3.45
Total	2.56	2.39	2.33	2.38	2.40	2.40	2.39	2.31

See footnotes at end of table

**Table 31. Average Price of Natural Gas Delivered to Electric Utility^a
Consumers by State (Continued)
(Dollars per Thousand Cubic Feet)**

State	March 1989	February 1989	January 1989	Total 1988	December 1988	November 1988	October 1988	September 1988
Alabama	2.21	2.56	2.34	2.15	2.14	2.02	2.07	2.13
Alaska	---	---	---	1.34	---	---	---	---
Arizona	2.09	2.19	2.84	2.32	2.50	2.44	2.42	2.65
Arkansas	1.50	1.47	1.21	1.39	1.10	1.30	1.47	1.47
California	2.89	2.92	3.33	2.93	3.65	3.66	3.18	3.30
Colorado	2.14	2.10	2.07	2.25	2.08	2.77	2.38	3.09
Connecticut	2.87	3.13	3.19	2.24	3.43	2.72	2.72	2.60
Delaware	2.56	2.72	3.28	2.59	3.09	2.76	2.69	2.94
District of Columbia	---	---	---	---	---	---	---	---
Florida	2.28	2.34	2.37	2.12	2.26	2.18	1.70	2.08
Georgia	3.60	3.62	3.35	2.80	3.50	3.16	2.78	2.91
Hawaii	---	---	---	---	---	---	---	---
Idaho	---	---	---	---	---	---	---	---
Illinois	3.26	3.96	3.30	3.34	3.36	3.26	3.10	2.62
Indiana	2.41	2.54	2.97	2.60	2.82	2.53	2.59	2.38
Iowa	2.84	3.19	3.49	2.04	3.26	3.03	2.72	2.61
Kansas	2.07	2.27	2.37	2.05	2.09	2.10	1.90	2.15
Kentucky	2.76	2.81	3.07	2.52	3.25	2.83	2.53	2.49
Louisiana	1.58	1.81	1.80	1.70	1.63	1.82	1.73	1.83
Maine	---	---	---	---	---	---	---	---
Maryland	2.64	3.67	3.41	2.71	3.86	3.29	2.52	2.37
Massachusetts	2.55	3.17	5.22	2.29	4.31	2.67	2.84	2.55
Michigan	.20	.19	.20	.41	.28	1.13	.44	.36
Minnesota	2.08	2.53	2.87	1.99	2.59	2.07	2.25	2.24
Mississippi	1.67	1.96	2.23	1.90	2.28	1.97	1.93	2.02
Missouri	2.43	2.60	2.56	2.75	2.71	2.38	1.82	2.49
Montana	1.12	1.01	1.18	1.53	1.29	1.72	1.64	1.24
Nebraska	2.36	2.50	2.89	2.56	2.99	2.43	2.27	2.66
Nevada	2.09	2.00	2.15	2.79	2.07	2.61	2.88	2.75
New Hampshire	---	---	---	2.48	---	---	---	---
New Jersey	2.62	3.24	3.08	2.32	3.02	2.74	2.51	2.46
New Mexico	2.02	2.23	2.47	2.19	2.39	2.40	2.21	2.41
New York	2.51	2.78	2.98	2.30	2.99	2.56	2.35	2.37
North Carolina	---	---	---	3.48	---	---	---	---
North Dakota	---	---	---	4.56	---	4.42	4.37	4.26
Ohio	4.25	4.23	4.21	3.51	4.18	4.17	3.83	3.03
Oklahoma	2.98	3.13	3.03	2.92	2.54	3.15	3.01	2.90
Oregon	---	---	---	---	---	---	---	---
Pennsylvania	3.66	3.97	3.81	3.45	4.03	3.78	3.62	3.42
Rhode Island	---	---	---	2.15	---	---	---	---
South Carolina	2.26	4.30	3.94	1.86	3.90	3.33	3.49	3.56
South Dakota	---	---	---	2.33	---	---	---	---
Tennessee	---	---	---	2.46	---	---	---	---
Texas	2.14	2.25	2.48	2.16	2.39	2.32	2.13	2.10
Utah	---	---	---	3.05	---	---	---	---
Vermont	---	---	---	---	---	---	---	---
Virginia	1.33	2.34	2.04	2.16	5.06	1.38	4.00	2.52
Washington	---	---	---	3.15	---	---	---	---
West Virginia	4.45	4.31	4.76	3.89	4.76	4.52	4.34	4.32
Wisconsin	3.43	3.52	3.43	3.26	3.62	3.78	3.31	3.45
Wyoming	5.17	4.10	3.57	3.78	3.60	4.03	4.75	4.10
Total	2.33	2.44	2.64	2.33	2.57	2.58	2.40	2.36

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

^b Average prices calculated from data reported on Form EIA-176

--- Not Applicable

Notes and Sources: See the last page of this section.

Table 32. Average Price of Natural Gas Delivered to All Consumers by State
(Dollars per Thousand Cubic Feet)

State	June 1990	May 1990	April 1990	March 1990	February 1990	January 1990	Total 1989	December 1989
Alabama	4.38	4.76	4.81	4.77	4.94	4.92	4.60	4.91
Alaska	1.94	2.27	2.29	2.38	2.51	2.42	1.84	2.26
Arizona	3.82	4.29	4.59	4.69	5.02	5.11	4.10	4.64
Arkansas	2.84	3.36	3.98	4.15	4.09	4.10	3.63	3.86
California	4.13	4.36	4.25	4.86	5.25	5.04	4.32	4.87
Colorado	3.97	3.90	3.89	3.86	4.01	3.93	4.07	4.11
Connecticut	6.18	6.54	6.72	7.17	7.32	7.49	6.62	7.25
Delaware	3.33	3.88	4.40	4.41	4.73	4.98	4.25	4.92
District of Columbia	5.95	6.17	6.35	7.32	6.88	6.86	6.42	6.57
Florida	2.57	2.74	2.77	3.05	3.47	4.02	3.15	3.83
Georgia	5.36	5.39	5.35	5.95	6.26	5.55	5.38	5.30
Hawaii	12.38	12.83	13.22	13.07	12.78	12.57	12.32	12.42
Idaho	4.88	4.85	4.73	4.43	4.33	4.16	4.64	4.45
Illinois	5.34	4.93	4.73	4.88	5.09	4.67	4.70	4.43
Indiana	5.10	5.03	5.07	5.11	5.11	5.37	5.01	4.59
Iowa	3.89	3.90	3.93	4.12	4.44	4.70	3.93	4.26
Kansas	2.97	3.49	3.79	3.89	3.99	3.97	3.46	3.92
Kentucky	5.07	5.00	4.57	4.48	4.59	4.54	4.42	4.23
Louisiana	1.97	2.00	2.15	2.38	2.88	3.08	2.34	2.90
Maine	5.01	5.47	6.57	7.29	7.35	6.41	5.81	6.37
Maryland	5.56	5.66	5.44	5.67	5.69	5.62	5.43	5.55
Massachusetts	4.27	4.39	6.03	7.25	7.46	6.81	5.54	6.77
Michigan	4.92	4.78	4.63	4.53	4.57	4.49	4.88	4.54
Minnesota	3.79	3.73	3.71	3.80	4.21	4.70	4.06	4.27
Mississippi	2.40	2.69	2.88	3.20	3.66	3.99	3.09	3.66
Missouri	5.23	4.98	4.88	4.89	4.86	4.67	4.59	4.56
Montana	4.31	4.11	4.13	4.13	4.14	4.13	4.08	4.17
Nebraska	3.92	3.83	3.75	3.91	4.08	4.42	3.94	4.12
Nevada	3.31	3.33	3.54	4.06	4.48	4.45	3.84	4.39
New Hampshire	5.81	5.52	6.79	7.30	7.26	6.48	6.18	6.57
New Jersey	5.21	5.65	5.56	5.78	5.94	5.60	5.34	5.81
New Mexico	3.27	3.54	3.89	4.14	4.56	4.48	3.84	4.12
New York	4.35	4.86	5.37	5.66	6.44	6.12	5.58	6.19
North Carolina	4.36	4.41	4.28	4.40	4.52	4.83	4.87	5.21
North Dakota	4.78	4.43	4.25	4.30	4.28	4.26	4.39	4.25
Ohio	5.36	4.91	5.03	4.63	5.00	5.02	5.12	4.81
Oklahoma	3.10	3.10	3.37	3.40	3.33	3.34	3.15	3.33
Oregon	4.97	5.19	5.15	5.24	5.30	5.24	4.14	5.28
Pennsylvania	6.54	6.39	6.06	5.97	5.94	5.87	5.58	5.65
Rhode Island	5.73	5.42	5.92	6.67	6.83	6.75	6.41	6.68
South Carolina	3.43	3.86	4.35	4.67	4.96	5.54	4.47	5.56
South Dakota	4.66	4.39	4.23	4.26	4.44	4.65	4.29	4.43
Tennessee	3.94	3.92	4.25	4.40	4.54	4.55	4.13	4.45
Texas	2.33	2.39	2.63	2.88	3.36	3.63	2.81	3.37
Utah	4.71	4.78	4.97	4.79	4.82	4.73	4.65	4.77
Vermont	4.09	4.18	4.42	4.73	4.97	4.85	4.48	4.93
Virginia	5.04	5.50	5.20	5.42	5.84	5.67	5.48	5.72
Washington	3.89	3.74	3.99	4.00	4.07	4.18	4.36	4.30
West Virginia	6.48	6.19	6.03	6.00	5.92	5.76	5.02	5.64
Wisconsin	4.68	4.69	4.77	5.09	5.20	4.94	4.92	4.66
Wyoming	4.57	4.50	4.47	4.39	4.47	4.40	4.39	4.34
Total	3.53	3.84	4.23	4.50	4.82	4.77	4.22	4.61

See footnotes at end of table.

Table 32. Average Price of Natural Gas Delivered to All Consumers by State
(Continued)
(Dollars per Thousand Cubic Feet)

State	November 1989	October 1989	September 1989	August 1989	July 1989	June 1989	May 1989	April 1989
Alabama	4.78	4.56	4.53	4.51	4.52	4.35	4.41	4.46
Alaska	2.16	1.98	1.77	1.63	1.79	1.82	1.91	2.11
Arizona	3.88	3.85	3.49	3.48	3.31	3.70	3.84	3.61
Arkansas	3.62	3.57	3.66	3.09	3.24	3.45	3.85	3.53
California	4.37	3.74	3.92	3.92	3.79	4.00	4.28	3.98
Colorado	4.22	4.23	4.29	3.92	4.31	4.36	4.17	4.03
Connecticut	6.61	5.93	5.73	5.93	6.51	6.26	6.05	6.56
Delaware	4.33	3.69	3.46	3.52	3.59	4.25	4.27	4.08
District of Columbia	6.40	6.42	6.52	5.40	5.06	5.21	6.05	6.32
Florida	3.18	3.04	2.75	2.83	3.04	3.05	3.26	3.26
Georgia	5.60	5.70	5.47	5.44	5.66	5.39	5.46	5.22
Hawaii	12.71	12.40	12.53	12.64	12.81	12.96	12.34	12.42
Idaho	4.89	5.04	5.11	5.33	5.19	5.05	5.02	4.90
Illinois	4.37	4.60	5.12	5.42	5.14	5.00	4.79	4.78
Indiana	4.52	4.59	5.03	5.02	4.85	4.69	5.47	5.40
Iowa	3.88	3.55	3.69	3.85	3.78	3.72	3.66	3.68
Kansas	3.71	3.81	3.27	2.80	2.90	3.15	3.59	3.42
Kentucky	4.46	4.60	5.04	5.05	4.78	4.64	4.56	4.43
Louisiana	2.33	2.10	2.10	2.11	2.14	2.14	2.09	2.20
Maine	5.96	5.56	5.42	5.21	5.10	5.37	5.50	5.79
Maryland	5.81	5.04	5.66	5.09	5.48	5.06	5.14	5.06
Massachusetts	6.22	3.93	4.04	4.13	4.10	4.41	4.83	5.58
Michigan	4.71	5.17	5.62	6.00	5.53	5.33	4.94	4.80
Minnesota	3.95	3.82	3.92	3.84	3.80	3.91	3.86	3.84
Mississippi	3.28	2.67	2.52	2.44	2.49	2.62	2.65	3.07
Missouri	4.70	4.89	5.19	5.32	5.34	5.21	4.85	4.51
Montana	4.19	3.88	3.81	3.68	3.44	3.99	3.94	4.09
Nebraska	3.87	3.77	3.85	3.74	3.66	4.07	3.89	3.75
Nebraska	4.04	3.60	3.27	3.06	3.07	3.70	3.73	3.50
Nevada	6.67	5.53	5.47	5.82	5.75	5.49	5.47	6.17
New Hampshire	5.63	5.30	4.94	4.65	4.54	4.54	5.19	5.24
New Jersey	3.81	3.62	3.43	3.47	3.61	3.69	3.64	3.72
New Mexico	5.94	5.00	4.63	4.59	4.60	4.81	4.99	5.34
New York	4.57	4.69	4.65	4.61	4.55	4.56	4.67	4.90
North Carolina	4.33	4.78	4.77	5.33	5.09	4.80	4.61	4.32
North Dakota	5.03	5.03	5.56	5.73	5.68	5.53	5.04	5.22
Ohio	3.18	3.29	2.96	2.88	3.10	3.08	3.07	3.11
Oklahoma	5.10	4.87	4.96	5.04	5.12	5.04	5.05	5.08
Oregon	5.80	5.99	6.23	6.20	6.26	5.62	5.55	5.50
Pennsylvania	6.45	5.45	6.14	5.53	5.71	6.15	6.25	6.55
Rhode Island	4.37	3.87	3.71	3.64	3.58	3.62	4.22	4.35
South Carolina	4.14	4.14	4.47	4.63	4.57	4.41	4.28	4.14
South Dakota	4.17	3.93	3.93	3.87	3.93	3.92	3.88	4.04
Tennessee	2.86	2.54	2.42	2.55	2.55	2.56	2.55	2.70
Texas	4.92	5.08	4.87	5.06	4.68	4.46	4.60	4.73
Utah	4.39	4.13	4.26	4.37	4.47	4.47	4.54	4.48
Vermont	5.33	5.73	5.57	5.82	5.29	4.66	5.11	5.09
Virginia	4.38	3.94	4.07	3.86	3.94	4.16	4.23	4.36
Washington	5.29	4.89	4.89	4.98	5.03	5.11	4.99	4.80
West Virginia	4.87	4.77	5.09	5.29	5.16	4.89	4.85	4.92
Wisconsin	4.45	4.48	4.59	4.79	4.71	4.46	4.36	4.38
Wyoming	4.30	3.86	3.67	3.57	3.59	3.72	3.94	4.18
Total	4.30	3.86	3.67	3.57	3.59	3.72	3.94	4.18

See footnotes at end of table.

Table 32. Average Price of Natural Gas Delivered to All Consumers by State
(Continued)
(Dollars per Thousand Cubic Feet)

State	March 1989	February 1989	January 1989	Total 1988	December 1988
Alabama	4.46	4.06	4.73	4.53	4.71
Alaska	2.12	2.42	2.23	1.77	2.10
Arizona	4.57	5.20	5.17	4.70	5.32
Arkansas	3.51	3.79	3.98	3.67	3.90
California	4.43	4.82	5.11	4.20	3.19
Colorado	4.01	3.90	3.90	4.04	3.78
Connecticut	6.73	6.92	6.89	6.25	6.70
Delaware	4.51	4.78	5.10	4.22	4.90
District of Columbia	6.87	6.56	6.67	6.07	6.49
Florida	3.11	3.26	3.35	2.92	3.43
Georgia	5.33	5.38	5.16	5.24	4.99
Hawaii	11.98	11.42	11.34	12.41	11.90
Idaho	4.53	4.39	4.36	4.99	4.44
Illinois	4.93	4.82	4.54	4.35	4.34
Indiana	5.30	5.09	5.40	4.73	4.96
Iowa	3.79	4.05	4.26	4.09	4.19
Kansas	3.53	3.52	3.41	3.19	3.35
Kentucky	4.33	4.35	4.31	4.20	4.19
Louisiana	2.42	2.79	2.82	2.29	2.68
Maine	5.98	5.97	6.01	5.80	6.31
Maryland	5.46	5.74	5.62	5.31	5.42
Massachusetts	6.19	6.70	6.65	5.62	6.75
Michigan	4.82	4.82	4.84	5.04	5.08
Minnesota	3.94	4.16	4.34	4.05	4.22
Mississippi	3.50	3.98	4.00	3.40	4.03
Missouri	4.37	4.38	4.36	4.44	4.35
Montana	4.13	4.17	4.25	4.04	4.01
Nebraska	3.85	4.06	4.17	3.88	4.03
Nevada	4.19	4.43	4.41	4.57	4.48
New Hampshire	6.41	6.41	6.34	5.64	6.42
New Jersey	5.39	5.70	5.52	5.18	5.46
New Mexico	3.82	4.02	4.19	3.68	4.11
New York	6.21	6.14	6.16	5.26	6.23
North Carolina	5.08	5.03	5.03	4.67	5.05
North Dakota	4.26	4.29	4.30	4.70	4.36
Ohio	5.07	5.21	5.19	4.98	5.07
Oklahoma	3.21	3.26	3.16	3.15	2.84
Oregon	5.10	5.20	5.49	5.50	5.92
Pennsylvania	5.38	5.34	5.32	5.18	5.33
Rhode Island	6.77	6.89	6.48	6.14	6.46
South Carolina	4.96	5.38	5.37	4.49	5.18
South Dakota	4.15	4.26	4.46	4.34	4.36
Tennessee	4.10	4.26	4.25	3.97	4.23
Texas	2.93	3.19	3.32	2.69	3.13
Utah	4.59	4.49	4.52	4.47	4.55
Vermont	4.48	4.56	4.49	4.47	4.45
Virginia	5.62	5.71	5.60	4.82	5.35
Washington	4.42	4.59	4.49	4.19	4.51
West Virginia	4.90	4.77	4.76	5.11	4.92
Wisconsin	4.96	5.08	5.02	5.19	5.14
Wyoming	4.32	4.32	4.32	4.18	4.21
Total	4.46	4.60	4.67	4.09	4.56

Notes and Sources: See the last page of this section.

