

# Natural Gas 1999: A Preliminary Summary

This Special Report provides preliminary natural gas data for 1999 which were reported on monthly surveys of the industry through December. These data will be revised and become final with the release of the *Natural Gas Annual 1999* in the fall of 2000. That report will include data from an annual survey of the industry.

## Production and Wellhead Prices

Dry natural gas production in 1999 is estimated to have been 18,660 billion cubic feet, just slightly below the level of 18,708 billion cubic feet in 1998. Annual production has been fairly stable since the increase of 4 percent that occurred in 1994. Dry production in 1999 is 5 percent higher than at the beginning of the decade.

Daily rates of production in each month are fairly steady during any year, but the range was a bit narrower in 1999 than in 1998. During 1999, the daily rate of dry production varied from a low of 50.1 billion cubic feet per day in August to a high of 52.2 billion cubic feet per day in February. During 1998, daily production rates varied from 48.5 to 52.8 billion cubic feet per day, in September and January, respectively.

State-level production data for 1999 are for marketed production, that is, natural gas that has not yet been processed for the removal of liquids and nonhydrocarbon gases. (Dry production data by State will be available in the fall of 2000 in the Energy Information Administration's *Natural Gas Annual 1999*.) Marketed production in 1999 was estimated to have been 19,611 billion cubic feet, less than 1 percent below the 1998 level of 19,646 billion cubic feet. Texas and Louisiana<sup>1</sup> together account for 60 percent of U.S. mar-

keted production—32 percent for Texas and 28 percent for Louisiana. The next two largest producers are Oklahoma and New Mexico, with 8 percent each. A total of 32 States reported measurable production in 1999.

The largest changes in marketed production from 1998 to 1999 took place in Texas and New Mexico. Marketed production dropped by 118 billion cubic feet in Texas, but this was a change of only 2 percent for the State. In New Mexico, marketed production increased by 97 billion cubic feet or 6 percent. The next largest changes were an increase of 51 billion cubic feet, or 16 percent, in California and a decline of 50 billion cubic feet, or 8 percent, in Kansas.

The average natural gas wellhead price in 1999 was \$2.07 per thousand cubic feet according to preliminary estimates. This was 7 percent higher than in 1998, but 11 percent lower than in 1997. Monthly average wellhead prices were flat or increasing during most of 1999, and for August through November, they were at least 25 percent higher than for those same months in 1998. The wellhead price reached its high for the year at \$2.44 per thousand cubic feet in November 1999, then fell 17 percent to \$2.03 per thousand cubic feet in December, similar to the decline in the futures market price for December deliveries at the Henry Hub (on the New York Mercantile Exchange). The lowest monthly wellhead price during 1999 was \$1.70 per thousand cubic feet in March.

The monthly pattern of working gas stocks in underground storage facilities in 1999 compared with 1998 may have contributed to the general rise in

1 The estimate of marketed production for Louisiana for 1999 includes the total of Federal offshore production for both Louisiana and Alabama. This estimate will be allocated to the States in the Energy Information Administration's *Natural Gas Annual 1999*, which should be available in the fall of 2000. Data for 1998 were adjusted to allow for consistent State-level comparisons in this analysis. Federal offshore production in Alabama in 1998 was 171 billion cubic feet.

wellhead prices later in the year. In January 1999, working gas was an estimated 22 percent higher than it had been in January 1998, and in February 1999, it was 26 percent higher than in February 1998. The difference in the amount of working gas between 1999 and 1998 declined in the following months, and by July 1999, the working gas was below that of 1998, though by only 2 percent. The gap generally widened through the rest of the year with the 1999 level remaining below that of 1998. By December 1999, there was 2,509 billion cubic feet of working gas, 8 percent less than in December 1998.