Table 33. Percentage of Total Deliveries Represented by Onsystem Sales

State	July 1990		June 1990		May 1990		April 1990	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	74.8	29.9	78.3	32.7	72.7	29.2	74.8	27.4
Alaska	100.0	57.4	100.0	53.1	100.0	64.0	100.0	55.1
Arizona	91.7	22.0	92.5	29.5	84.7	45.4	93.3	42.7
Arkansas	88.4	18.3	88.7	16.8	90.6	16.7	93.2	13.6
California	90.0	38.3	92.4	37.0	95.9	47.6	96.6	49.8
Colorado	94.0	56.0	97.4	39.4	97.2	49.0	97.5	46.7
Connecticut	87.4	67.2	88.9	78.6	91.1	79.0	95.6	88.2
Delaware	100.0	69.9	100.0	70.6	100.0	67.5	100.0	69.9
District of Columbia	100.0	---	100.0	---	100.0	---	100.0	---
Florida	97.4	59.7	97.2	61.0	97.3	62.5	100.0	74.2
Georgia	79.0	38.9	79.9	31.7	81.0	27.6	88.2	27.4
Hawaii	100.0	---	100.0	---	100.0	---	100.0	---
Idaho	86.2	.5	88.1	.6	85.8	.6	87.7	.6
Illinois	46.8	13.8	47.4	8.6	59.5	14.9	57.9	16.8
Indiana	92.2	16.7	90.7	16.0	92.1	15.9	90.2	18.5
Iowa	95.3	31.8	96.3	30.5	97.2	29.6	97.8	34.2
Kansas	94.5	19.5	93.6	16.3	92.2	16.0	93.0	18.4
Kentucky	89.3	11.5	89.6	12.5	89.9	11.5	93.4	13.0
Louisiana	100.0	49.7	100.0	44.3	100.0	44.7	100.0	45.3
Maine	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Maryland	93.8	19.2	94.7	20.3	94.5	27.6	95.8	36.9
Massachusetts	100.0	97.4	100.0	92.7	100.0	94.6	100.0	93.4
Michigan	47.7	9.4	56.2	9.9	65.6	15.2	70.7	18.9
Minnesota	89.6	27.0	91.0	32.0	94.7	30.5	94.7	35.3
Mississippi	89.8	42.5	90.4	44.1	90.9	44.9	100.0	54.3
Missouri	72.5	22.3	78.8	23.0	83.7	27.7	89.0	32.7
Montana	96.3	77.0	98.4	79.7	96.9	82.1	98.6	75.0
Nebraska	96.8	49.1	89.3	21.8	92.1	34.4	92.7	39.9
Nevada	90.5	8.6	96.7	9.9	96.4	10.6	97.0	11.3
New Hampshire	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
New Jersey	89.2	48.8	93.2	50.4	94.3	51.6	94.4	59.8
New Mexico	76.3	34.1	76.7	28.0	78.2	18.1	82.4	13.3
New York	82.1	31.9	81.9	28.0	80.8	33.2	87.3	35.2
North Carolina	83.4	53.2	84.8	48.3	89.2	47.7	97.7	71.7
North Dakota	54.3	19.2	69.7	20.3	75.4	22.2	76.1	29.4
Ohio	76.4	8.9	77.9	9.4	81.8	9.3	86.0	11.4
Oklahoma	88.1	49.8	89.8	38.9	91.9	43.6	92.5	48.5
Oregon	96.5	16.4	97.5	23.4	97.4	18.2	97.3	20.2
Pennsylvania	68.0	14.0	69.7	16.7	73.6	15.3	79.6	21.0
Rhode Island	100.0	82.2	100.0	86.0	100.0	88.6	100.0	89.4
South Carolina	97.1	81.2	97.1	77.6	90.5	74.3	97.7	76.9
South Dakota	85.5	38.5	86.2	42.4	87.1	55.4	89.3	47.0
Tennessee	94.2	53.0	94.5	52.1	94.6	52.7	97.5	54.7
Texas	94.1	24.8	95.4	23.6	94.1	21.9	94.2	21.4
Utah	100.0	19.1	100.0	18.7	100.0	18.5	100.0	19.8
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	93.8	10.0	93.5	12.9	93.8	16.0	85.8	19.9
Washington	88.4	46.2	88.9	47.7	91.0	50.1	92.2	50.9
West Virginia	36.4	11.1	37.2	10.5	49.2	10.8	55.9	10.1
Wisconsin	79.7	30.6	83.5	29.8	88.9	35.4	90.7	39.2
Wyoming	99.6	6.2	99.7	7.7	99.7	11.8	99.8	11.4
Total	85.3	32.1	86.1	29.8	86.8	30.3	87.9	32.2

See footnotes at end of table

**Table 33. Percentage of Total Deliveries Represented by Onsystem Sales
(Continued)**

State	March 1990		February 1990		January 1990		Total 1989	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	78.1	29.9	80.4	28.9	85.5	31.8	82.9	37.4
Alaska	100.0	80.5	100.0	80.3	100.0	57.8	100.0	55.1
Arizona	94.9	47.2	98.5	58.8	98.4	62.3	93.7	44.5
Arkansas	93.7	14.5	94.7	16.7	95.8	18.1	93.1	19.4
California	97.8	48.8	97.2	42.4	97.8	68.2	91.8	44.1
Colorado	97.8	45.5	98.0	45.6	98.1	50.6	97.3	43.3
Connecticut	93.6	83.9	100.0	98.5	100.0	99.7	91.2	91.4
Delaware	100.0	74.0	100.0	72.2	100.0	78.2	100.0	75.6
District of Columbia	100.0	---	100.0	---	100.0	---	100.0	---
Florida	100.0	72.4	100.0	72.5	100.0	72.4	100.0	74.7
Georgia	87.9	27.2	89.8	25.3	98.3	58.2	90.2	36.4
Hawaii	100.0	---	100.0	---	100.0	---	100.0	---
Idaho	89.7	.5	90.4	.6	91.5	8.8	87.5	.5
Illinois	62.5	22.3	67.6	31.4	66.6	28.5	69.3	29.6
Indiana	93.5	18.4	98.6	28.3	99.2	29.3	95.1	21.7
Iowa	98.1	39.0	98.2	46.2	98.5	44.5	97.8	44.2
Kansas	91.0	17.5	91.1	19.6	92.9	21.8	93.1	22.1
Kentucky	95.3	15.5	96.2	21.6	96.3	40.1	94.9	30.9
Louisiana	100.0	41.0	100.0	41.9	100.0	41.1	99.9	47.4
Maine	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Maryland	96.1	42.1	97.2	59.9	98.3	58.7	96.2	32.5
Massachusetts	100.0	90.2	100.0	91.8	100.0	94.2	99.9	98.4
Michigan	73.0	22.0	72.4	20.7	71.5	22.0	70.4	17.6
Minnesota	95.6	46.0	96.2	51.4	97.5	53.5	95.8	47.2
Mississippi	100.0	57.0	100.0	51.4	100.0	52.0	100.0	50.7
Missouri	89.9	37.7	91.4	46.3	94.1	55.8	92.3	47.4
Montana	97.7	68.8	97.8	73.3	97.9	56.5	98.1	73.7
Nebraska	93.9	43.8	95.2	56.5	95.5	50.6	98.4	43.3
Nevada	97.7	11.8	99.4	18.8	99.1	27.3	95.1	11.3
New Hampshire	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
New Jersey	96.6	61.4	99.3	73.2	99.6	81.3	97.8	61.5
New Mexico	85.1	8.7	83.4	9.1	85.5	8.6	88.1	17.3
New York	87.4	40.5	93.4	60.9	92.4	58.2	85.5	39.7
North Carolina	98.8	92.8	98.9	97.1	99.1	99.4	93.5	70.1
North Dakota	78.4	29.5	82.5	30.4	83.9	27.7	80.3	26.2
Ohio	89.5	12.6	88.9	12.8	89.2	20.2	86.4	16.0
Oklahoma	91.3	53.1	92.6	58.8	94.3	57.6	89.6	50.0
Oregon	98.4	20.7	98.5	18.2	98.2	26.6	98.2	21.9
Pennsylvania	80.5	23.5	83.3	28.4	85.7	31.2	85.3	29.1
Rhode Island	100.0	95.1	100.0	100.0	100.0	100.0	83.9	82.3
South Carolina	97.9	76.6	98.0	85.6	98.3	79.5	98.1	78.5
South Dakota	91.7	55.3	92.1	63.1	92.5	76.0	92.1	60.6
Tennessee	98.4	60.3	98.2	63.3	98.7	65.5	98.1	62.4
Texas	89.5	27.4	94.0	27.5	94.6	30.2	89.9	25.5
Utah	100.0	19.1	100.0	23.9	100.0	24.9	100.0	28.4
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	90.1	24.0	95.6	20.9	97.1	25.6	97.1	36.3
Washington	93.2	61.0	95.9	63.9	96.2	63.9	94.0	58.6
West Virginia	60.1	10.8	63.6	15.0	70.2	17.6	61.5	27.9
Wisconsin	90.8	44.1	90.3	47.0	90.5	55.6	92.6	36.9
Wyoming	99.7	16.9	99.7	13.8	99.7	19.1	99.9	16.7
Total	88.8	34.8	90.5	37.0	91.0	41.0	89.0	36.3

See footnotes at end of table.

**Table 33. Percentage of Total Deliveries Represented by Onsystem Sales
(Continued)**

State	December 1980		November 1980		October 1980		September 1980	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	85.6	42.4	78.3	32.6	84.4	33.0	78.9	33.3
Alaska	100.0	51.7	100.0	81.4	100.0	49.0	100.0	48.6
Arizona	95.3	57.5	94.8	55.8	91.6	44.2	91.5	51.5
Arkansas	93.4	23.5	90.7	18.1	87.5	16.4	88.2	22.0
California	92.2	52.6	90.1	25.9	88.5	72.4	91.0	39.4
Colorado	97.2	35.4	98.9	34.6	95.0	41.7	95.8	42.8
Connecticut	99.5	100.0	90.8	96.5	85.5	86.4	74.8	85.4
Delaware	100.0	74.1	100.0	88.9	100.0	88.0	100.0	84.0
District of Columbia	100.0	---	100.0	---	100.0	---	100.0	---
Florida	100.0	74.7	100.0	88.7	100.0	72.4	100.0	71.3
Georgia	98.8	59.6	89.4	36.4	86.4	29.0	83.0	30.2
Hawaii	100.0	---	100.0	---	100.0	---	100.0	---
Idaho	87.4	.6	84.5	.6	79.3	.3	84.1	.3
Illinois	74.5	38.9	68.9	30.6	64.5	27.6	62.4	23.2
Indiana	98.9	32.0	97.7	22.5	91.0	17.2	89.1	15.3
Iowa	98.3	45.7	97.8	48.4	96.6	49.5	95.2	41.5
Kansas	92.9	26.7	88.2	19.7	88.0	22.6	91.8	22.1
Kentucky	97.0	41.0	94.4	21.8	90.7	20.8	89.8	16.3
Louisiana	99.9	40.5	99.9	42.4	99.9	45.4	99.9	47.9
Maine	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Maryland	96.8	45.7	94.6	31.5	94.2	24.3	94.1	20.7
Massachusetts	99.9	99.6	99.9	96.9	99.9	100.0	99.9	100.0
Michigan	73.5	22.5	69.5	15.5	64.4	12.3	57.5	10.8
Minnesota	97.0	56.2	94.9	45.4	91.9	48.1	92.7	34.5
Mississippi	100.0	56.4	100.0	49.7	100.0	50.6	100.0	52.9
Missouri	92.3	48.5	90.3	47.2	88.8	41.3	86.9	42.8
Montana	98.1	59.2	97.9	61.3	97.5	59.2	96.3	60.5
Nebraska	98.5	58.7	98.1	60.5	98.8	76.7	99.7	30.8
Nevada	98.8	13.0	97.2	7.4	96.2	11.2	91.2	6.9
New Hampshire	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
New Jersey	99.7	83.5	99.0	71.6	94.7	53.9	93.5	51.6
New Mexico	87.6	16.8	85.6	13.7	86.9	16.6	80.2	21.9
New York	89.7	51.7	82.4	39.4	74.8	35.0	73.6	29.1
North Carolina	98.1	98.0	97.1	92.1	86.3	48.7	84.4	48.1
North Dakota	81.6	27.3	74.8	21.2	70.9	15.5	71.4	18.5
Ohio	90.3	19.9	87.8	15.8	85.1	15.9	78.9	14.3
Oklahoma	91.2	61.1	89.1	55.5	80.5	46.2	86.8	47.3
Oregon	98.0	22.1	97.3	21.8	96.7	20.8	97.4	17.8
Pennsylvania	85.3	39.0	82.9	31.6	80.3	23.3	76.4	20.4
Rhode Island	100.0	100.0	100.0	88.9	82.7	87.5	44.6	67.8
South Carolina	97.3	91.3	98.0	82.9	97.8	70.5	97.7	75.7
South Dakota	92.0	63.9	91.1	57.8	89.6	56.4	90.0	55.2
Tennessee	99.1	66.3	97.4	62.7	97.1	61.0	96.9	55.9
Texas	92.7	24.6	86.9	24.5	86.3	24.7	81.8	25.1
Utah	100.0	23.4	100.0	23.3	100.0	22.9	100.0	23.6
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	97.9	44.6	96.4	38.7	93.3	24.8	95.4	21.9
Washington	96.5	52.9	93.6	51.0	93.0	62.5	87.3	58.1
West Virginia	71.5	34.4	58.6	26.3	49.5	22.8	40.5	24.2
Wisconsin	95.0	58.0	91.1	36.6	84.3	25.0	84.2	22.1
Wyoming	99.7	16.2	99.7	11.9	99.6	12.9	99.8	12.6
Total	90.7	39.2	87.6	34.4	85.2	37.2	84.7	33.2

See footnotes at end of table.

**Table 33. Percentage of Total Deliveries Represented by Onsystem Sales
(Continued)**

State	August 1989		July 1989		June 1989		May 1989	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	83.6	34.9	55.5	36.9	86.2	37.8	83.8	37.6
Alaska	100.0	47.7	100.0	44.4	100.0	55.2	100.0	60.4
Arizona	89.1	49.6	89.1	49.3	91.7	45.9	92.8	45.1
Arkansas	86.2	17.5	87.2	14.9	91.5	19.0	91.3	18.9
California	87.8	34.0	89.4	40.1	92.8	43.9	94.8	38.1
Colorado	91.8	53.2	95.0	49.5	97.3	41.5	97.3	42.0
Connecticut	80.4	98.4	74.5	80.6	76.5	85.4	81.6	82.6
Delaware	100.0	66.0	100.0	78.2	100.0	76.4	100.0	82.9
District of Columbia	100.0	--	100.0	--	100.0	--	100.0	--
Florida	100.0	74.4	100.0	71.1	100.0	73.1	100.0	75.9
Georgia	80.2	29.6	80.7	27.4	81.7	31.1	85.3	30.6
Hawaii	100.0	--	100.0	--	100.0	--	100.0	--
Idaho	83.0	3	86.7	2	85.8	4	82.7	4
Illinois	47.4	21.8	50.2	21.0	59.7	22.1	67.5	25.0
Indiana	96.8	17.1	96.7	19.3	97.2	29.2	92.6	14.4
Iowa	95.0	41.1	95.4	44.1	96.3	40.7	97.0	43.5
Kansas	94.7	27.4	93.7	20.4	89.2	19.0	92.9	18.1
Kentucky	88.2	20.2	89.5	32.2	89.2	28.4	91.0	31.2
Louisiana	99.9	47.0	99.9	51.6	99.9	52.9	99.9	53.1
Maine	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Maryland	94.7	18.4	94.3	16.9	95.1	22.0	95.9	28.1
Massachusetts	99.9	100.0	99.9	100.0	99.9	100.0	99.9	100.0
Michigan	50.8	8.8	51.7	9.5	47.6	9.5	64.9	16.2
Minnesota	89.9	34.3	89.4	31.8	92.4	41.7	95.0	48.4
Mississippi	100.0	48.0	100.0	52.1	100.0	46.6	100.0	50.7
Missouri	90.5	42.1	86.1	42.3	85.8	42.0	90.7	44.7
Montana	96.3	75.3	96.4	84.8	96.8	89.6	97.4	85.4
Nebraska	99.9	37.4	99.9	27.8	99.8	31.2	99.7	37.5
Nevada	91.7	7.1	92.7	9.2	94.3	9.0	94.2	8.9
New Hampshire	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
New Jersey	93.4	47.5	94.2	48.1	94.7	55.4	96.2	53.3
New Mexico	81.9	28.5	80.2	21.3	83.4	21.4	86.6	28.6
New York	78.2	34.6	78.6	27.5	81.3	29.8	85.4	35.5
North Carolina	84.2	48.6	80.1	53.6	87.7	54.2	89.6	57.6
North Dakota	64.9	19.7	69.2	20.4	74.8	13.5	80.6	22.0
Ohio	75.0	11.2	75.5	14.5	74.4	11.3	81.2	12.7
Oklahoma	85.0	49.8	86.7	42.3	86.6	48.9	89.1	47.1
Oregon	97.2	17.5	97.0	16.3	97.6	22.1	97.6	19.4
Pennsylvania	77.2	19.5	79.6	17.2	76.9	20.9	81.7	23.9
Rhode Island	40.4	71.2	48.9	69.8	47.7	67.7	83.9	71.3
South Carolina	97.7	74.4	98.1	83.7	98.2	85.0	98.1	67.7
South Dakota	89.4	53.4	90.2	55.1	91.6	53.6	92.5	56.3
Tennessee	95.8	57.8	96.7	58.0	95.9	56.8	96.8	67.4
Texas	90.4	23.2	92.7	25.0	88.8	28.8	89.9	25.6
Utah	100.0	22.8	100.0	28.5	100.0	26.1	100.0	28.8
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	94.1	20.0	93.9	23.3	96.4	37.1	96.4	28.3
Washington	92.6	61.8	87.0	57.9	89.7	60.3	93.0	57.5
West Virginia	39.5	23.8	39.8	22.6	45.3	23.3	55.0	23.3
Wisconsin	84.2	14	86.1	21.7	87.7	26.7	92.6	32.8
Wyoming	100.0	2.7	100.0	13.6	100.0	18.5	100.0	24.5
Total	84.9	32.1	84.9	33.5	86.1	36.5	88.2	35.3

See footnotes at end of table.