## Imports

Natural gas imports increased for the 13<sup>th</sup> consecutive year in 1999 to over 3.5 trillion cubic feet. (Table SR3) Imports, both pipeline and liquefied natural gas (LNG), grew by 13 percent, the largest annual growth rate of the past 5 years. Imports continued to increase in 1999 because of several factors, including Canadian-U.S. border pipeline expansions and a growth in LNG imports. Pipeline imports from Canada still represented the bulk of total imports, 94 percent in 1999, although imports of LNG increased from 3 percent of the total in 1998 to 5 percent in 1999.

Net imports have become and are increasingly a major contributor of natural gas to the U.S. marketplace. Net imports for 1999 totaled 3.5 trillion cubic feet, which accounted for 16 percent of total natural gas consumption in the United States. Every month in 1999 had a higher volume of net imports than for the same month in 1998. The monthly volume in 1999 ranged from 275 billion cubic feet in June to 311 billion cubic feet in August.

Pipeline imports from Canada increased by 10 percent between 1998 and 1999. Imports of Canadian gas are expected to increase in the future because of the recently opened Northeast and Maritimes Pipeline, which is expected to deliver over 400 million cubic feet per day to the Northeast by fall 2000. Canadian flow capacity to the Northeast has already grown significantly, reaching 3,295 million cubic feet per day in 1999, up 20 percent, from 2,739 million cubic feet per day in 1998.

LNG imports made a significant impact on U.S. markets in 1999, representing 5 percent of total imports. LNG imports reached 160 billion cubic feet, the highest level ever recorded and almost twice the volume of 1998 (85 billion cubic feet). This significant annual increase could be a result of more diversified sources

of LNG and an increase in short-term sellers of LNG. In 1998, Algeria supplied 80 percent of the LNG imports to the United States, whereas in 1999, Algeria supplied only 46 percent of LNG imports. The other 54 percent came from Trinidad, Qatar, Australia and Malaysia. This rapid growth in LNG imports can be mainly attributed to the new Atlantic LNG project in Trinidad, which provided 31 percent of LNG imports for 1999, even though shipments only began in May 1999. In addition to the two operational LNG receiving terminals in Lake Charles, Louisiana, and Everett, Massachusetts, a retired LNG receiving terminal in Cove Point, Maryland will be reopened to receive deliveries in 2002, evidence of the growing demand in the LNG sector.

Similar to the growth in wellhead prices, the price of pipeline imports from Canada increased in 1999. Prices averaged \$2.28 per thousand cubic feet, up 17 percent from 1998 and 6 percent from 1997. In contrast, the average price of LNG imports decreased by 5 percent in 1999 from \$2.63 per thousand cubic feet in 1998 to \$2.51 per thousand cubic feet.

## Exports

For the fourth consecutive year, exports of natural gas increased. Exports totaled 167 billion cubic feet in 1999, with 103 billion cubic feet as pipeline exports to Canada and Mexico and 64 billion cubic feet as LNG exports to Japan and Mexico. All exports increased in volume except LNG exports to Japan which decreased by 4 percent from the 1998 level. This followed an increase of 6 percent in 1997. The largest increase occurred in LNG exports to Mexico, which totaled 255 million cubic feet compared with 33 million cubic feet in 1998. LNG represents 38 percent of total U.S. exports.

The average price of total exports increased slightly, from \$2.45 in 1998 to \$2.58 in 1999. All countries receiving U.S. gas exports in 1999 paid higher average prices than in 1998, with the exception of Japan. The export price of LNG to Japan continues to decline, decreasing by 2 percent since 1998 and by 34 percent since 1997. LNG exports to Mexico had the largest increase in average prices with a gain of 25 percent between 1998 and 1999.

## End-Use Consumption

Consumption of natural gas by end-use customers in 1999 was estimated at 19.5 trillion cubic feet, 2 per-

cent above the level in 1998. Increases in residential and commercial consumption between 1998 and 1999 were offset by declines in natural gas consumption in the industrial and electric utility sectors.