**Table 33. Percentage of Total Deliveries Represented by Onsystem Sales
(Continued)**

State	April 1989		March 1989		February 1989		January 1989	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	90.6	39.5	89.4	42.2	82.5	40.4	33.9	38.2
Alaska	100.0	50.9	100.0	61.8	100.0	59.2	100.0	72.3
Arizona	93.5	43.6	94.1	31.5	96.3	32.7	96.1	29.7
Arkansas	94.3	17.3	95.9	18.3	95.6	23.1	95.3	24.1
California	88.3	39.9	93.0	37.4	95.1	50.7	94.6	52.2
Colorado	97.8	43.6	98.3	39.5	98.1	46.2	98.0	47.6
Connecticut	90.0	87.2	98.4	91.7	100.0	100.0	100.0	100.0
Delaware	100.0	83.8	100.0	83.5	100.0	79.2	100.0	75.9
District of Columbia	100.0	--	100.0	--	100.0	--	100.0	--
Florida	100.0	74.0	100.0	78.0	100.0	80.0	100.0	79.7
Georgia	88.2	33.0	89.7	37.2	93.6	42.6	96.6	53.2
Hawaii	100.0	--	100.0	--	100.0	--	100.0	--
Idaho	89.0	4	90.6	.5	90.2	.7	88.8	7
Illinois	69.6	27.7	69.8	30.6	73.4	36.4	71.8	37.1
Indiana	92.6	17.1	94.3	20.0	93.9	28.3	94.1	24.7
Iowa	98.0	40.7	98.5	44.6	98.4	46.0	98.4	43.6
Kansas	94.6	21.3	94.1	22.7	94.4	22.5	94.8	23.0
Kentucky	94.9	31.0	96.4	32.9	96.6	35.6	97.1	46.2
Louisiana	99.9	51.2	99.9	47.4	99.9	45.3	99.9	48.0
Maine	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Maryland	96.7	36.3	97.1	40.6	96.6	42.5	97.1	47.9
Massachusetts	99.9	100.0	99.9	100.0	99.9	91.2	99.9	91.0
Michigan	71.7	18.9	76.0	23.6	74.5	23.7	75.8	25.1
Minnesota	95.8	52.4	97.0	53.5	97.4	56.6	97.3	56.2
Mississippi	100.0	47.5	100.0	55.4	100.0	54.6	100.0	46.3
Missouri	93.2	47.4	94.4	53.5	93.9	53.4	94.4	55.4
Montana	98.6	83.7	98.8	88.9	98.9	89.9	98.3	74.3
Nebraska	99.8	42.2	97.1	41.9	96.5	45.9	96.8	49.0
Nevada	95.0	11.2	96.9	15.4	98.1	21.3	98.0	16.8
New Hampshire	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
New Jersey	98.3	58.7	98.7	62.6	98.9	75.1	99.0	79.0
New Mexico	86.5	15.9	91.4	2.2	89.2	10.9	93.0	9.0
New York	85.0	36.3	89.3	45.7	90.1	47.3	90.4	50.0
North Carolina	92.4	71.3	94.9	78.1	98.9	96.8	98.7	97.4
North Dakota	83.9	34.9	84.0	33.4	84.8	36.5	81.7	36.5
Ohio	86.0	15.3	87.1	16.6	88.1	18.7	87.4	21.1
Oklahoma	87.9	46.7	91.7	48.1	90.2	54.7	89.7	51.3
Oregon	98.3	22.2	98.7	24.6	99.2	31.9	99.1	26.6
Pennsylvania	87.4	25.5	88.7	33.8	88.9	42.9	89.4	42.5
Rhode Island	87.1	82.1	100.0	100.0	100.0	100.0	100.0	100.0
South Carolina	98.3	75.8	98.6	74.5	98.5	76.5	98.5	95.2
South Dakota	92.1	65.5	92.8	68.1	93.1	68.6	92.8	64.0
Tennessee	97.5	61.9	98.9	66.1	98.9	65.9	99.1	66.4
Texas	91.9	26.4	93.2	28.1	91.8	25.4	86.2	24.8
Utah	100.0	31.3	100.0	30.3	100.0	38.8	100.0	38.7
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	97.1	45	98.1	43.3	98.4	51.0	98.3	49.4
Washington	93.2	60.9	96.9	58.9	94.8	62.4	95.5	60.8
West Virginia	63.9	30.8	65.3	27.1	69.0	36.6	68.6	36.2
Wisconsin	94.0	35.7	94.5	40.9	94.2	43.5	94.1	44.5
Wyoming	100.0	15.5	100.0	21.5	100.0	21.7	100.0	18.5
Total	89.1	36.1	90.8	37.5	91.2	39.3	91.0	40.5

See footnotes at end of table.

**Table 33. Percentage of Total Deliveries Represented by Onsystem Sales
(Continued)**

State	Total 1988		December 1988		November 1988		October 1988	
	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial	Commercial	Industrial
Alabama	91.1	50.0	82.9	39.9	90.6	49.7	88.0	46.0
Alaska	100.0	54.5	100.0	67.4	100.0	63.6	100.0	63.7
Arizona	95.4	29.1	95.1	28.2	94.3	25.7	95.5	23.1
Arkansas	93.7	24.3	94.3	27.3	91.6	26.6	89.2	19.5
California	95.6	63.1	33.6	67.3	85.1	59.8	92.2	70.3
Colorado	97.7	39.0	97.8	34.9	97.0	37.1	96.5	38.2
Connecticut	98.1	97.7	100.0	100.0	99.6	98.8	97.7	96.3
Delaware	100.0	79.1	100.0	77.5	100.0	76.5	100.0	74.3
Distr. of Columbia	100.0	--	100.0	--	100.0	--	100.0	--
Florida	100.0	76.1	100.0	76.8	100.0	76.2	100.0	77.8
Georgia	93.9	46.3	95.5	61.6	89.9	45.6	89.6	39.3
Hawaii	100.0	--	100.0	--	100.0	--	100.0	--
Idaho	85.9	3.6	86.4	3.7	81.6	2.5	79.5	1.8
Illinois	76.8	34.8	74.7	31.0	73.7	36.7	78.2	32.6
Indiana	95.2	23.3	94.2	28.8	98.4	21.9	93.6	23.1
Iowa	98.3	40.3	98.2	44.4	97.8	38.8	96.2	43.2
Kansas	96.4	37.1	93.2	23.5	91.8	22.7	90.4	23.1
Kentucky	95.8	37.7	96.0	42.3	95.1	36.4	93.8	32.0
Louisiana	99.9	57.4	99.9	52.7	99.9	55.5	99.9	58.8
Maine	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Maryland	96.9	37.9	96.8	40.7	96.1	36.1	94.7	26.5
Massachusetts	99.9	99.2	100.0	93.7	100.0	99.6	99.6	98.6
Michigan	71.6	19.9	74.5	23.2	72.8	19.5	60.0	14.7
Minnesota	96.8	55.9	98.5	55.0	96.3	56.2	95.0	53.4
Mississippi	100.0	56.0	100.0	49.5	100.0	60.1	100.0	54.1
Missouri	96.2	70.3	92.4	64.2	91.9	63.5	90.8	53.3
Montana	99.9	86.8	99.9	85.2	99.2	76.7	99.9	84.0
Nebraska	97.7	51.1	99.5	47.5	100.0	43.5	95.8	47.3
Nevada	95.1	31.2	91.0	13.3	91.6	25.2	93.7	30.3
New Hampshire	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
New Jersey	93.5	65.2	99.4	77.6	98.0	58.2	96.4	50.3
New Mexico	92.7	21.1	92.3	15.0	94.6	16.0	87.5	19.1
New York	89.4	48.0	89.7	54.0	87.6	47.0	87.1	34.3
North Carolina	95.6	82.3	98.4	96.2	96.3	85.1	91.3	75.4
North Dakota	92.7	43.5	93.3	39.6	89.6	37.1	94.3	26.5
Ohio	87.1	18.7	88.2	22.5	86.8	21.0	85.6	16.0
Oklahoma	74.5	40.0	80.3	57.6	73.4	58.2	43.3	62.3
Oregon	98.8	34.6	98.4	21.7	97.7	22.0	97.5	19.6
Pennsylvania	90.2	41.2	91.0	48.4	88.7	42.5	86.3	37.2
Rhode Island	87.1	85.2	100.0	100.0	98.3	94.9	87.6	73.7
South Carolina	99.1	80.2	97.3	87.0	98.1	80.0	98.0	76.2
South Dakota	96.2	69.5	94.5	71.7	94.0	69.8	93.6	68.3
Tennessee	97.4	67.8	99.0	65.3	97.9	66.2	95.9	68.1
Texas	87.5	29.8	79.1	33.4	88.1	29.7	82.1	33.5
Utah	100.0	47.0	100.0	38.6	100.0	41.7	100.0	43.1
Vermont	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Virginia	97.6	51.3	97.9	53.6	97.1	51.2	96.1	48.1
Washington	97.2	68.9	96.1	56.1	93.3	57.8	97.0	63.8
West Virginia	60.3	17.3	66.9	17.9	64.1	16.2	49.3	17.8
Wisconsin	93.4	35.5	93.7	44.9	92.8	37.6	91.9	30.0
Wyoming	100.0	22.1	100.0	17.5	100.0	14.8	100.0	22.6
Total	90.8	42.6	89.7	44.4	88.7	42.1	87.4	43.3

-- Not Applicable

Notes and Sources: The percentages depict the portion of total commercial and industrial deliveries represented by onsystem sales. Total deliveries include volume transported to commercial and industrial consumers for the account of others.

Figure 7. Percentage of Total Deliveries Represented by Onsystem Sales

Source: Form EIA-857.

Table Notes and Sources

Table 1

Notes: Data for 1984 through 1989 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources:

- EIA, *Natural Gas Annual 1989*, Table 7 and EIA estimates, January 1990 through current month. See Explanatory Notes 1, 3, and 6 for discussion of computation, estimating procedures, and revision policy.

Table 2

Notes: Data for 1984 through 1989 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources:

- Total Dry Gas Production: EIA *Natural Gas Annual 1989*, 1984 through 1989; IOCC, MMS reporting, and EIA estimates, January 1990 through current month. See Explanatory Note 3 for estimation procedures and revision policy.
- Withdrawals from and Additions to Storage: EIA *Natural Gas Annual 1989*, 1984 through 1989; Form FERC-8 and Form EIA-191, January 1990 through current month.
- Supplemental Gaseous Fuels: EIA *Natural Gas Annual 1989*, 1984 through 1989; and EIA computations, January 1990 through current month. See Explanatory Note 2 for discussion of computation procedures and revision policy.
- Imports and Exports: Form FPC-14, 1984 through 1989; and EIA estimates, January 1990 through the current month. See Explanatory Note 4 for discussion of procedures and revision policy.
- Consumption and Unaccounted For: EIA *Natural Gas Annual 1989*, 1984 through 1989; and EIA computations, January 1990 through current month. See Explanatory Notes 5 and 11 for discussion of computation procedures and revision policy.

Table 3

Notes: Data for 1984 through 1989 are final. All other data are preliminary unless otherwise indicated. Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Sources:

- All data except electric utility: EIA *Natural Gas Annual 1989*, 1984 through 1989; and Form EIA-857 and computations January 1990 through the current month. See Explanatory Note 5 for computation procedures and revision policy. Electric utility data: Form EIA-759, "Monthly Power Plant Report" (formerly Form FPC-4).

Table 4

Notes: Data for 1984 through 1989 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 for 1984 through 1987 include imputed averages for volumes of gas delivered for the account of others. From 1988 on, average prices reflect on-system sales prices only. The change in series in 1987 affects the commercial, industrial, and all consumers averages.

Sources:

- Average wellhead price: EIA *Natural Gas Annual 1989*, 1984 through 1989; and EIA estimates, January 1990 through current month. See Explanatory Note 8 for estimation procedures and revision policy.
- Imports and Interstate Pipeline Company Purchases: Form FERC-11.
- Average City Gate, Residential, Commercial and Industrial average prices for 1984 through current month from Form EIA-857. See Explanatory Note 5 for discussion of revision policy.
- Earlier prices from EIA *Natural Gas Annual 1989*. Electric Utilities averages from Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 5

Notes: See Explanatory Note 12 for discussion of purchased gas adjustment filings. Totals may not equal sum of components because of independent rounding.

Source:

- Purchased Gas Adjustment filings for interstate pipeline companies.

Table 6

Notes: Data for 1985 through 1989 are final. All other data are preliminary.

Sources:

- Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas."
- "Quarterly Sales and Price Report" prepared by the Office of Fuels Programs, Office of Fossil Energy.

Table 7

Notes: Data for 1984 through 1989 are final. All other data are preliminary, unless otherwise indicated. Totals may not equal sum of components because of independent rounding. See Explanatory Notes 1 and 3 for discussion of computation procedures and revision policy.

Sources:

- EIA *Natural Gas Annual 1989*, 1984 through 1989.
- IOCC, MMS reports, and EIA computations, January 1990 through current month.

Table 8

Notes: Data for the current month and the previous 2 months are preliminary. All other data are final. Dates shown indicate date received at the FERC. Data include affirmative determinations only. See Explanatory Note 10 for discussion of Title I of the Natural Gas Policy Act. Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Source:

- Form FERC-121.

Table 9

Notes: Dates shown indicate date received at FERC. Values include affirmative determinations only. See Explanatory Note 10 for discussion of Title I of the Natural Gas Policy Act. Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Source:

- Form FERC-121.

Table 10

Note: Data shown are based on filings received at FERC during the month indicated by the table heading. Data include affirmative determinations only. See Explanatory Note 10 for discussion of Title I of the Natural Gas Policy Act. Geographic coverage is the 50 States and the District of Columbia. Totals may not equal sum of components because of independent rounding.

Source:

- Form FERC-121.

Table 11

Notes: Geographic coverage is the 50 States and the District of Columbia. A "small producer" is one with annual sales subject to FERC jurisdiction not in excess of 10 billion cubic feet. On November 16, 1984, the Federal Energy Regulatory Commission issued Order No. 406 in Docket No. RM 84-14-000 providing for inclusion of maximum lawful prices under Sections 103(b)(2) and 105(b)(3) of the Natural Gas Policy Act. Order No. 406 became effective on January 1, 1985.

Source:

- *Federal Register*, "Rules and Regulations."

Table 12

Notes: Data up to 3 years prior to current month are final. All other data are preliminary unless otherwise indicated. See Explanatory Note 9 for discussion of major interstate pipeline companies. Totals may not equal sum of components because of independent rounding. This table shows selected items only and therefore does not balance mathematically.

Source:

- Form FERC-11.

Table 13

Notes: The summaries presented in this table are exclusive of transactions between major pipeline companies in the computation of total pipeline activities to eliminate double-counting. Data up to 3 years prior to current month are final. All other data are preliminary unless otherwise indicated. See Explanatory Note 9 for discussion of major interstate pipeline companies. Totals may not equal sum of components because of independent rounding.

Source:

- Form FERC-11.

Table 14

Notes: Two lines have been added to this table to explicitly differentiate transactions between major and nonmajor pipeline companies. Totals may not equal sum of components due to independent rounding and provisions for pending regulatory adjustments.

Source:

- Form FERC-11.

Table 15

Notes: Previously published manufactured gas is now summarized with liquefied natural gas, gasified coal, and synthetic gas production. Also, the summaries presented in this table are exclusive of transactions between major pipeline companies in the computation of total pipeline activities to eliminate double counting. See Explanatory Note 9 for discussion of major interstate pipeline companies. Totals may not equal sum of components because of independent rounding.

Source:

- Form FERC-11.

Table 16

Notes: Previously published manufactured gas is now summarized with liquefied natural gas, gasified coal, and synthetic gas production. Two lines have been added to this table that explicitly differentiate transactions between major and nonmajor pipeline companies. See Explanatory Note 9 for discussion of major interstate pipeline companies. Totals may not equal sum of components because of independent rounding.

Source:

- Form FERC-11.

Table 17

Notes: Data for 1984 through 1989 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 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, Form FERC-8, and Form EIA-176.

Table 18

Notes: Data for 1984 through 1989 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 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, Form FERC-8, and Form EIA-176.

Table 19

Notes: Data for 1984 through 1989 are final. All other data are preliminary unless otherwise noted. See Explanatory Note 7 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, Form FERC-8, and Form EIA-176.

Table 20

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.

Source:

- Form FERC-8.

Table 21

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.

Sources:

- Form FERC-8 and Form EIA-191.

Tables 22-25

Notes: Geographic coverage is the 50 States and the District of Columbia. Volumes in these tables represent the amount of natural gas delivered to four groups of natural gas consumers. See Explanatory Note 5 for discussion of computations and revision policy.

Sources:

- Residential, Commercial, and Industrial Volumes: Form EIA-857.
- Electric Utility Volumes: Form EIA-759.

Table 26

Notes: Geographic coverage is the 50 States and the District of Columbia. Volumes in this table represent the amount of natural gas delivered to all consumers. See Explanatory Note 5 for discussion of computations and revision policy.

Source:

- Form EIA-857 and Form EIA-759.

Table 27

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 is transferred from a pipeline to a local distribution company within the State. See Explanatory

Note 5 for discussion of computations and revision policy.

Source:

- Form EIA-857.

Tables 28-31

Notes: Data for 1988 and 1989 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 and industrial consumers for 1988 forward reflect onsystem sales prices only. See Explanatory Note 5 for discussion of computations and revision policy. See Table 33 for data on onsystem sales expressed as a percentage of both total commercial and total industrial deliveries.

Sources:

- Residential, Commercial, and Industrial Prices: Form EIA-857.
- Electric Utility Prices: Form FERC-423.

Table 32

Notes: Geographic coverage is the 50 States and the District of Columbia. Prices in this table represent the on-system average price of natural gas delivered to all consumers. See preceding note regarding break in average price series. See Explanatory Note 5 for discussion of computations and revision policy.

Sources:

- Form EIA-857 and Form FERC-423.

Table 33

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.

Appendix A

Explanatory Notes

Explanatory Notes

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-627. For 1989, of the 32 producing States, 22 reported data on nonhydrocarbon gases removed. The 22 States accounted for 57 percent of total 1989 gross withdrawals. Of the 22 States reporting nonhydrocarbon gases removed, 11 reported zero values: Alaska, Arizona, Arkansas, Illinois, Indiana, Maryland, Missouri, New York, Oregon, South Dakota, and Virginia. The nine States reporting volumes greater than zero are Alabama, California, Colorado, Florida, Mississippi, New Mexico, North Dakota, Texas, and Wyoming. Two States (Kentucky and Nebraska) reported quantities unknown but considered insignificant. In addition, Kansas, Louisiana, Montana, and Oklahoma, which together accounted for 38 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. Three States report monthly data on nonhydrocarbon gases removed: Alabama, Texas, and Mississippi. Monthly data for California, Colorado, Florida, New Mexico, North Dakota, and Wyoming are estimated based on annual data reported on Form EIA-627. 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

Monthly data are revised after publication of the *Natural Gas Annual* by proportionally allocating the differences between annual data reported on the Form EIA-627 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 32 gas-producing States on Form EIA-627. 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 an average rate of change between the report month and the prior month over the previous 3 years. The rate-of-change percentage is applied to the data for the month prior to the report month to compute the estimate for the report month in the current year.

Estimates for total U.S. marketed production are based on the application of historical (latest 3 calendar years) month-to-month ratios of daily production rates to the latest preliminary reported monthly production data. State estimates for nonhydrocarbon gas removed, gas used for repressuring, and gas vented and flared are based on the ratio of the latest preliminary reported 3-month average of these categories to marketed production. These ratios are applied to the estimates of marketed production to calculate figures for nonhydrocarbon gas removed, gas used for repressuring, and gas vented and flared. Estimates for gross withdrawal data are the sum of the estimates calculated for nonhydrocarbon gases removed, gas used for repressuring, gas vented and flared, and marketed production.

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 Interstate Oil Compact Commission (IOCC) 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

The differences between each State's annual production data reported on the annual Form EIA-627 and the sum of its monthly IOCC reports (January-December) are allocated proportionally to the monthly IOCC data.

Note 4. Imports and Exports

Annual Data and Final Monthly Data

Annual and final monthly data are published from the annual Form FPC-14, which requires data to be reported 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 Form FPC-14, 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-116. 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.

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 sales volumes reported in Form EIA-857.

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 (excluding nonhydrocarbon gases). 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 data are based on a revised annual ratio of lease and plant fuel consumption to marketed production (excluding nonhydrocarbon gases) from Form EIA-176. This ratio is applied to each month's revised marketed production figure to compute final monthly lease and plant fuel consumption estimates.

Note 6. Extraction Loss

Annual Data

Extraction loss data are calculated from filings of Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." For a fuller discussion, see the *Natural Gas Annual 1989*.

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 disposition.

Note 7. Natural Gas Storage

Underground Natural Gas Storage

All monthly data concerning underground storage are published from the essentially identical forms, FERC-8 and EIA-191. Monthly data are revised after publication of "Underground Natural Gas Storage in the United States" for the heating year (April through March) in which the report month falls. In addition, injection and withdrawal data from the FERC-8/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 1984 through 1989 shown in Table 2 include both underground and liquefied natural gas (LNG) storage. Underground storage data are obtained from the FERC-8/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.

Note 8. Average Wellhead Value

Annual Data

Form EIA-627 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 wellhead value. 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

An estimate of the U.S. gas price is made each month based on monthly gas prices from four States: Mississippi, New Mexico, Oklahoma, and Texas.

Final Monthly Data

Preliminary monthly data are revised after the publication of the *Natural Gas Annual*. The weighted average 12-month prices for Texas, New Mexico, Oklahoma, and Mississippi are compared to the wellhead prices published for each of the four States in the *Natural Gas Annual*. The ratio derived from this comparison is then applied to each month's estimates for those States, and the monthly data are revised.

Note 9. Financial Data of Major Interstate Pipeline Companies

The prices in Table 4 for imports and purchases from producers, and industrial sales by major interstate pipeline companies, and all data in Tables 12 through 16 are derived from Form FERC-11. Form FERC-11 is filed monthly by the approximately 47 major interstate natural gas pipeline companies. A major pipeline company is defined as one "whose combined sales for resale, and gas transported interstate or stored for a fee exceeded 50 billion cubic feet in the previous calendar year."

Data reported by the major interstate pipeline companies on Form FERC-11 generally reflect the timing of data entry, revision, and/or reclassification of accounts in the companies' accounting records in accordance with the FERC regulations and regulatory filings. Certain data may also be estimated. Consequently, the data reported and shown in Tables 12 through 16 for any given month may include or reflect out-of-period dollar or volume adjustments, restatements or revisions, or account reclassifications. The dollar amounts reported as paid or received and volumes reported as delivered or received may also include amounts paid, delivered, or received under contractual provisions such as prepayment, take-or-pay, minimum take, or minimum bill provisions. Unless otherwise footnoted, the individual data items, computed averages, and aggregated totals shown include the effect of any and all such adjustments, revisions, estimates, reclassifications, and/or contractual provisions. Average prices are not reported on the Form 11. The averages shown are computed by dividing the total dollars reported for the particular item by the total volume reported for the same item.

Final Monthly Data

Final revisions for the prior year's data are made upon receipt of the December data for the current survey year.

Note 10. Natural Gas Policy Act of 1978

Tables 5 and 8 through 11, in this publication contain data reported by the natural gas industry under Title I of the Natural Gas Policy Act of 1978 (NGPA).

Title I of the NGPA - Wellhead Prices

The NGPA signed into law on November 9, 1978, mandated a new framework for the regulation of most facets of the natural gas industry. Ceiling prices were established for all production of natural gas. For gas produced from both new and old (pre-NGPA) reserves, ceiling prices depend on contract provisions and the characteristics of the well. If a well qualifies under more than one provision in Title I of the NGPA, the highest maximum ceiling price is applicable. Further, all price ceilings are adjusted by a monthly inflation adjustment.

Natural gas dedicated to interstate commerce on or before the November 9, 1978 enactment of the NGPA has as a maximum lawful price the "just and reasonable" rate as established by the Federal Energy Regulatory Commission under Section 104.

The maximum lawful price of natural gas under old intrastate contracts (Section 105) is based on its contract price on November 9, 1978, and is, in general, much higher than for comparable old interstate gas. Gas production under Sections 104, 105, and 106 (old contracts that have "rolled over") constitute what is referred to as "old gas."

Almost all development and extension wells begun after February 19, 1977, qualify as new onshore production (Section 103). In order to qualify for new gas status under Section 102, an onshore well started after February 19, 1977, must produce from a new reservoir or be at least 2.5 miles from, or 1,000 feet deeper than, a "marker well" (a well producing in commercial quantities any time between January 1, 1970, and April 20, 1977). Offshore gas qualifies for Section 102 if production is from new leases (entered into on or after April 20, 1977) or reservoirs "discovered" on or after July 27, 1976.

Production from wells qualifying under Section 107 is given special treatment as "high-cost gas" and is defined as gas produced:

- from wells started after February 19, 1977, and completed to produce from a depth greater than 15,000 feet
- from geopressured brine
- from coal seams
- from Devonian shale
- under conditions determined by the Federal Energy Regulatory Commission to present extraordinary risks or costs.

On November 1, 1979, gas from the first four categories was deregulated. On August 15, 1980, natural gas produced from tight formations (geologic formation where tight packing of the reservoir rock causes low production rates) was defined as high-cost gas with a ceiling price set at 200 percent of the Section 103 price.

Under the NGPA, producers applying for price classification under Sections 102, 103, 107, or 108 must file Form FERC-121, with the applicable State jurisdictional agency. The forms are then sent to FERC for review. The filings are grouped according to the month received by FERC. Not all submissions contain estimated annual volumes or contract prices. Annual volumes are often estimated by producers prior to actual operations or based on short periods of operation. Price data from Form FERC-121 are not included in this publication, since submission dates vary and prices may have changed subsequent to submission.

On January 1, 1985, the following categories of gas were deregulated pursuant to NGPA Section 121:

- Section 102(c) "new natural gas"
- Section 103(c) "new onshore production wells" which were not committed or dedicated to interstate commerce on April 20, 1977, and which produce gas from a completion location deeper than 5,000 feet.
- Sections 105 and 106(b) "intrastate gas under contracts" where the price paid on December 31, 1984, is higher than \$1.00 per million Btu, provided that such price over \$1.00 was not established by operation of an indefinite escalator clause.

On July 1, 1987, the following category of gas was deregulated pursuant to NGPA Section 121:

- Section 103(b)(2) "new onshore production wells" which were not committed or dedicated to interstate commerce on April 20, 1977, and which produce gas from a completion location less than 5,000 feet deep.

On July 26, 1989, the President signed legislation to remove all remaining natural gas wellhead price controls by 1993.

Note 11. Unaccounted For

The "unaccounted for" 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 "unaccounted for" data, see the *Natural Gas Annual 1988*.

Preliminary Monthly Data

Preliminary monthly data in the "unaccounted for" category are calculated by subtracting additions to storage, exports, and consumption from total supply/disposition.

Final Monthly Data

Final monthly data in the "unaccounted for" category are calculated by subtracting storage additions, exports, and total consumption from total supply.

Note 12. Purchased Gas Adjustments

The Purchased Gas Adjustment filings for selected interstate pipeline companies have been aggregated to present volume and price data by NGPA category as shown in Table 5. These filings represent over 85 percent of the wellhead purchases subject to the NGPA and dedicated to the interstate market.

These filings were submitted every 6 months by most of the pipeline companies and once a year by the others. Beginning June 1, 1988, all pipelines will file projections quarterly in an abbreviated format, and one detailed filing per year. The projected volume and price data are used for each month for which the filing is effective. The filing dates, which are different for the different companies, are shown in Table A1.

Table A1. PGA Filing Schedule

Pipeline Company -----	Annual Filing Effective Date -----
Alabama-Tenn (b)	January
Algonquin Gas Trans (a)	March
ANR Pipeline	May
Arkla Gas (a,b)	April
Bayou Inter	August
Carnegie Nat Gas	September
Colorado Inter	October
Columbia (a,c)	May
Commercial	April
Consolidated (a)	September
E. Tenn Natural Gas (b)	January
Eastern Shore (c)	November
El Paso (b)	July
Equitrans Inc (a)	September
Florida (a,c)	May
Granite St Gas Trans(a,b)	January
Great Lakes Gas (a,c)	November
KN Energy (a)	December
Kentucky W. Va (a,c)	May
Lawrenceburg Gas	February
Mid-Louisiana Gas	September
Midwestern No. Div (b,c)	October
Midwestern So. Div	April
MIGC, Inc. (c)	May
MS. River Trans	June
National Fuel Supply(a,b)	January
Natural (a)	March
North Penn Gas (d)	March
Northern Natural (a,b)	January
Northwest Pipeline (a)	April
Panhandle Eastern (a)	March
Questar Pipeline Co	June
Ringwood Gathering	October
Sea Robin Pipeline (a)	January
South Georgia	July
Southern Natural	April
Tennessee Gas Pipeline(b)	January
Texas Eastern (a)	February
Texas Gas Pipeline	November
Texas Gas Trans (a,c)	February
Transcontinental (a)	August
Transwestern	July
Trunkline (a)	September
United (a)	October
Valero Interstate	June
Valley Gas	November
Western Gas Inter	August
Williams Nat Gas (a,c)	May
Williston Basin (a)	August

(a) Filed quarterly effective June 1, 1988.

(b) Filed quarterly effective July 1, 1988.

(c) Filed quarterly effective August 1, 1988.

Appendix B

Data Sources

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 five monthly surveys. Filings with the FERC also provide sources of data for this publication.

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 three surveys of the natural gas industry and two surveys of the electric utility industry. The natural gas industry surveys are the Forms FERC-8 and EIA-191 filed by companies that operate underground storage facilities, the Form FERC-11 filed by major interstate natural gas pipeline companies, 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 five monthly surveys are mandatory.

Data in this publication are also taken from two types of reports that are filed with the FERC under its regulatory functions. One filing is the Form FERC-121, filed by natural gas producers who are the first seller of gas that qualified for an incentive price. The other filing is the "Purchased Gas Adjustment," which is filed by interstate pipeline companies to allow them to recover changes in their purchase prices for natural gas above the cost of service reflected in their current filings.

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. Also shown are copies of the EIA and FERC survey forms that are sources of data for this publication.

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 revision of the Form EIA-176 continues to be the basis of the current version of this form. On March 4, 1985, the Form EIA-176 was again approved by the Office of Management and Budget for use through report year 1986.

In 1988, the Form EIA-176 was revised to include data collection for deliveries of natural gas to commercial consumers for the account of others. The revised form was approved for use during report years 1987 through 1989. Response to the form continues to be mandatory.

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.

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 February 1990 for report year 1989 totaled 2,138 questionnaire packages. To this original mailing, 9 names were added and 2 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 2,145 responses from approximately 1,800 companies.

Following the original mailing, second request mailing, and nonrespondents followup, 2,145 responses were entered into the data base, and there were no 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-176

U.S. DEPARTMENT OF ENERGY
ENERGY INFORMATION ADMINISTRATIONForm Approved
OMB No. 19050176
Expires: 12/31/90ANNUAL REPORT OF NATURAL AND SUPPLEMENTAL GAS SUPPLY AND DISPOSITION, 19

This report is mandatory under the Federal Energy Administration Act of 1974 (Public Law 93-275). Failure to report may result in criminal fines, civil penalties, and other sanctions as provided by law. See Section VI of the instructions for confidentiality statement. Public reporting burden for this collection of information is estimated to average 19.8 hours per response, including the time of reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Energy Information Administration, Office of Statistical Standards, EI-73, Mail Station 1H-023 Forrestal, 1000 Independence Ave SW, Washington DC 20585; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington DC 20503.

EIA USE

Affix mailing label or enter mail address

Control (ID) No. _____

EIA COPY. Tear out, complete, and return to:

Energy Information Administration
Mail Station: BG-094 FORSTL
U.S. Department of Energy
Washington, D.C. 20585
Attn: Form EIA-176Name: _____
Operations in (State): _____
Street or Post Office Box: _____
City, State, Zip Code: _____
Attention: _____

PART I: IDENTIFICATION

1.0 Control No.	2.0 Company Name:	3.0 Report State	EIA ☐	4.0 Resubmittal ☐	Date: _____
5.0 Company status, name, and/or address change or correction. (Check appropriate box.)					
a. ☐ Name and address on mailing label are correct.					
b. ☐ Change name, attention line, and/or mail address as indicated below.					
c. ☐ Company was sold to, or merged with, company entered below.					
d. ☐ Company went out of business. Customer accounts taken over by company entered below.					
e. ☐ Other changes, corrections, or comments: _____					
5.1 Change mail address to:					
a. Company Name: _____					
b. Operations in (State): _____					
c. Street or Post Office Box: _____					
d. City, State, Zip Code: _____					
e. Attention: _____					
6.0 Contact person:					
Name: _____		Telephone Number: _____	Area Code: _____	No. _____	Ext. _____

PART II: CERTIFICATION AND DISCLOSURE STATEMENT

1.0 I certify that (Check appropriate box):	
a. ☐ The information provided herein and appended hereto is true and accurate or, where indicated on the form, reasonable estimates to the best of my knowledge.	
b. ☐ My company does not meet any of the criteria set forth in Section II, "Who must submit," of the instructions and is therefore not required to complete and submit a Form EIA-176 for the report State.	
c. Does the information supplied on this form contain trade secrets and/or confidential commercial information? ☐ Yes ☐ No	
2.0 Name	3.0 Title
4.0 Signature	5.0 Date
Title 18, USC 1001, makes it a crime for any person knowingly and willingly to make to any agency or department of the United States any false, fictitious or fraudulent statements as to any matter within its jurisdiction.	