The residential sector saw the largest increase in natural gas consumption during 1999. Residential natural gas consumption during this period was estimated at 4.7 trillion cubic feet, up 154 billion cubic feet (3 percent) from the previous year. Natural gas use by residential customers during the first quarter of the year is greatly influenced by weather because of space heating requirements. During this period, January through March in both 1999 and 1998, warmer-than-normal weather was experienced, as measured by heating degree days, but the early months of 1999 were colder than in 1998, which contributed to the increased natural gas consumption relative to 1998. Residential demand in 1999 was higher than in 1998 for all months except July, August, and November. In the East North Central region, which consumes the most residential natural gas of the regions, three States saw significant increases in natural gas consumption during 1999. Wisconsin had an increase of 12 billion cubic feet (10 percent) from 1998 to 1999 while Illinois had an increase of 35 billion cubic feet (9 percent), and Michigan an increase of 30 billion cubic feet (9 percent).

Commercial consumption of natural gas in 1999 was estimated at 3.1 trillion cubic feet, an increase of 2 percent from the 3.0 trillion cubic feet the previous year. As is the case with the residential sector, the use of natural gas by commercial customers is largely to meet space-heating requirements. The slight increase in commercial consumption during 1999 also may be explained in part by the colder weather seen during the first quarter of 1999 as compared with the same period the previous year. During 1999, consumption increased relative to 1998 for all months except July, November, and December.

Consumption of natural gas by the industrial sector in 1999 was estimated at 8.7 trillion cubic feet. This estimate is less than 1 percent below the 1998 level of industrial consumption, and 2 percent less than the level in both 1996 and 1997. During 1999, natural gas consumption by electric utilities was 3.1 trillion cubic feet, indicating a 4 percent decrease from the 3.3 trillion cubic feet reported in 1998.

The decline in gas consumption by electric utilities reflects changes as a result of the restructuring of that industry. When a generating plant is sold to an entity that is not a regulated utility, the classification of that

plant immediately changes. For purposes of data gathering, the Energy Information Administration (EIA), conducts separate consumption surveys from both electric utilities (regulated entities) and nonutility generators (nonregulated entities). According to EIA's *Electric Power Monthly, April 2000* (page 5), the sale of generating plants by regulated utilities has had a substantial effect on consumption of gas reported during 1999. When an electric utility is sold, gas previously reported as consumed by an electric utility is now intended to be reported as consumed by a nonutility generator. Data from EIA's survey of nonutility generators (Form EIA-900) indicate that during 1999 the generating plants involved in those sales consumed 370 billion cubic feet of natural gas following their sale. EIA includes nonutility gas consumption in industrial consumption.

EIA continuously conducts quality assurance activities to ensure that the data it reports are of the highest quality. We are currently investigating the reporting of gas consumption data to determine potential survey design and reporting problems that may arise as restructuring of the electric utility industry proceeds.

## City Gate and End-Use Prices

Following the pattern of wellhead prices, city gate and electric utility prices rose substantially from August through December 1999. However, declines in prices earlier in the year somewhat offset these increases. The average city gate price for 1999 was \$3.11 per thousand cubic feet, only 1 percent more than the 1998 price and still well below the 1997 price of \$3.66 per thousand cubic feet. The average price paid by electric utilities reached \$2.56 per thousand cubic feet in 1999, 7 percent higher than a year ago, mirroring the percentage increase seen for wellhead prices, but 8 percent less than the 1997 price of \$2.78 per thousand cubic feet. The State of Texas accounted for 39 percent of natural gas consumption by electric utilities during 1999. This State saw a 9-percent increase from 1998 to 1999 in the electric utility gas price.

Although the residential and commercial sectors benefit from decreases in wellhead prices, the response is delayed. From 1997 to 1998, there were sharp declines of 16 percent in the average wellhead and city gate prices, but much more modest declines in the residential (2 percent) and commercial (6 percent) sectors. These declines continued

into 1999 as prices in these sectors fell again by 3 to 4 percent.

Residential consumers<sup>2</sup> continue to pay the highest price for natural gas. They paid an average price of \$6.61 per thousand cubic feet in 1999, \$0.21 less than in 1998. These consumers require service on demand which peaks during the heating season. Commercial consumers paid the second highest average price for gas, \$5.26 per thousand cubic feet, \$0.22 lower than a

year ago. Much of the demand for gas in this sector is for space heating, making it highly responsive to weather conditions. The average price of gas for industrial consumers was \$3.04 per thousand cubic feet in 1999, \$0.10 lower than in 1998. The industrial price is the average price paid by those companies that continue to buy gas from local distribution suppliers. These suppliers accounted for only 17 percent of total deliveries to industrial end users in 1999.

2 End-use prices in the residential, commercial, and industrial sectors are for onsystem gas sales only. While monthly onsystem sales are nearly 100 percent of residential deliveries, in 1999 they were 65 percent of commercial deliveries and only 17 percent of industrial deliveries.

## SR1. Summary Statistics for Natural Gas in the United States, 1995-1999

	1995	1996	1997	1998	1999
<b>Production (million cubic feet)</b>					
Gross Withdrawals					
From Gas Wells.....	17,282,032	17,737,334	17,844,046	17,558,621	17,679,309
From Oil Wells.....	6,461,596	6,376,201	6,368,631	6,365,612	6,273,573
<b>Total.....</b>	<b>23,743,628</b>	<b>24,113,536</b>	<b>24,212,677</b>	<b>23,924,233</b>	<b>23,952,881</b>
Repressuring.....	-3,565,023	-3,510,753	-3,491,542	-3,433,323	-3,527,819
Nonhydrocarbon Gases Removed.....	-388,392	-518,425	-598,691	-611,226	-560,851
Wet After Lease Separation.....	19,790,213	20,084,357	20,122,444	19,879,684	19,864,211
Vented and Flared.....	-283,739	-272,117	-256,351	-234,130	-252,929
Marketed Production.....	19,506,474	19,812,241	19,866,093	19,645,554	19,611,282
Extraction Loss.....	-907,795	-958,178	-963,759	-937,798	-951,147
<b>Total Dry Production.....</b>	<b>18,598,679</b>	<b>18,854,063</b>	<b>18,902,334</b>	<b>18,707,756</b>	<b>18,660,135</b>
<b>Supply (million cubic feet)</b>					
Dry Production.....	18,598,679	18,854,063	18,902,334	18,707,756	18,660,135
Receipts at U.S. Borders					
Imports.....	2,841,048	2,937,413	2,994,173	3,152,058	3,547,832
Intransit Receipts.....	492,481	536,333	548,000	481,581	NA
Withdrawals from Storage					
Underground Storage.....	2,974,102	2,911,327	2,824,245	2,377,344	2,696,581
LNG Storage.....	50,446	69,287	69,517	54,365	NA
Supplemental Gas Supplies.....	110,290	109,455	103,153	102,189	95,358
Balancing Item.....	-230,002	217,114	61,024	-33,330	-901,809
<b>Total Supply.....</b>	<b>24,837,044</b>	<b>25,634,990</b>	<b>25,502,445</b>	<b>24,841,963</b>	<b>24,098,097</b>
<b>Disposition (million cubic feet)</b>					
Consumption.....	21,580,665	21,966,616	21,958,660	21,262,023	21,375,503
Deliveries at U.S. Borders					
Exports.....	154,119	153,393	157,006	159,007	167,155
Intransit Deliveries.....	492,481	536,333	516,620	459,461	NA
Additions to Storage					
Underground Storage.....	2,565,882	2,905,592	2,800,294	2,903,585	2,555,438
LNG Storage.....	43,897	73,057	69,865	57,887	NA
<b>Total Disposition.....</b>	<b>24,837,044</b>	<b>25,634,990</b>	<b>25,502,445</b>	<b>24,841,963</b>	<b>24,098,097</b>
<b>Consumption (million cubic feet)</b>					
Lease and Plant Fuel.....	1,220,168	1,249,662	1,203,179	1,157,498	1,227,666
Pipeline Fuel.....	700,335	711,446	751,470	635,477	638,869
Delivered to Consumers					
Residential.....	4,850,318	5,241,414	4,983,772	4,520,276	4,674,273
Commercial.....	3,031,077	3,158,244	3,214,912	2,999,491	3,060,583
Industrial.....	8,579,585	8,870,422	8,832,450	8,686,147	8,660,692
Vehicle Fuel.....	2,674	2,932	4,424	5,079	NA
Electric Utilities.....	3,196,507	2,732,496	2,968,453	3,258,054	3,113,420
<b>Total Delivered to Consumers.....</b>	<b>19,660,161</b>	<b>20,005,508</b>	<b>20,004,012</b>	<b>19,469,047</b>	<b>19,508,967</b>
<b>Total Consumption.....</b>	<b>21,580,665</b>	<b>21,966,616</b>	<b>21,958,660</b>	<b>21,262,023</b>	<b>21,375,503</b>
<b>Average Prices for Natural Gas (dollars per thousand cubic feet)</b>					
Wellhead (Marketed Production).....	1.55	2.17	2.32	1.94	2.07
Imports.....	1.49	1.97	2.17	1.97	2.29
Exports.....	2.39	2.97	3.02	2.45	2.58
City Gate.....	2.78	3.27	3.66	3.07	3.11
Delivered to Consumers					
Residential.....	6.06	6.34	6.94	6.82	6.61
Commercial.....	5.05	5.40	5.80	5.48	5.26
Industrial.....	2.71	3.42	3.59	3.14	3.04
Electric Utilities.....	2.02	2.69	2.78	2.40	2.62