ANNUAL REPORT OF NATURAL AND SUPPLEMENTAL GAS SUPPLY AND DISPOSITION, 19

1.0 Control No.	2.0 Company Name	3.0 Report State	EIA 	4.0 Resubmittal Date:
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PART III: TYPE OF COMPANY AND GAS ACTIVITIES OPERATED IN THE REPORT STATE

1.0 Type of Company (check one) a ☐ Investor owned distributor b ☐ Municipally owned distributor c ☐ Interstate pipeline d ☐ Intrastate pipeline e ☐ Storage operator f ☐ SNG plant operator g ☐ Integrated oil and gas h ☐ Producer i ☐ Gatherer j ☐ Processor k ☐ Other (specify) _____	2.0 Gas Activities Operated On-system Within the Report State (check all that apply) <table style="width: 100%;"><tr><td style="width: 60%;">a ☐ Produced Natural Gas</td><td style="width: 40%;">m ☐ Delivered for Resale</td></tr><tr><td>b ☐ Gathered</td><td>n ☐ Delivered directly to consumers</td></tr><tr><td>c ☐ Processed</td><td>☐ Other (specify) _____</td></tr><tr><td>d ☐ Purchased</td><td></td></tr><tr><td>e ☐ Transported Interstate</td><td></td></tr><tr><td>f ☐ Transported Intrastate</td><td></td></tr><tr><td>g ☐ Stored Underground</td><td></td></tr><tr><td>h ☐ Stored LNG</td><td></td></tr><tr><td>i ☐ Injected Propane-air</td><td></td></tr><tr><td>j ☐ Produced SNG</td><td></td></tr><tr><td>k ☐ Imported</td><td></td></tr><tr><td>l ☐ Exported</td><td></td></tr></table>	a ☐ Produced Natural Gas	m ☐ Delivered for Resale	b ☐ Gathered	n ☐ Delivered directly to consumers	c ☐ Processed	☐ Other (specify) _____	d ☐ Purchased		e ☐ Transported Interstate		f ☐ Transported Intrastate		g ☐ Stored Underground		h ☐ Stored LNG		i ☐ Injected Propane-air		j ☐ Produced SNG		k ☐ Imported		l ☐ Exported	
a ☐ Produced Natural Gas	m ☐ Delivered for Resale																								
b ☐ Gathered	n ☐ Delivered directly to consumers																								
c ☐ Processed	☐ Other (specify) _____																								
d ☐ Purchased																									
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i ☐ Injected Propane-air																									
j ☐ Produced SNG																									
k ☐ Imported																									
l ☐ Exported																									

PART IV: SUPPLY OF NATURAL AND SUPPLEMENTAL GAS RECEIVED WITHIN OR TRANSPORTED INTO REPORT STATE

	Volume (Mcf at 14.73 psia)	g or f	Cost (Dollars)	g or f
1.0 Company owned natural gas produced on-system				
2.0 On-system purchases received:				
2.1 From producers, gatherers, and/or gas processors				
2.2 From pipeline, distribution, and/or storage operators				
2.3 From synthetic natural gas plants or SNG pipeline				
2.4 At State line or U.S. border from:				
(Company)				
(State or Country)				
(Continue on Part VI, if more space is needed)				
3.0 Transportation, exchange, and/or storage receipts:				
3.1 Received within the report State				
3.2 Received at the State line or U.S. border from:				
(Company)				
(State or Country)				
(Continue on Part VI, if more space is needed)				
4.0 Transported into the report State from:				
(State or Country)				
(Continue on Part VI, if more space is needed)				
5.0 Withdrawn from company operated storage facilities:				
5.1 From underground storage				
5.2 From liquefied natural gas storage				
6.0 Synthetic natural gas produced				
7.0 Other sources of supply (specify):				
(Source and/or kind of fuel)				
(Continue on Part VI, if more space is needed)				
8.0 Total supply within report State				

EIA-176

EIA COPY Page 2

ANNUAL REPORT OF NATURAL AND SUPPLEMENTAL GAS SUPPLY AND DISPOSITION, 19

1.0 Control No.	2.0 Company Name	3.0 Report State	EIA 	4.0 Resubmittal Date:
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PART V: DISPOSITION OF NATURAL AND SUPPLEMENTAL GAS WITHIN OR TRANSPORTED OUT OF REPORT STATE

	Volume (Mcf at 14.73 psia)	e or f	Cost or Revenue (Dollars)	e or f
1.0 Used in well, lease, and field operations				
2.0 Returned to oil and/or gas reservoirs				
3.0 Used, removed, or lost in gas processing or treating plants				
3.1 Company operated plants:				
3.1.1 Volume delivered to company operated plants for redelivery Mcf				
3.1.2 Volume used for plant fuel				
3.1.3 Extraction loss (Estimated gas phase volume of liquids extracted)				
3.1.4 Volume of nonhydrocarbons removed (e.g., H ₂ S & CO ₂)				
3.1.5 Vented, flared, and/or lost				
3.2 Plants operated by others:				
3.2.1 Volume delivered to plants operated by others for redelivery Mcf				
3.2.2 Total volume used, removed, vented, and/or flared				
4.0 Used in pipeline, storage, and/or distribution operations				
5.0 Added to company operated storage facilities:				
5.1 Injected into underground storage				
5.2 Added to liquefied natural gas storage				
6.0 Transportation, exchange, and/or storage deliveries:				
6.1 Delivered at point(s) within the report State				
6.2 Delivered at the State line or U.S. border to:				
(Company) 				
(State or Country) 				
(Continue on Part VI, if more space is needed)				
7.0 Transported out of the report State to:				
(State or Country) 				
(Continue on Part VI, if more space is needed)				
8.0 Delivered for sales for resale:				
8.1 Delivered within the report State				
8.2 Delivered at the State line or U.S. border to:				
(Company) 				
(State or Country) 				
(Continue on Part VI, if more space is needed)				
9.0 Delivered directly to consumers:				
(Type of transaction and consumer) (Number of consumers)				
9.1 Residential sales				
9.2 Commercial sales				
9.3 Industrial sales				
9.4 Electric utility sales				
9.5 Transported to industrials				
9.6 Transported to electric utilities				
9.7 Transported to commercial consumers				
10.0 Average heat content of gas delivered directly to consumers Btu (Btu per cubic foot)				
11.0 Other disposition (specify) 				
(Continue on Part VI, if more space is needed)				
12.0 Total disposition accounted for				
13.0 Unaccounted for gas supply (+) or disposition (-)				

ANNUAL REPORT OF NATURAL AND SUPPLEMENTAL GAS SUPPLY AND DISPOSITION, 19

1.0 Control No.	2.0 Company Name	3.0 Report State	EIA 	4.0 Resubmittal 	Date:
PART VI: CONTINUATION SHEET (To be used only if insufficient space was provided on Part IV and/or Part V)					Sheet of
Supply (Continued)		Volume (Mcf at 14.73 psig)	e or f	Cost or Revenue (Dollars)	e or f
PART IV, 2.4 On-system purchases received at State line or U.S. border from: (Continued)					
Company 					
State or Country 					
Company 					
State or Country 					
PART IV, 3.2 Transportation, exchange, and/or storage receipts at State line or U.S. border from: (Continued)					
Company 					
State or Country 					
Company 					
State or Country 					
PART IV, 4.0 Transported into report State from: (Continued)					
State or Country 					
State or Country 					
State or Country 					
State or Country 					
PART IV, 7.0 Other sources of supply (specify): (Continued) (Source and/or kind of fuel)					
					
					
					
Disposition (Continued)					
PART V, 6.2 Transportation, exchange, and/or storage deliveries at State line or U.S. border to: (Continued)					
Company 					
State or Country 					
Company 					
State or Country 					
PART V, 7.0 Transported out of report State to: (Continued)					
State or Country 					
State or Country 					
State or Country 					
State or Country 					
PART V, 8.2 Delivered for sale for resale at State line or U.S. border to: (Continued)					
Company 					
State or Country 					
Company 					
State or Country 					
PART V, 11.0 Other Disposition (specify): (Continued)					
					
					
					

Form Approved
OMB No. 1906-0176
Expires: 12/31/90

SHORT FORM

This report is mandatory under the Federal Energy Administration Act of 1974 (Public Law 93-275). Failure to report may result in criminal fines, civil penalties, and other sanctions as provided by law. See Section VI of the instructions for confidentiality statement. Public reporting burden for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Energy Information Administration, Office of Statistical Standards, El-73, Mail Station 1H-023 Forrestal, 1000 Independence Ave SW, Washington DC 20585; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington DC 20503.

Affix mailing label or enter mail address

Control (ID) No. _____

EIA COPY. Tear out, complete, and return to:

Energy Information Administration
Mail Station: BG-094 FORSTL
U.S. Department of Energy
Washington, D.C. 20585
Attn: Form EIA-176

Name: _____
Operations in (State): _____
Street or Post Office Box: _____
City, State, Zip Code: _____
Attention: _____

1.0 Control No.	2.0 Company Name:	3.0 Report State	EIA <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div>	4.0 Resubmittal <div style="border: 1px solid black; width: 20px; height: 20px; margin: 2px;"></div>
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Date: _____

5.0 Company status, name, and/or address change or correction. (Check appropriate box.)

a. ☐ Name and address on mailing label are correct.

b. ☐ Change name, attention line, and/or mail address as indicated below.

c. ☐ Company was sold to, or merged with, company entered below.

d. ☐ Company went out of business. Customer accounts taken over by company entered below.

e. ☐ Other changes, corrections, or comments: _____

5.1 Change mail address to:

a. Company Name: _____

b. Operations in (State): _____

c. Street or Post Office Box: _____

d. City, State, Zip Code: _____

e. Attention: _____

6.0 Contact person:

Name: _____ Telephone Number: _____ Area Code: _____ No. _____ Ext. _____

1.0 I certify that (Check appropriate box):

a. ☐ The information provided herein and appended hereto is true and accurate or, where indicated on the form, reasonable estimates to the best of my knowledge.

b. ☐ My company does not meet any of the criteria set forth in Section II, "Who must submit," of the instructions and is therefore not required to complete and submit a Form EIA-176 for the report State.

c. Does the information supplied on this form contain trade secrets and/or confidential commercial information? ☐ Yes ☐ No

2.0 Name	3.0 Title
4.0 Signature	5.0 Date

Title 18, USC 1001, makes it a crime for any person knowingly and willingly to make to any agency or department of the United States any false, fictitious or fraudulent statements as to any matter within its jurisdiction.

ANNUAL REPORT OF NATURAL AND SUPPLEMENTAL GAS SUPPLY AND DISPOSITION, 19

1.0 Control No.	2.0 Company Name:	3.0 Report State	EIA	4.0 Resubmittal	Date:
			<div style="border: 1px solid black; width: 20px; height: 15px; display: inline-block;"></div>	<div style="border: 1px solid black; width: 20px; height: 15px; display: inline-block;"></div>	

PART III: TYPE OF COMPANY AND GAS ACTIVITIES OPERATED IN THE REPORT STATE

1.0 Type of Company (check one) a. ☐ Investor owned distributor b. ☐ Municipally owned distributor c. ☐ Interstate pipeline d. ☐ Intrastate pipeline e. ☐ Storage operator f. ☐ SNG plant operator g. ☐ Integrated oil and gas h. ☐ Producer i. ☐ Gatherer j. ☐ Processor k. ☐ Other (specify) _____	2.0 Gas Activities Operated On-system Within the Report State (check all that apply) <table style="width: 100%;"><tr><td style="width: 60%;">a. ☐ Produced Natural Gas</td><td style="width: 40%;">m. ☐ Delivered for Resale</td></tr><tr><td>b. ☐ Gathered</td><td>n. ☐ Delivered directly to consumers</td></tr><tr><td>c. ☐ Processed</td><td>o. ☐ Other (specify) _____</td></tr><tr><td>d. ☐ Purchased</td><td></td></tr><tr><td>e. ☐ Transported Interstate</td><td></td></tr><tr><td>f. ☐ Transported Intrastate</td><td></td></tr><tr><td>g. ☐ Stored Underground</td><td></td></tr><tr><td>h. ☐ Stored LNG</td><td></td></tr><tr><td>i. ☐ Injected Propane-air</td><td></td></tr><tr><td>j. ☐ Produced SNG</td><td></td></tr><tr><td>k. ☐ Imported</td><td></td></tr><tr><td>l. ☐ Exported</td><td></td></tr></table>	a. ☐ Produced Natural Gas	m. ☐ Delivered for Resale	b. ☐ Gathered	n. ☐ Delivered directly to consumers	c. ☐ Processed	o. ☐ Other (specify) _____	d. ☐ Purchased		e. ☐ Transported Interstate		f. ☐ Transported Intrastate		g. ☐ Stored Underground		h. ☐ Stored LNG		i. ☐ Injected Propane-air		j. ☐ Produced SNG		k. ☐ Imported		l. ☐ Exported	
a. ☐ Produced Natural Gas	m. ☐ Delivered for Resale																								
b. ☐ Gathered	n. ☐ Delivered directly to consumers																								
c. ☐ Processed	o. ☐ Other (specify) _____																								
d. ☐ Purchased																									
e. ☐ Transported Interstate																									
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i. ☐ Injected Propane-air																									
j. ☐ Produced SNG																									
k. ☐ Imported																									
l. ☐ Exported																									

PART IV: SUPPLY OF NATURAL AND SUPPLEMENTAL GAS RECEIVED WITHIN OR TRANSPORTED INTO REPORT STATE

	Volume (Mcf at 14.73 psia)	e or f	Cost (Dollars)	e or f
2.0 On-system purchases received:				
2.1 From producers, gatherers, and/or gas processors				
2.2 From pipeline, distribution, and/or storage operators				
2.3 From synthetic natural gas plants or SNG pipeline				
7.0 Other sources of supply (specify): (Source and/or kind of fuel)				

(Continue on Part VI, if more space is needed)				
8.0 Total Supply within report State				

PART V: DISPOSITION OF NATURAL AND SUPPLEMENTAL GAS WITHIN OR TRANSPORTED OUT OF REPORT STATE

	Volume (Mcf at 14.73 psia)	e or f	Cost or Revenue (Dollars)	e or f
4.0 Used in pipeline, storage and/or distribution operations				
9.0 Delivered directly to consumers:				
(Type of transaction and consumer)	(Number of consumers)			
9.1 Residential sales				
9.2 Commercial sales				
9.3 Industrial sales				
9.4 Electric utility sales				
10.0 Average heat content of gas delivered directly to consumers (Btu per cubic foot)				
_____ Btu				
11.0 Other disposition (specify)				

(Continue on Part VI, if more space is needed)				
12.0 Total disposition accounted for				
13.0 Unaccounted for gas supply (+) or disposition (-)				

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Page 3

Form EIA-627, "Annual Quantity and Value of Natural Gas Report"

Survey Design

Beginning with 1980, natural gas production data previously obtained on an informal basis from State conservation agencies were collected on Form EIA-627 (Figure D2). 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. 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.

Survey Universe and Response Statistics

Form EIA-627 is mailed to energy or conservation agencies in all 32 natural gas producing States. All producing States participate voluntarily in the EIA-627 survey by filing the completed form or by responding to telephone contacts. For 1989, data on the quantities of nonhydrocarbon gases removed were reported by the appropriate agencies of 22 of the 32 States. These 22 States accounted for 57 percent of total 1989 gross withdrawals. In addition, gross withdrawal data from Kansas, Oklahoma, Louisiana, and Montana, which together accounted for 38 percent of total production, excluded all or most of the nonhydrocarbon gases removed on leases.

Summary of Form EIA-627 Data Reporting Requirements

Form EIA-627 is a multipart form that collects data on the 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; marketed production; the value of marketed production; and the number of producing gas wells.

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

Routine Form EIA-627 Edit Checks

Each filing of Form EIA-627 is manually checked for reasonableness and mathematical accuracy. Information on the forms is compared to totals of monthly data reported to the Interstate Oil Compact Commission (see Appendix B, "Data Sources"). 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-627

Data from Form EIA-627 are also published in the EIA publication, *Natural Gas Annual*.

Interstate Oil Compact Commission Form "Monthly Report of Natural Gas Production"

Survey Design

The Interstate Oil Compact Commission (IOCC) is an organization comprised of 32 gas and oil producing States; the Governor of each State sits on the board of the IOCC. The IOCC form, "Monthly Report of Natural Gas Production," (Figure D3) is a voluntary report filed to the IOCC by most of the producing States. The IOCC forwards copies of these forms to the EIA. The purpose of the form is to standardize, to the extent possible, the reporting of natural gas data by the States.

Survey Universe and Response Statistics

Most of the 32 States report data to the IOCC. Two exceptions are Florida, which submits its own form, and California, whose data are taken from the Conservation Committee of California Oil Producers publication. Reports on State production are forwarded to the EIA by the IOCC approximately 80 days after the end of the report month.

ANNUAL QUANTITY AND VALUE OF NATURAL GAS REPORT

This report is collected under P.L. 93-275, Federal Energy Administration Act of 1974. Your voluntary cooperation and response are urgently needed to provide comprehensive, accurate and timely energy information. Because the data collected on EIA-627 are already aggregated by state, no confidentiality pledges are required.

PART I: IDENTIFICATION DATA	
1. Name of State Reporting	2. Calendar Year Being Reported <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> </div>
3. Name of Office/Agency	
4. Office Address (Street, City, State, Zip Code)	
5. Name of Contact Person	6. Phone Number of Contact Person <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> </div> <div style="margin: 0 5px;">-</div> <div style="border: 1px solid black; width: 40px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> <div style="width: 10px; height: 10px; border: 1px solid black;"></div> </div> </div>
PART II: NATURAL GAS VOLUMES	
7. Enter the pressure base at which all volumes are reported (psia at 60°F)	
8. Gross Withdrawals	
REPORT ALL VOLUMES IN MILLIONS OF CUBIC FEET <i>Gross withdrawals should represent full well stream volumes including all natural gas plant liquids and nonhydrocarbon gases, but excluding lease condensate. Also, include amounts delivered as royalty payments or consumed in field operations. PROVIDE BEST ESTIMATE WHEN GAS IS NOT METERED</i>	
Item (a)	Volume (b)
(1) Are the gross withdrawal quantities available from your records consistent with the definition stated above? (i) ☐ Yes (ii) ☐ No . . . Explain the difference(s) in PART IV	
(2) Enter the volume of natural gas from gas and condensate wells	
(3) Enter the volume of natural gas from oil wells (casinghead)	
(4) Enter the total of 8(2) and 8(3)	
9. Enter quantity of natural gas returned to formation for repressuring, pressure maintenance and cycling	
10. Enter quantity of natural gas vented to air or burned in flares on the lease or at gas processing plants	
11. Enter quantity of nonhydrocarbon gases removed in treating or processing operations	
12. Enter marketed production (Enter the result of line 8(4) less lines 9, 10, and 11)	

ANNUAL QUANTITY AND VALUE OF NATURAL GAS REPORT

PART III: NATURAL GAS VALUES

13. Value of Marketed Production (Wellhead Sales Prices)

NOTE

The value reported on line 14 below should represent wellhead sales prices including charges for natural gas plant liquids subsequently removed from the gas and for gathering and compression, in addition to state production, severance, and/or similar taxes.

Complete the table below only if your method of reporting is inconsistent with the above note. For each item in column (a) of the table, enter an "X" in column (b) or (c) to indicate whether the item is included or excluded from the amount reported on line 14.

Line No.	Item (a)	Included (b)	Excluded (c)
(1)	Natural gas plant liquids		
(2)	Lease condensate		
(3)	Gathering and compression charges		
(4)	State production, severance, and/or similar taxes		

14. Enter the available value of marketed production

REPORT IN THOUSANDS OF DOLLARS

\$

15. Enter the quantity of marketed production associated with the value entered in 14.

REPORT IN MILLIONS OF CUBIC FEET

16. Enter the total number of producing gas wells in operation as of December 31 for the reporting year.

PART IV: COMMENTS

17. Enter any additional comments you may have, including identification and explanation of any data elements submitted based on definitions differing from those applications to data which you provided for the previous year. If more space is needed, please attach separate sheet(s) and put "sheet ____ of ____" in the upper right corner of those sheets.

INTERSTATE OIL COMPACT COMMISSION

HEADQUARTERS OFFICE: 901 N. E. 23RD STREET

P. O. BOX 53127

OKLAHOMA CITY, OKLAHOMA 73152

TELEPHONE: (405) 525-3556

Address Reply to Headquarters Office

Monthly Report of Natural Gas Production for the State of _____

Month of _____

Please return two copies of this report as soon as the figures are available after the close of the month for which data are reported. Reports should be addressed to the Interstate Oil Compact Commission, Box 53127, Oklahoma City, OK 73152.

Name of Reporting Agency _____

Address _____

Correspondent & Title _____

Please adjust all volumes to the same pressure base:

Report pressure base used (_____ lbs. absolute at 60° F.)

(Millions of Cubic Feet)

1. Gross gas production* _____
 - (a) Natural gas from gas and condensate wells _____
 - (b) Natural gas from oil wells (casinghead) _____

* Include amounts delivered as royalty payments or consumed in field operations. Please provide best estimates when gas is not metered.

2. Quantity of natural gas returned to formation for repressuring, pressure maintenance and cycling. _____

3. Quantity of natural gas vented to air or burned in flares on the lease or at gas processing plants. _____

MEMBER STATES: ALABAMA • ALASKA • ARIZONA • ARKANSAS • CALIFORNIA • COLORADO • FLORIDA • ILLINOIS • INDIANA • KANSAS • KENTUCKY
LOUISIANA • MARYLAND • MICHIGAN • MISSISSIPPI • MONTANA • NEBRASKA • NEVADA • NEW MEXICO • NEW YORK • NORTH DAKOTA • OHIO
OKLAHOMA • PENNSYLVANIA • SOUTH DAKOTA • TENNESSEE • TEXAS • UTAH • WEST VIRGINIA • WYOMING
ASSOCIATES: GEORGIA • IDAHO • NORTH CAROLINA • OREGON • SOUTH CAROLINA • WASHINGTON

Summary of Data Requirements

The IOCC form consists of three questions on one page, and requires volumetric information on gross production, quantities of gas vented or flared, and gas used for repressuring.

Routine Edit Checks

State data are checked for reasonableness and, in the event of problems, the appropriate State agency is called.

FERC-8/EIA-191 Surveys, "Underground Natural Gas Storage Report"

Survey Design

This survey was 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.

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 have not been merged because of FERC's stated desire to maintain the separate identity of the FERC-8 for administrative reasons.

Survey Universe and Response Statistics

Currently, 91 companies operate underground storage facilities. Of these companies, 40 are subject to the jurisdiction of FERC and are required to report data on Form FERC-8. The other 51 companies are required to file the essentially identical Form EIA-191. Both forms are filed with EIA and the data are merged in a unified data processing system.

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 FERC-8/EIA-191 Data Reporting Requirements

The virtually identical Forms FERC-8 and EIA-191 are multipart forms that report the quantities of gas in storage, injections and withdrawals, and the location (including State and county), and capacity of underground storage reservoirs. Information on co-owners of storage reservoirs is also required.

Collection of the survey is on a custody basis, although some respondent ownership data are required. Information requested must be provided within 10 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. In the case of most estimated filings, the necessary revisions are reflected in subsequent scheduled filings or in a revised submission that provides actual data filed, although there is no specific requirement that the respondent do either. 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 Forms FERC-8/EIA-191 Edit Checks

Data received on Form FERC-8 are merged with data received on Form EIA-191 in a unified data processing system. The survey's five principal data elements (total, base, and working gas in storage, injections, and withdrawals) are hand tabulated to provide preliminary totals.

Individual company reports are manually checked for reasonableness by comparing current reports with prior responses. Mathematical calculations are manually checked for accuracy and all data are checked for internal consistency. Respondents are required to refile reports containing any inconsistencies or errors.

Other EIA Publications Referencing Forms FERC-8/EIA-191

The EIA publication *Monthly Energy Review* contains data from the FERC-8/EIA-191 survey.

Form EIA-191

U.S. DEPARTMENT OF ENERGY
ENERGY INFORMATION ADMINISTRATION
Washington, D.C. 20585

Form Approved
OMB No. 19050175
Expires: 12/31/90

UNDERGROUND GAS STORAGE REPORT

This report is mandatory under Public Law 93-275. Failure to report may result in criminal fines, civil penalties, or other sanctions as provided by law. See Part F of the General Instructions for information concerning confidentiality.

I. RESPONDENT IDENTIFICATION DATA

(1)	a. IRS EIN Number	b. DOE Code	c. Report Period Ending Date	d. Check if this is a revision to report previously submitted for the report period indicated.	e. Check box if respondent identification has changed. If name has changed, enter previous name:
			Mo Da Yr		
(2)	Respondent's Name		Street Address		City, State and Zip Code
(3)	Person to contact if questions arise concerning this report:		Title	City and State	Tel. No. (Include Area Code and Extension)

II. GAS STORAGE DATA

Line No.	BALANCES (All volumes in Mcf - 14.73 psia - 60°F)					INJECTIONS & WITHDRAWALS		
	Base Gas (a)	Working Gas (b)	Total Gas in Storage (c)	Natural Gas Included in Column (a) (d)	Time Period	Injections (e)	Withdrawals (f)	
	A. Respondent's Gas In Reservoirs Operated By Respondent					☐ Estimated ☐ Actual		
4	Balance Nov. 1				Nov. 1 To Date			
5	Report Period				Report Period			
	B. Gas Belonging To Others In Reservoirs Operated By Respondent							
6	Balance Nov. 1				Nov. 1 To Date			
7	Report Period				Report Period			
	C. Total Gas (Sum Of A And B)							
8	Balance Nov. 1				Nov. 1 To Date			
9	Report Period				Report Period			
	D. Respondent's Gas In Reservoirs Operated By Others							
10	Balance Nov. 1				Nov. 1 To Date			
11	Report Period				Report Period			
	E. Reservoirs In Development Stage Included In A And B Above							
12	Balance Nov. 1				Nov. 1 To Date			
13	Report Period				Report Period			

III. CERTIFICATION

I certify that the information submitted on this form is the most accurate available at this time to the best of my knowledge			
Name (Type or Print)	Title	Signature	Date
Title 18 USC 1001 makes it a crime for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious or fraudulent statements as to any matter within its jurisdiction.			

Form FERC-11, "Natural Gas Pipeline Company Monthly Statement"

Survey Design

The collection of monthly data from major pipeline companies was begun in December 1964 by the Federal Power Commission (FPC). On October 1, 1977, FPC ceased to exist, and its functions and regulatory responsibilities were transferred to the Secretary of Energy and to the Federal Energy Regulatory Commission (FERC), an independent commission within the Department of Energy.

Information collected on Form FERC-11 (Figure D5) is used by FERC in carrying out its regulatory authority. Form FERC-11 is a monthly regulatory reporting form rather than one filed for statistical purposes.

Survey Universe and Response Statistics

Form FERC-11 is filed by major interstate natural gas pipeline companies whose combined sales for resale and gas transported interstate or stored for a fee exceeded 50 billion cubic feet in the previous calendar year. Approximately 40 pipeline companies report data on Form FERC-11. Natural gas pipeline companies are monitored annually to determine whether each has met the requirements for classification as a major pipeline.

Information is collected monthly by mail. Historically, the response rate has been 100 percent.

Summary of Form FERC-11 Data Requirements

Form FERC-11 requires information on revenues, expenses, and sales data, as well as volumetric data on purchases and production.

Submission of Form FERC-11 is required no later than 40 days after the close of the report month. The form requires reporting of both preliminary data for the report month and final data for the same month in the previous year. All data are reported on an equity basis.

Routine Form FERC-11 Edit Checks

Data are collected on standard forms that initially are manually reviewed and coded. Reviews are made to ensure consistency in reporting within and among utilities in the presentation of current and 12-month financial and sales data. Also, receipts and disposition of gas are analyzed between domestic and foreign producers. Data are later sent for keying, which begins the automated processing. Data are keyed to tape or disk for data editing. Edit reports are produced and are reviewed manually.

Other EIA Publications Referencing Form FERC-11

The Energy Information Administration publication *Monthly Energy Review* contains data from Form FERC-11.

FERC-121, "Application for Determination of the Maximum Lawful Price Under the Natural Gas Policy Act"

Survey Design

Form FERC-121 (Figure D6) was designed by the Federal Energy Regulatory Commission (FERC) to carry out its authority to regulate natural gas prices under the Natural Gas Policy Act. Form FERC-121 is initially filed with the agency having jurisdiction over the lease on the land where the well is drilled, for example, State agencies or the Department of Interior. The agencies determine whether or not to grant the application. The application, support documentation, and decision are forwarded to FERC, which has 45 days to review the decision.

Survey Universe and Response Statistics

Form FERC-121 must be filed by any natural gas producer who is the first seller of gas that qualifies for an incentive price. At the end of February 1988, FERC had 408,363 applications from 12,000 producers on file. Of the total applications, approximately 20 percent are reapplications requesting new price determinations on wells that have been producing under a previous application.

(Expires 6-30-90)

FERC FORM NO. 11: NATURAL GAS PIPELINE COMPANY MONTHLY STATEMENT

This report is mandatory under the authority granted by Sections 10 and 16 and sanctions provided by Section 21(b) of the Natural Gas Act. Failure to report may result in criminal fines, civil penalties and other sanctions as provided by law.

Company Code Number

Month Being Reported
19 ____

PART I: IDENTIFICATION

1. Name of Company

2. Address of Company

(1) Number and Street

(2) City

(3) State

(4) Zip Code

3. Person Authorized To Sign This Report

(1) Signature

(2) Phone Number (Include area code)

PART II: REVENUE DATA

Line No. (a)	Item (b)	Revenues (In thousands of dollars)		Sales (In millions of cubic feet)		Foot-note (g)
		Current Year (c)	Previous Year (d)	Current Year (e)	Previous Year (f)	
4	Sales of Natural Gas					
5	Firm Industrial					
6	Off-peak Industrial					
7	Interruptible Industrial					
8	TOTAL INDUSTRIAL (Enter total of lines 5, 6 and 7)					
9	Other Ultimate Consumers					
10	TOTAL SALES TO ULTIMATE CONSUMERS (Enter total of lines 8 and 9)					
	Sales For Resale (483)					
11	Total Major Gas Pipelines					
12	Total to All Other Pipelines and Gas Utilities					
13	TOTAL SALES FOR RESALE (Enter total of lines 11 and 12)					
14	TOTAL SALES OF NATURAL GAS (Enter total of lines 10 and 13)					
15	Intracompany Transfers (485)					
16	Revenues From Transportation of Gas of Others (489)			(Enter volume of gas transported:)		
17	Provision for Rate Refunds (496)					

Company Code Number		Month and Year Being Reported		
PART III: INCOME DATA				
Line No. (a)	Item (b)	Current Year (In thousands of dollars) (c)	Previous Year (In thousands of dollars) (d)	Foot-note (e)
18	Gas Operating Revenues (400)			
19	Operation and Maintenance Expense (401, 402)			
20	Depreciation, Depletion and Amortization Expense (403-407)			
21	Taxes Other Than Income Taxes, Utility Operating Income (408.1)			
22	Total Gas Operating Expenses (401, 402, 403-407, 408.1, 409.1, 410.1, 411.1, 411.4)			
23	Net Gas Operating Revenues (Enter the result of lines 18 minus 22) (Including Plant Leased to Others)			
24	Total Gas Utility Operating Income (Refer to specific instruction for line 24.)			
25	Allowance For All Funds Used During Construction - Credit (419.1, 432)			
26	Total Income Before Interest Charges (427-432) and Extraordinary Items (409.3, 434, 435)			
27	Net Income (433) Before Extraordinary Items (434, 435), Income Taxes (409.1, 409.2, 409.3, 410.1, 410.2, 411.1, 411.2), and Investment Tax Credits (411.4, 411.5, 420)			
28	Net Income (Monthly Amount Related to 433.)			
PART IV: OTHER SELECTED DATA				
Line No. (a)	Item (b)	Current Year (In thousands of dollars) (c)	Previous Year (In thousands of dollars) (d)	Foot-note (e)
29	Gas Utility Plant in Service (101)			
30	Accumulated Provision For Depreciation, Depletion, and Amortization of Gas Utility Plant (108, 111)			
31	Gas Plant Construction Work In Progress (107)			
32	Gross Additions To Construction Work In Progress (107) For This Month Being Reported			
33	Amount Collected Which Is Subject To Refund During This Month Being Reported			
34	Cumulative Amount Collected Since January 1 This Year Subject To Refund, At End Of This Month Being Reported			
35	Monthly Amount Subject To Refund Actually Refunded During This Month Being Reported			
36	Cumulative Amount Subject To Refund Refunded Since January 1 This Year, To The End Of This Month Being Reported			

Company Code Number		Month and Year Being Reported				
PART V: OPERATION AND MAINTENANCE EXPENSE DATA						
Line No. (a)	Item (b)	Amount (In thousands of dollars)		Gas Volume (In millions of cubic feet)		Foot-note (g)
		Current Year (c)	Previous Year (d)	Current Year (e)	Previous Year (f)	
37	Manufactured Gas Production					
38	Liquefied Petroleum Gas					
39	Other Manufactured Gas					
40	TOTAL (Enter total of lines 38 and 39)					
41	Natural Gas Production					
42	Production and Gathering (750-769)					
43	Products Extraction (770-791)			(Enter thousands of gallons) 7		
44	Exploration and Development (795-798)					
	Purchased Natural Gas From					
45	Producers (800, 801-803)					
46	Intracompany Transfers (800 1)					
47	Imports					
48	Major Gas Pipelines (800, 801-803)					
49	Other Pipelines (800, 801-803)					
50	Other Gas Purchases (804, 805, 805.1 minus line 68-71)					
51	TOTAL (Enter total of lines 45 to 50)					
52	Natural Gas Produced					
53	Exchange Gas - In (806)					
54	Exchange Gas - Out (806)					
55	Purchased Gas Expenses (807.1-807.5)					
56	Gas Withdrawn From Underground Storage - Debit (808.1, 809.1)					
57	Gas Delivered To Underground Storage - Credit (808.2, 809.2)					
58	Gas Used For Compressor Station Fuel - Credit (810)					
59	Gas Used For Products Extraction - Credit (811)					
60	Gas Used For Other Utility Operations - Credit (812)					
61	Other Gas Supply Expenses (813)					
62	TOTAL GAS PRODUCTION (Enter total of lines 40, 42, 43, 44, 51, 53 to 61)					
63	Storage Expenses (814-843.9)					
64	LNG Terminating and Processing Expenses (844.1-847.8)					
65	Transmission Expenses (850-867)					
66	Distribution Expenses (870-894)					
67	Other Gas Purchased and Produced (Entries here should not be included under any other item in this part)					
68	Liquefied Natural Gas (804.1)					
69	Gasified Coal					
70	Synthetic Gas (Reformed (gasified) liquid hydrocarbons)					
71	TOTAL (Enter total of lines 68 to 70)					
72	All Other Operating and Maintenance Expenses (901-905, 907-916, 920-931, 935)					
73	TOTAL OPERATING AND MAINTENANCE EXPENSES (Enter total of lines 62, 63, 64, 65, 66, 71, 72)					

Summary of Form FERC-121 Data Reporting Requirements

Form FERC-121 requires information on the location and API number of the well, the name and address of the applicant, the type of determination being sought, the estimated annual production, and the contract price.

In addition to Form FERC-121, each application must be submitted with support documentation; for example, a well completion report for Section 103 filings, and geological information on surrounding wells for Section 102 applications.

Routine Form FERC-121 Edit Checks

Upon receipt at FERC, forms are checked manually for completeness. In addition, a computerized edit program flags incomplete or incorrect data.

Purchased Gas Adjustment Filings

The purpose of the PGA is to allow interstate natural gas pipeline companies to recover changes in their purchase prices for natural gas above the cost of service reflected in their current tariff filings. To allow recovery in a timely manner, the key data reported in the PGA are projections of purchases in the immediate future. In most cases, companies report both the NGPA Section number covering each contracted purchase and the date of the contract. These data make the PGA filings a unique source of information about the current state of the natural gas market.

Description of Data

Fifty-eight interstate pipeline companies submit PGA filings. Pipeline companies that transport only intra-state supplies of natural gas do not submit filings, nor do companies that have no purchased gas adjustment clauses in their tariffs.

Prior to July 1, 1984, filings for 20 of the largest interstate pipeline companies were included in Table 5. Together, they accounted for between 86 and 88 percent of all interstate wellhead purchases reported on Form FERC-2 for each year between 1976 and 1982. These

companies were also the subject of an informal 1979 FERC study of NGPA prices.

The portion of the PGA filing used was generally referred to as the supporting cost-study. This study was not filed in a specific format or for specified time periods. As a result, the level of detail included varied from company to company, as did the exact time period covered. In most cases, however, companies filed price and volume data for their purchase contracts, along with the following:

- Contract date
- NGPA category
- Geographic source
- FERC account category.

For the 20 pipeline companies, the timing of PGA submissions varied in two ways:

- Seventeen companies reported data semi-annually, while three reported annually.
- The dates on which the filings became effective and the periods covered by the filings varied.

Because of the lack of a specified form for PGA filings, each submission was processed separately. Major adjustments required to transform the various submissions into a single data base are described in the section on data transformations.