NA = Not available.

**Notes:** Beginning in 1987, prices for gas delivered to consumers are calculated using only on-system sales data. No imputations are made for prices of gas delivered for the account of others. In previous years, prices were calculated using reported values and values imputed for gas delivered for the account of others. The United States includes the 50 states and the District of Columbia. Totals may not equal sum of components due to independent rounding. Beginning in 1996, consumption of natural gas for agricultural use was classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use.

**Sources:** Energy Information Administration (EIA), Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"; Form EIA-627, "Annual Quantity and Value of Natural Gas Report" (1995); Form EIA-895, "Monthly Quantity and Value of Natural Gas Report" (1996 through 1999); Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"; Form EIA-816, "Monthly Natural Gas Liquids Report"; Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production"; Form EIA-759, "Monthly Power Plant Report"; Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants"; Form EIA-191, "Underground Gas Storage Report"; Office of Fossil Energy, U.S. Department of Energy, Natural Gas Imports and Exports; U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, Annual Reports, DOE/EIA-0216; and the U.S. Minerals Management Service.

**SR2. Gross Withdrawals and Marketed Production of Natural Gas by State, 1999**  
 (Million Cubic Feet)

State	Gross Withdrawals			Repressuring	Nonhydrocarbon Gases Removed	Vented and Flared	Marketed Production
	From Gas Wells	From Oil Wells	Total				
Alabama.....	413,497	7,039	420,536	13,793	23,956	1,085	381,702
Alaska.....	178,470	3,142,326	3,320,797	2,854,134	0	6,797	459,865
Arizona.....	475	3	478	0	0	0	478
Arkansas.....	162,537	27,216	189,753	1,123	0	52	188,578
California.....	88,996	327,819	416,815	47,968	1,952	950	365,945
Colorado.....	649,292	100,191	749,483	6,397	0	802	742,284
Florida.....	0	6,702	6,702	0	769	0	5,933
Illinois.....	167	5	172	0	0	0	172
Indiana.....	384	0	384	0	0	0	384
Kansas.....	503,025	51,893	554,918	943	0	555	553,419
Kentucky.....	91,067	0	91,067	0	0	0	91,067
Louisiana.....	4,817,825	724,258	5,542,084	43,466	0	23,775	5,474,842
Maryland.....	82	0	82	0	0	0	82
Michigan.....	226,423	56,606	283,028	1,994	0	2,832	278,202
Mississippi.....	121,006	5,750	126,757	6,286	6,703	2,745	111,022
Montana.....	50,073	6,828	56,901	62	0	0	56,840
Nebraska.....	907	313	1,220	0	0	0	1,220
Nevada.....	0	8	8	0	0	0	8
New Mexico.....	1,507,455	262,440	1,769,895	10,768	158,130	2,869	1,598,128
New York.....	16,335	264	16,599	0	0	5	16,594
North Dakota.....	15,772	39,780	55,552	0	78	2,752	52,722
Ohio.....	103,193	0	103,193	0	0	0	103,193
Oklahoma.....	1,447,180	156,976	1,604,156	0	0	0	1,604,156
Oregon.....	1,555	0	1,555	50	213	0	1,291
Pennsylvania.....	59,504	0	59,504	0	0	0	59,504
South Dakota.....	677	7,162	7,839	0	5,157	1,289	1,393
Tennessee.....	0	1,345	1,345	0	0	0	1,345
Texas.....	5,564,396	1,248,033	6,812,429	387,107	198,030	26,506	6,200,786
Utah.....	238,947	38,020	276,967	519	0	13,835	262,614
Virginia.....	42,834	0	42,834	0	0	0	42,834
West Virginia.....	175,310	0	175,310	0	0	0	175,310
Wyoming.....	1,201,926	62,594	1,264,520	153,208	165,863	166,080	779,369
<b>Total.....</b>	<b>17,679,309</b>	<b>6,273,573</b>	<b>23,952,881</b>	<b>3,527,819</b>	<b>560,851</b>	<b>252,929</b>	<b>19,611,282</b>

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

**Source:** Energy Information Administration (EIA), Form EIA-895, "Monthly Quantity and Value of Natural Gas Report."

## SR3. Summary of U.S. Natural Gas Imports and Exports, 1995-1999

	1995	1996	1997	1998	1999
<b>Imports</b>					
Volume (million cubic feet)					
Pipeline					
Canada.....	2,816,408	2,883,277	2,899,152	3,052,073	3,332,658
Mexico.....	6,722	13,862	17,243	14,532	54,528
<b>Total Pipeline Imports.....</b>	<b>2,823,130</b>	<b>2,897,138</b>	<b>2,916,394</b>	<b>3,066,605</b>	<b>3,387,186</b>
LNG					
Algeria.....	17,918	35,325	65,675	68,567	74,612
Australia.....	—	—	9,686	11,634	11,903
Malaysia.....	—	—	—	—	2,576
Qatar.....	—	—	—	—	19,532
Trinidad.....	—	—	—	—	49,310
United Arab Emirates.....	—	4,949	2,417	5,252	2,713
<b>Total LNG Imports.....</b>	<b>17,918</b>	<b>40,274</b>	<b>77,778</b>	<b>85,453</b>	<b>160,646</b>
<b>Total Imports.....</b>	<b>2,841,048</b>	<b>2,937,413</b>	<b>2,994,173</b>	<b>3,152,058</b>	<b>3,547,832</b>
Average Price (dollars per thousand cubic feet)					
Pipeline					
Canada.....	1.48	1.96	2.15	1.95	2.28
Mexico.....	1.53	2.25	2.31	2.03	2.17
<b>Total Pipeline Imports.....</b>	<b>1.48</b>	<b>1.96</b>	<b>2.15</b>	<b>1.95</b>	<b>2.28</b>
LNG					
Algeria.....	2.30	2.70	2.67	2.51	2.50
Australia.....	—	—	2.92	3.30	2.70
Malaysia.....	—	—	—	—	2.37
Qatar.....	—	—	—	—	2.66
Trinidad.....	—	—	—	—	2.41
United Arab Emirates.....	—	3.46	3.74	2.63	2.97
<b>Total LNG Imports.....</b>	<b>2.30</b>	<b>2.80</b>	<b>2.74</b>	<b>2.63</b>	<b>2.51</b>
<b>Total Imports.....</b>	<b>1.49</b>	<b>1.97</b>	<b>2.17</b>	<b>1.97</b>	<b>2.29</b>
<b>Exports</b>					
Volume (million cubic feet)					
Pipeline					
Canada.....	27,554	51,905	56,447	39,891	42,361
Mexico.....	61,283	33,840	38,372	53,133	61,025
<b>Total Pipeline Exports.....</b>	<b>88,836</b>	<b>85,745</b>	<b>94,818</b>	<b>93,023</b>	<b>103,386</b>
LNG					
Japan.....	65,283	67,648	62,187	65,951	63,514
Mexico.....	0	0	0	33	255
<b>Total LNG Exports.....</b>	<b>65,283</b>	<b>67,648</b>	<b>62,187</b>	<b>65,984</b>	<b>63,769</b>
<b>Total Exports.....</b>	<b>154,119</b>	<b>153,393</b>	<b>157,006</b>	<b>159,007</b>	<b>167,155</b>
Average Price (dollars per thousand cubic feet)					
Pipeline					
Canada.....	1.96	2.67	2.52	2.25	2.34
Mexico.....	1.50	2.11	2.46	2.04	2.44
<b>Total Pipeline Exports.....</b>	<b>1.64</b>	<b>2.45</b>	<b>2.49</b>	<b>2.13</b>	<b>2.40</b>
LNG					
Japan.....	3.41	3.65	3.83	2.91	2.86
Mexico.....	—	—	—	5.69	7.11
<b>Total LNG Exports.....</b>	<b>3.41</b>	<b>3.65</b>	<b>3.83</b>	<b>2.91</b>	<b>2.88</b>
<b>Total Exports.....</b>	<b>2.39</b>	<b>2.97</b>	<b>3.02</b>	<b>2.45</b>	<b>2.58</b>