Effective July 1, 1984, Form 542-PGA required that certain purchased gas cost information that is common to all PGA filings be set forth in a standardized format. Filings received after July 1, 1984, are now being included in Table 5 as they are computerized and become available. Eventually all pipeline companies that file the Form 542-PGA will be included in the table. It is expected that there will be approximately 54 companies included.

All PGA filings included projected purchases for a defined future period. Projected volumes and prices represent the company's best estimate of natural gas purchase volumes and costs during the subsequent effective tariff period. The figures are usually derived from those of similar past periods. Some PGA filings also include "actual" volumes and prices for some past period. The two sets of figures cannot, in general, be used to check each other because the actual figures can cover periods other than past projections. To the extent that the two sets of figures can be compared, they appear to approximate but not to match each other.

Form FERC-121

U.S. DEPARTMENT OF ENERGY
Federal Energy Regulatory Commission
Washington, D.C. 20426

Form Approved
OMB No. 19050175
Expires: 12/31/90

APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL
PRICE UNDER THE NATURAL GAS POLICY ACT (NGPA)
(Sections 102, 103, 107 and 108)

GENERAL INSTRUCTIONS

Complete this form if you are applying for price classification under sections 102, 103, 107 or 108 of the NGPA.

Complete each appropriate item on the reverse side of this page. The code numbers used in items 4 and 6 can be obtained from the Buyer/Seller Code Book. If there is more than one purchaser or contract, identify the additional information in the space below. Also enter any additional remarks in the space below. The data reported on this form are not considered to be confidential and will not be treated as such.

Submit the completed application to the appropriate Jurisdictional Agency as listed in title 18 of the CFR, part 274.501. If there are any questions, call (202) 357-8585.

SPECIFIC INSTRUCTIONS

Use the codes in the table below for type of determination in item 2.

Section of NGPA (a)	Category Code (b)	Description (c)
102	1	New OCS lease
102	2	New onshore well (2.5 mile test)
102	3	New onshore well (1000 feet deeper test)
102	4	New onshore reservoir
102	5	New reservoir on old OCS lease
103	-	New onshore production well
107	0	Deep (more than 15,000 feet) high-cost gas*
107	1	Gas produced from geopressured brine
107	2	Gas produced from coal seams
107	3	Gas produced from Devonian shale
107	5	Production enhancement gas
107	6	New tight formation gas
107	7	Recompletion tight formation gas
108	0	Stripper well
108	1	Stripper well - seasonally affected
108	2	Stripper well - enhanced recovery
108	3	Stripper well - temporary pressure buildup
108	4	Stripper well - protest procedure

Enter the appropriate information regarding other Purchasers/Contracts.

Line No.	Contract Date (Mo, Da, Yr) (a)	Purchaser (b)	Buyer Code (c)
1			
2			
3			
4			
5			
6			

Remarks:

FERC-121 (8-82)

APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL PRICE UNDER THE NATURAL GAS POLICY ACT (NGPA)

1.0 API well number. (If not assigned, leave blank. 14 digits.)	_____				
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	<div style="display: flex; justify-content: space-around;"> _____ _____ </div> <div style="display: flex; justify-content: space-around; font-size: small;"> Section of NGPA Category Code </div>				
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	_____ feet				
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	<div style="display: flex; justify-content: space-between;"> <div style="width: 80%;"> Name _____ Street _____ City _____ State _____ Zip Code _____ </div> <div style="width: 15%; text-align: right;"> Seller Code _____ </div> </div>				
5.0 Location of this well: (Complete (a) or (b).) (a) For onshore wells (35 letters maximum for field name.)	Field Name _____ County _____ State _____				
(b) For OCS wells	<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;">Area Name _____</div> <div style="width: 20%;">Block Number _____</div> </div> <div style="text-align: center; margin-top: 10px;"> Date of Lease: <div style="display: flex; justify-content: center; gap: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px;"></div> <div style="border: 1px solid black; width: 20px; height: 15px;"></div> <div style="border: 1px solid black; width: 20px; height: 15px;"></div> <div style="border: 1px solid black; width: 20px; height: 15px;"></div> <div style="border: 1px solid black; width: 20px; height: 15px;"></div> <div style="border: 1px solid black; width: 20px; height: 15px;"></div> </div> <div style="display: flex; justify-content: center; gap: 10px; font-size: x-small;"> Mo. Day Yr. OCS Lease Number </div> </div>				
(c) Name and identification number of this well: (35 letters and digits maximum.)	_____				
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	_____				
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.)	<div style="display: flex; justify-content: space-between;"> <div style="width: 80%;">Name _____</div> <div style="width: 15%; text-align: right;">Buyer Code _____</div> </div>				
(b) Date of the contract:	<div style="display: flex; justify-content: center; gap: 5px;"> <div style="border: 1px solid black; width: 20px; height: 15px;"></div> <div style="border: 1px solid black; width: 20px; height: 15px;"></div> <div style="border: 1px solid black; width: 20px; height: 15px;"></div> <div style="border: 1px solid black; width: 20px; height: 15px;"></div> <div style="border: 1px solid black; width: 20px; height: 15px;"></div> <div style="border: 1px solid black; width: 20px; height: 15px;"></div> </div> <div style="display: flex; justify-content: center; gap: 10px; font-size: x-small;"> Mo. Day Yr. </div>				
(c) Estimated total annual production from the well:	_____ Million Cubic Feet				
		(a) Base Price	(b) Tax	(c) All Other Prices (Indicate (+) or (-).)	(d) Total of (a), (b) and (c)
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	S/MMBTU	_____	_____	_____	_____
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	S/MMBTU	_____	_____	_____	_____
9.0 Person responsible for this application:	<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> Name _____ Signature _____ Date Application is Completed _____ </div> <div style="width: 35%;"> Title _____ Phone Number _____ </div> </div>				

Agency Use Only

Date Received by Juris. Agency

Date Received by FERC

FERC-121 (8-82)

Only projected figures for volumes and costs have been used. They are considered more generally useful and accurate than the reports of actual production for the following reasons:

- Companies file actual reports largely as a convenience to themselves. The data are not generally subjected to the same scrutiny as projections. Moreover, pipeline companies have considerable latitude as to which time they use in reporting actual figures.
- The costs reported as actual costs are costs derived from previous projections.
- Not all companies filed actual totals.
- As a general rule, neither projected nor actual volumes are audited. In the absence of such an audit, it is thought that actual volumes may be as subject to error as the projections.

It appears that PGA data have become increasingly accurate and complete with each submission. The number of cases requiring imputation for missing data (for example, NGPA Section number) has been reduced, as has the incidence of obviously incorrect data. Moreover, company submissions have become increasingly consistent with each other.

Purchased volumes and prices were checked against control totals taken from the hard copy of the submission on file with the FERC. The data comprising inconsistent totals were compared directly with the filing. Discrepancies were forwarded to the FERC for consideration. Errors discovered in this way were corrected, and the process was repeated until agreement was reached.

PGA data (through mid-1982) were also compared with data from Form FERC-2 to ensure that the totals derived from the two sources were compatible. The two filings cannot be compared directly because the PGA is not usually filed for calendar years.

The results of this comparison suggest that PGA filings approximate the best currently available source for aggregate information, but do not match it very closely. Volumes can differ by as much as 20 percent (though many are very close). There is no consistent pattern of volume differences. In the case of prices, there appears to be two patterns: either the two reports agree quite closely, or else the PGA projects prices 10 to 20 percent lower than those reported on Form FERC-2. The reason for such consistent discrepancy is at present unknown. In general, differences between PGA filings and Form 2 information may be due to a variety of causes, including:

- PGA filings are projections that may not always reflect future behavior accurately.
- Companies may use different methods to obtain PGA projections.

- There may be systematic differences in reporting practices between the two reports for some or all companies.

The PGA filings contain a rough indication of the error due to using projections in the form of the surcharge adjustment. The surcharge adjustment is used to recover purchase costs beyond those expected or to repay costs below those expected. The surcharge adjustment cannot be applied directly to PGA filings because:

- It contains only a summary figure for all differences from projected levels. This includes costs of pipeline purchases and imports.
- No volumes are directly reported. A cost per thousand cubic feet figure is reported but is based on projected future purchases only.
- It covers time periods different from previous projections. Normally, the surcharge adjustment covers a period from 9 to 3 months prior to the beginning of a new projection period.

The PGA filings remain the only source of information for analyzing gas categories, however, and the data problems do not appear to be crippling for purposes of drawing general conclusions.

No further validation of the PGA data has been performed because of the difficulties involved in such a process. There are some procedural issues that may affect the accuracy of filings, however. PGA filings are not intended to serve as data collection instruments per se but as a regulatory system for natural gas. Questions concerning the data are usually aired during FERC rate hearings, where the primary concern is resolution of legal issues. No attempt is made to revise PGA submissions to reflect the results of such questioning. In addition, most PGA filings are protested and the resulting tariffs are suspended for a time. In cases of successful protests, a new PGA must be filed. The precise status of data on a given current submission becomes difficult to judge.

Interpretation of Data. The projected purchase cost for each contract volume represents the pipeline company's estimates of the purchase costs it will incur during the coverage period of the filing. These costs include:

- The average price to be paid to the producer
- Gathering charges
- Transportation charges
- Taxes.

Royalty payments and payments for gas not received under take-or-pay clauses are among the costs not included.

Projected volumes reported in the PGA filings are generally based on actual volumes for a similar

preceding period (though they are typically adjusted to fit current market conditions). A number of projected gas purchases reported in the PGA filings have not been considered because they would have resulted in significant double counting. They are:

- Purchases from other pipelines
- Imports
- Exchange gas.

In addition, cost-of-service gas (a company's own production from specific leaseholds of pre-NGPA gas) is not considered because it is not covered by the NGPA and because most companies do not include it in their PGA filings.

The table included in this publication is therefore designed to cover a specific part of the overall national gas market: wellhead purchases that are both subject to the NGPA and dedicated to the interstate market.

Imputation of NPGA Category Data. NGPA categories were not included in part or all of some early PGA filings. To make filings comparable, each contract that did not have a reported NGPA section was assigned one based on cost. The same procedure was used for reported NGPA sections when the prices were obviously inappropriate. Less than 10 percent of the volume was subjected to this procedure in any given month. Since the inception of the Form 542-PGA, NGPA categories are included in all PGA filings.

Miscellaneous Adjustments. Slight reporting discrepancies among the companies required further minor adjustments to the data base. The adjustments are as follows:

- All volumetric projections have been converted to monthly rates.
- In their PGA filing, many companies, in whole or in part, reported their gas volumes at a pressure base other than 14.73 psia. Volumes provided at the other pressure bases (14.65 and 15.025) were adjusted to the 14.73 psia level. The factors used in the adjustment were:
 - Volume (at 14.65) $\times$ 0.9946 = Volume (at 14.73)
 - Volume (at 15.025) $\times$ 1.02 = Volume (at 14.73).
- Volumetric data are presented in cubic feet, although several companies reported in therms for their hardcopy filings. Volumes in cubic feet are available on tape.
- All prices are reported in cents (or dollars and cents) per thousand cubic feet.

In filings received since July 1, 1984, all companies are reporting volumes in million Btu making pressure base adjustments to volumes unnecessary.

Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas"

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). Since 1979, the Energy Information Administration (EIA) has had the responsibility for collecting Form FPC-14.

Survey Universe and Response Statistics

The Form FPC-14 is filed annually by each organization or individual having authorization to import and export natural gas regardless of whether any imports or exports took place during the reporting year. The authorization to import and export was originally granted by the FPC. In 1977, it was transferred to the Economic Regulatory Commission (ERA) and it now resides with the Office of Fuels Programs in the Office of Fossil Energy. In 1989, 205 companies met the reporting criteria, only 76 reported import or export of natural gas.

The respondent list for the Form FPC-14 is updated at the beginning of each year. All new respondents with authorization to import or export natural gas are added to the list and respondents whose licenses have expired are deleted. Five copies of Form FPC-14 are mailed in February to all companies authorized to import or export natural gas. The completed original and three copies are to be filed with the EIA on or before March 31 of each year, for the preceding calendar year. Companies that have not filed by March 31 are contacted.

Routine Form FPC-14 Edit Checks

Respondents are required to certify the accuracy of all data reported. The survey forms are checked at the EIA for reasonableness and accuracy. If errors are found the companies are required to file corrected data. The data are processed at the EIA and published as reported. 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 prices are in U.S. dollars and import/export prices are those paid at the U.S. border (except exports of LNG are those prices paid at the point of sale and delivery in Yokohama, Japan).

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

This report is prepared quarterly by the Office of Fuels Programs in the Office of Fossil Energy based on information submitted by all firms having authorization to import or export natural gas. All data on this report is considered preliminary until the annual data on the Form FPC-1 is final, usually in September of the following year.

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.

Survey Universe and Response Statistics

A sample of 408 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. 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 90 percent, and responses received after follow-up, 100 percent.

The Form EIA-857 is a monthly sample survey of natural gas marketers, including interstate pipelines, intrastate pipelines, and local distribution companies. 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.

Form EIA-857
U.S. Department of Energy
Energy Information Administration

Form Approved
OMB No. 19050175
Expires: 12/31/90

MONTHLY REPORT OF NATURAL GAS PURCHASES AND DELIVERIES TO CONSUMERS

This report is mandatory under the Federal Energy Administration Act of 1974 (Public Law 93-275). Failure to report may result in criminal fines, civil penalties, and other sanctions as provided by law. See section VI of the instructions for the confidentiality statement. Public reporting burden for this collection of information is estimated to average 4 hours per response, including time of reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden or any other aspect of this collection of information, including suggestions for reducing this burden, to the Energy Information Administration, Office of Statistical Standards EI-73, Mail Station: 114-023 Forrestal, 1000 Independence Ave. SW, Washington, DC 20585; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

Affix Identification Label or Enter:

01 Control No.: _____

02 Company Name: _____

State of Operation: _____

Return completed forms to:

Energy Information Administration
Mail Station: BG-094
U.S. Department of Energy
Washington, D.C. 20585
Attn: Form EIA-857

SECTION I — Natural Gas Purchases and Deliveries to Consumers

		Report Period Mo.	Yr.	Revised Report Indicator
		03		04
		Volume (Mcf at 14.73 psia)		Cost or Revenue (Dollars)
Purchased Gas Received in Distribution Service Area	05			
Delivered to Residential Consumers (Onsystem Sales)	06			
Delivered to Commercial Consumers (Onsystem Sales)	07			
Delivered to Industrial Consumers (Onsystem Sales)	08			
Transported to Commercial Consumers	09			
Transported to Industrial Consumers	10			
Average Btu Content of Gas Delivered to Consumers				(Btu/cu. ft.)
				11

SECTION II — FOOTNOTES

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SECTION III — CONTACT PERSON AND CERTIFICATION

Contact Person:	(Area Code---Number---Extension)
12 Name:	13 Telephone:
Certification: I certify that the information provided hereon is true and accurate or, where indicated on the form, reasonable estimates to the best of my knowledge.	
Name:	Title:
14	15
Signature:	Date:

EIA-857
(Revised 1988)

ANNUAL REPORT FOR
IMPORTERS AND EXPORTERS OF NATURAL GAS

Form Approved 1902-0027
OMB Number
Expiration Date 03/31/89

GENERAL INSTRUCTIONS

1. The completed original and 3 conformed copies of this report shall be filed with the Federal Energy Regulatory Commission, Washington, D.C. 20426 on or before March 31, of each year, for the preceding calendar year.
2. The report will be filed by each person having authorization to import or export natural gas.
3. Use a separate schedule for each authorization. If one authorization involves more than one import or export point, a separate schedule must be filed for each point.
4. All volumes reported in Mcf will be at 14.73 Psia and 60°F.
5. Where transactions are based primarily on volumetric measurement, weighted average Btu data should be used to estimate total monthly Btu's.
6. Amounts paid or received and cost or receipts shall be reported in U.S. Dollars.
7. DEFINITIONS: — Transporter—the party or parties, other than buyer or seller, owning the facilities by which gas or LNG is physically transferred between buyer and seller; Costs—all expenses incurred by importer up to the U.S. point of delivery for the reported quantity imported; Receipts—all revenues received by exporter for the reported quantity exported.

Name of Respondent	Address of Respondent	Year Ending December 31, _____
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SCHEDULE I — GASEOUS PHASE NATURAL GAS

NOTE: If authorization granted is increased, decreased, or extended under a succession of docket numbers and all related gas moved through the same border facilities and authorized expansions thereof, moved to or from the same purchaser or supplier, and was subject to the same rate, such transaction shall be combined for reporting purposes and appropriate Docket Numbers shown.

Report for (Check one) ☐ Import ☐ Export	Foreign Seller or Foreign Buyer
---	---------------------------------

U.S. Entry or Exit Point	Transporter	Docket Number(s)
--------------------------	-------------	------------------

Line No.	Month (a)	QUANTITY RECEIVED OR SHIPPED AT THE ENTRY OR EXIT POINT				Amount Paid or Received at Entry or Exit Point (f)
		Peak Day		Mcf (d)	MMBtu (e)	
		Date (b)	Mcf (c)			
1	January					
2	February					
3	March					
4	April					
5	May					
6	June					
7	July					
8	August					
9	September					
10	October					
11	November					
12	December					
13	TOTAL					
ANNUAL WEIGHTED AVERAGE IN Btu's PER CUBIC FOOT (Line 13; (Column (e) ÷ (Column (d) X 1000)))				ANNUAL WEIGHTED AVERAGE PRICE IN CENTS PER MMBtu (Line 13; Column (f) ÷ Column (e) X 100)		

FPC-14 (8-82)

Appendix C

Statistical Considerations

Statistical Considerations

The monthly sales (volume and price) and monthly deliveries (volume) of natural gas by State presented in this report 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 natural gas marketers including interstate pipeline companies, intrastate pipeline companies, producers, and local distribution companies. It provides data that are used to estimate monthly onsystem sales of natural gas (volume and price) by State and monthly deliveries of natural gas (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 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 1,746 companies. These companies were respondents to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," for reporting year 1988. (See Appendix B for a description of the Form EIA-176.)

Sampling Plan. The goal was a sample that would provide estimates of monthly natural gas consumption by the three consuming sectors within each State and the District of Columbia. A stratified sample using a single stage and systematic selection with probability proportional to size was designed. The measure of size was the volume of gas sales and deliveries by the company during 1988. 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 408 companies.

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 sales, 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 were determined. Companies with gas sales/deliveries to the industrial sector or to the combined residential/commercial sector above a certain level were selected with certainty. This procedure ensured that large companies would be included since a few large companies often account for most of the volume of gas sales within a State. 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 gas sales/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 gas sales/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 (I) for selecting the companies systematically was calculated ($I = \frac{X_2}{m}$). A uniform random number R was selected between zero and I . The first sampled company was the first company on the list to have a cumulative measure of size greater than R . The second company selected was the first company on the list to have a cumulative measure of size greater than $R + I$. $R + I$ was increased again by I to determine the third company to be selected. This procedure was repeated until the entire sample was drawn.

Subgroups. In 12 States, the noncertainty stratum was divided into subgroups to ensure that gas in each consumer sector could be estimated. The systematic sampling 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:

West Virginia: companies handling only residential/commercial gas and all other companies.

California, Louisiana, and Mississippi: companies handling only industrial gas and all other companies.

Alabama, Illinois, Kentucky, and Ohio: companies handling any industrial gas and all other companies.

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

Arkansas: companies handling 0.5 million cubic feet or more of gas and companies handling less than 0.5 million cubic feet of gas.

Colorado: companies handling 1 million cubic feet or more of gas and companies handling less than 1 million cubic feet of gas.

New York: companies handling 8 million cubic feet or more of gas and companies handling less than 8 million cubic feet of gas.

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 1989 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:

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

where:

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

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

Estimates of Revenues. State revenues are estimated from monthly data reported by the sample companies in the same way as the volumes are estimated. Ratio estimators are calculated for each consumer sector based on annual *sales* revenue in each State where companies are sampled. The estimated revenues are subsequently used to calculate average prices.

The formula for calculating the ratio estimator for residential gas sales revenues in consumer sector j is:

$$E_{rj} = \frac{Z_{.j}}{Z'_{.j}},$$

where:

$Z_{.j}$ = the sum within State of annual gas sales revenues in consumer sector j,

$Z'_{.j}$ = the sum within State of annual gas sales revenues for those companies in the sample in consumer sector j.

The ratio estimator is applied as follows:

$$R_j = z_j \cdot E_p$$

where:

R_j = the monthly estimated revenue for gas sales in consumer sector j,

z_j = the sum within State of reported monthly gas sales revenues 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 average price of natural gas is calculated as follows:

$$P_j = \frac{R_j}{V_j}$$

where:

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

V_j = the estimate of gas sales within a 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 in the commercial and industrial sectors 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. Virtually all natural gas deliveries to the residential sector represent sales volumes only.

Table 33 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.

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:

$$E_t = E_{t-1} \cdot \frac{y_{jt}}{y_{jt-1}} \quad (5)$$

where:

E_t = imputed gas volume for current month t,

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

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

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

Final Revisions

Adjusting Monthly Data to Annual Data. After the annual data reported on the Form EIA-176 have been submitted, edited, and prepared for publication in the *Natural Gas Annual*, revisions are made to monthly data. The revisions are made to the volumes and prices of natural gas delivered to consumers that have appeared in the *Natural Gas Monthly* to match them to the annual values appearing in the *Natural Gas Annual*. The revised monthly estimates allocate the difference between the sum of monthly estimates and the annual reports according to the distribution of the estimated values across the months.

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

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

The formula for revising the estimated consumption is:

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

where:

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

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

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

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

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

The formula for revising the estimated revenue is:

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

where:

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

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

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

R_{jm}' = The annual sum of estimated monthly revenues.

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 C2. 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.

**Table C-1. Standard Error for Natural Gas Deliveries and Price to Consumers
by State, July 1990**

State	Volume Million Cubic Foot				Price Dollars per Thousand Cubic Foot			
	Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial	Total
Alabama	167	92	350	399	0.37	0.27	0.30	0.73
Alaska	0	0	0	0	.00	.00	.00	.00
Arizona	6	17	0	18	.03	.02	.00	.05
Arkansas	28	28	646	647	.18	.08	.39	.73
California	221	1,363	2,655	2,993	.06	.03	.07	.15
Colorado	19	27	5,550	5,550	.04	.02	1.08	2.98
Connecticut	0	0	0	0	.00	.00	.00	.00
Delaware	0	0	0	0	.00	.00	.00	.00
District of Columbia	0	0	0	0	.00	.00	.00	.00
Florida	35	263	693	742	.25	.02	.00	.31
Georgia	116	583	500	777	.34	.61	.78	2.05
Hawaii	0	0	0	0	.00	.00	.00	.00
Idaho	0	0	0	0	.00	.00	.00	.00
Illinois	85	51	144	175	.09	.16	.03	.10
Indiana	84	55	147	178	.41	.25	.01	.53
Iowa	8	13	72	74	.03	.00	.05	.11
Kansas	264	9,191	14,847	17,463	.60	1.39	3.34	6.79
Kentucky	28	74	491	497	.18	.04	.07	.24
Louisiana	24	19	71,222	71,222	.23	.04	.18	4.31
Maine	0	0	0	0	.00	.00	.00	.00
Maryland	7	23	58	63	.00	.06	.32	.19
Massachusetts	39	120	323	346	.09	.29	.18	.27
Michigan	416	325	3,213	3,256	.17	.21	.76	.43
Minnesota	117	77	640	655	.38	.09	.22	.37
Mississippi	82	121	1,869	1,875	.19	.22	.24	2.03
Missouri	62	161	69	186	.04	.03	.07	.15
Montana	2	1	0	2	.01	.00	.00	.01
Nebraska	60	441	99	456	.04	.01	.08	.36
Nevada	0	0	0	0	.00	.00	.00	.00
New Hampshire	0	0	0	0	.00	.00	.00	.00
New Jersey	0	0	0	0	.00	.00	.00	.00
New Mexico	55	150	0	160	.13	1.17	.00	.67
New York	620	1,417	1,235	1,979	.17	.13	.22	.61
North Carolina	14	9	162	163	.13	.02	.13	.37
North Dakota	0	0	0	0	.00	.00	.00	.00
Ohio	490	316	7,515	7,538	.05	.16	.03	.34
Oklahoma	173	256	6	309	1.55	.65	.00	.17
Oregon	0	0	0	0	.00	.00	.00	.00
Pennsylvania	23	116	3,232	3,365	.04	.09	1.02	1.27
Rhode Island	0	0	0	0	.00	.00	.00	.00
South Carolina	26	86	1,710	1,712	.74	.12	.29	.74
South Dakota	0	0	0	0	.00	.00	.00	.00
Tennessee	55	33	2,152	2,153	.04	.09	.23	.46
Texas	46	4,152	0	4,152	.04	.63	.00	1.92
Utah	0	0	0	0	.00	.00	.00	.00
Vermont	0	0	0	0	.00	.00	.00	.00
Virginia	67	94	892	900	.16	.16	1.41	1.41
Washington	0	0	0	0	.00	.00	.00	.00
West Virginia	34	51	17	64	.22	.10	.01	.22
Wisconsin	116	124	390	425	.28	.01	.09	.27
Wyoming	36	101	67	126	.24	.82	.55	1.32
U.S. Totals	1,032	10,326	73,652	74,380	.07	.33	.64	.33

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:

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

where:

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.

Appendix D

Natural Gas Reports and Feature Articles

Natural Gas Reports and Feature Articles

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

- *Natural Gas Annual 1989*, DOE/EIA-0131(89), September 1990.
- *Statistics of Interstate Natural Gas Pipeline Companies 1988*, DOE/EIA-0145(88), November 1989. Published annually.
- *Gas Supplies of Interstate Natural Gas Pipeline Companies 1988*, DOE/EIA-0167(88), December 1989. Published annually.

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

- *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves - 1989 Annual Report*, DOE/EIA-0216(89), September 1990.
- *Monthly Energy Review*, DOE/EIA-0035, Published monthly. Provides national aggregate data for natural gas, natural gas liquids, and other energy sources.
- *Annual Report to Congress 1989*, DOE/EIA-0173(89), March 1990. Published annually.
- *Annual Energy Outlook 1990*, DOE/EIA-0383(90), January 1990. Published annually.
- *Annual Energy Review 1989*, DOE/EIA-0384(89), May 1990. Published annually.
- *Short-Term Energy Outlook*, DOE/EIA-0202. Published quarterly. Provides forecasts for next six quarters for natural gas and other energy sources.
- *Annual Outlook for Oil and Gas: 1990*, DOE/EIA-0517(90), May 1990.
- *International Oil and Gas Exploration and Development Activities*, DOE/EIA-0523. Published Quarterly. Provides a compilation of reported oil and gas reserve additions in foreign countries.

Selected One-Time Natural Gas and Related Reports

- *Drilling and Production Under Title I of the Natural Gas Policy Act, 1978-1986*, DOE/EIA-0448(86), January 1989.
- *An Examination of Domestic Natural Gas Resource Estimates*, SR/RNGD/89-01, February 1989.
- *Growth in Unbundled Natural Gas Transportation Services: 1982-1987*, DOE/EIA-0525, May 1989.
- *Assessment of Pipeline Capacity to Transport Domestic Natural Gas Supplies to the Northeast*, SR/RNGD/89-02, August 1989.
- *Natural Gas Production Responses to a Changing Market Environment, 1978-1988*, DOE/EIA-0532, June 1990.
- *Costs and Indices for Domestic Oil and Gas Field Equipment and Production Operations - 1987 through 1989*, DOE/EIA-0185(89), July 1990.
- *U.S. Oil and Gas Reserves by Year of Field Discovery*, DOE/EIA-0534, August 1990.

Selected and Recurring Natural Gas and Related Data Reference Reports

- *Directory of Energy Data Collection Forms*, DOE/EIA-0249(89), January 1990.
- *Oil and Gas Field Code Master List, 1989*, EIA-0370(89), January 1990.

NGM Feature Articles

March 1987

Estimated Distribution of Proved Natural Gas Reserves Among the Geologic Provinces of the Lower 48 States

(Presents an overview of the methodology and procedures employed in the formulation of certain positions of EIA's annual reserves study.)

April 1987

Contract Provisions Covering Production of New Gas

(Discusses various types of contract provisions included in recent natural gas contracts.)

May 1987

U.S. Imports and Exports of Natural Gas 1986

(Provides final 1986 data on all U.S. imports and exports of natural gas.)

July 1987

Underground Storage of Natural Gas

(Presents an analysis of the natural gas storage facilities and statistics.)

Domestic Natural Gas Reserves and Production Dedicated to Interstate Pipeline Companies, 1986

(Provides preliminary data on natural gas reserves and production dedicated to the interstate market.)

October 1987

Main Line Natural Gas Sales to Industrial Users, 1986

(Describes and analyzes direct sales to end users by interstate pipeline companies and SIC codes.)

December 1987

Overview of Wellhead Purchases by Interstate Natural Gas Pipeline Companies Since the NGPA

(Presents an overview of gas purchasing trends and practices since 1979.)

January 1988

Gas Deliverability in Louisiana

(Provides information on the levels of natural gas deliverability in the State of Louisiana.)

April 1988

Overview of Pipeline Take-or-Pay Exposure: 1983-1987

(Presents information on the recent history of the take-or-pay issue.)

June 1988

Domestic Natural Gas Reserves and Production Dedicated to Interstate Pipeline Companies, 1987

(Provides preliminary data on natural gas reserves and production dedicated to the interstate market.)

July 1988

U.S. Imports and Exports of Natural Gas - 1987

(Contains final 1987 data on all U.S. imports and exports of natural gas.)

September 1988

Status of Coalbed Methane Recovery in the United States

(Presents an overview of coalbed methane gas in the U.S.)

January 1989

Main Line Natural Gas Sales by Interstate Pipeline Companies, 1987

(Describes and analyzes direct sales to end users by interstate pipeline companies and SIC codes.)

Summary of An Examination of Domestic Gas Resource Estimates

(Provides an overview of the various natural gas resource estimates currently in use.)

May 1989

The Outlook for Natural Gas Supply in the 1990's

(Discusses recent conditions in the oil and gas producing industry.)

June 1989

Domestic Natural Gas Reserves and Production Dedicated to Interstate Pipeline Companies, 1988

(Provides preliminary data on natural gas reserves and production dedicated to the interstate market.)

August 1989

U.S. Natural Gas Imports and Exports - 1988

(Contains final 1988 data on all U.S. imports and exports of natural gas.)

September 1989

Natural Gas Production in the Post-NGPA Decade

(Presents data on the production of natural gas by categories defined under the Natural Gas Policy Act of 1978 (NGPA).)

November 1989

Natural Gas Wellhead Decontrol Act of 1989

(Describes the categories of natural gas most affected by the decontrol provisions and provides market data for these categories and the overall markets during the 1980's.)

March 1990

The Developing Natural Gas Futures Market and Its Potential Impact on Domestic Natural Gas Markets

(Discusses futures markets vs. physicals markets (which include spot markets).)

April 1990

The Outlook for Natural Gas

(Discusses projections of natural gas markets through the year 2010.)

May 1990

Domestic Natural Gas Reserves and Production Dedicated to Interstate Pipeline Companies, 1989

(Provides preliminary data on natural gas reserves and production dedicated to the interstate market.)

June 1990

U.S. Natural Gas Imports and Exports - 1989

(Contains final 1989 data on all U.S. imports and exports of natural gas.)

July 1990

Resurgence in Natural Gas Wellhead Productivity

(Explores the factors that contributed to the recent increases in natural gas wellhead production.)

Appendix E

Technical Contacts

Appendix E

Technical Contacts

Section	Tables		Principal Data Sources	Technical Contact
Summary Statistics: Natural Gas Production and Consumption	1, 2, 3	Monthly: Annual: Monthly:	Interstate Oil Compact Commission (IOCC) Form EIA-627, "Annual Quantity and Value of Natural Gas Report" Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Sheila Darnell (202) 586-6165
Extraction Loss	1	Monthly: Annual:	EIA computations 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: Annual:	EIA computations Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"	Margo Natof (202) 586-6303
Imports and Exports	2	Monthly Annual:	EIA computations Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas"	Margo Natof (202) 586-6303 Fay Dillard (202) 586-6181
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
Imports and Purchases from Producers	4	Monthly:	Form FERC-11, "Natural Gas Pipeline Company Monthly Statement"	James Keeling (202) 586-6107
Wellhead	4	Monthly: Annual:	EIA computations Form EIA-627, "Annual Quantity and Value of Natural Gas Report"	Sheila Darnell (202) 586-6165
Electric Utility	4	Monthly:	Form FPC-423, "Cost and Quality of Fuels for Electric Power Plants"	Margo Natof (202) 586-6303
NGPA Category - Prices And Volumes	5	Periodic:	Purchased Gas Adjustment Filings	Norman Crabtree (202) 586-6180
Summary of Natural Gas Imports and Exports	6	Quarterly:	Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas" and "Quarterly Sales and Price Report"	James Todaro (202) 586-6305
Producer Related Activities: Natural Gas Production	7	Monthly:	Interstate Oil Compact Commission (IOCC)	Sheila Darnell (202) 586-6165
Well Determination Filings	8, 9, 10,	Monthly:	Form FERC-121, "Application for Determination of Maximum Lawful Price Under the Natural Gas Policy Act"	Norman Crabtree (202) 586-6180
NGPA Ceiling Prices	11	Monthly:	<i>Federal Register</i>	Eva Fleming (202) 586-6113
Interstate Pipeline Activities:	12, 13, 14, 15, 16	Monthly:	Form FERC-11, "Natural Gas Pipeline Company Monthly Statement"	James Keeling (202) 586-6107

Underground Storage:	17, 18, 19, 20, 21	Monthly:	Forms FERC-8 and EIA-191, "Underground Gas Storage Report"	Ellis Maupin (202) 586-6178
Distribution and Consumption:				
Deliveries to:				
Residential,	22	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
Commercial,	23			
Industrial,	24			
Electric Utility,	25		Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants"	Margo Natof (202) 586-6303
All Consumers	26			
Average Price to:				
City Gate	27	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4780
Residential,	28			
Commercial,	29			
Industrial,	30		Form FERC-423, "Cost and Quality of Fuels for Electric Power Plants"	Margo Natof (202) 586-6303
Electric Utility,	31			
and All Consumers	32			
Onsystem Sales	33	Monthly:	Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"	Roy Kass (202) 586-4790
Heating Degree Days	34	Seasonal:	National Oceanic and Atmospheric Administration	Rosemary Jameson (202) 586-6229
Highlights and Industry Overview				James Todaro (202) 586-6305
Recent Developments				James Todaro (202) 586-6305

Glossary

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

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

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

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

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

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

Dry Natural Gas Production: Marketed production less extraction loss.

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

Exports: Natural gas deliveries out of the Continental United States (including Alaska) to foreign countries. {3}

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.

Hinshaw Pipeline: A pipeline or local distribution company that has received exemption, (by Section 1 (c) of the Natural Gas Act), from regulations pursuant to the Natural Gas Act. These companies transport interstate natural gas not subject to regulations under NGA.

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

Independent Producers: Independent natural gas producers subject to the jurisdiction of the FERC.

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 lease operations, as gas processing plant fuel, and net used for gas lift.

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.

Major Interstate Pipeline Company: A company whose combined sales for resale, and gas transported interstate or stored for a fee, exceeded 50 million thousand cubic feet in the previous year.

Native Gas: Gas in place at the time that a reservoir was converted to use as an underground storage reservoir. Excludes quantities of gas added or injected.

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.

Natural Gas Policy Act of 1978 (NGPA): Signed into law on November 9, 1978, the NGPA is a framework

for the regulation of most facets of the natural gas industry. See Explanatory Note 10 for a full discussion.

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 for pressure maintenance and cycling purposes.

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

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.

Unaccounted For: 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.

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.

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