— = Not applicable.

**Note:** Totals may not equal sum of components due to independent rounding.**Source:** Energy Information Administration, Office of Fossil Energy, U.S. Department of Energy, Natural Gas Imports and Exports.

**SR4. Additions to and Withdrawals from Gas Storage by State, 1999**  
 (Million Cubic Feet)

State	Underground Storage			Total		
	Injections	Withdrawals	Net	Number of Active Fields	Capacity (billion cubic feet)	Percent of U.S. Capacity
Alabama .....	2,646	2,482	-164	0	3	0.04
Arkansas .....	5,784	6,017	233	2	24	0.30
California .....	135,049	133,915	-1,134	9	388	4.75
Colorado .....	37,674	36,524	-1,151	9	100	1.22
Illinois .....	225,310	224,818	-492	30	899	10.99
Indiana.....	20,502	20,689	187	28	113	1.38
Iowa.....	74,364	75,210	846	4	273	3.34
Kansas.....	103,217	120,213	16,997	18	301	3.68
Kentucky .....	55,836	58,092	2,256	25	220	2.69
Louisiana.....	256,533	251,711	-4,822	14	564	6.89
Maryland .....	18,802	18,724	-78	1	62	0.76
Michigan.....	338,831	372,798	33,967	49	1,022	12.49
Minnesota.....	1,383	1,131	-253	1	7	0.09
Mississippi.....	46,405	60,710	14,304	7	134	1.64
Missouri.....	3,159	2,601	-557	1	31	0.38
Montana .....	20,231	28,425	8,194	5	372	4.54
Nebraska.....	6,097	5,802	-294	1	39	0.48
New Mexico.....	17,460	15,167	-2,293	3	97	1.18
New York.....	53,534	62,307	8,773	22	175	2.14
Ohio.....	176,850	192,550	15,699	24	575	7.03
Oklahoma.....	120,024	109,517	-10,508	13	395	4.83
Oregon.....	7,588	7,178	-409	3	12	0.14
Pennsylvania.....	316,981	337,444	20,463	59	685	8.37
Tennessee.....	593	565	-28	1	1	0.01
Texas.....	279,578	279,965	387	34	684	8.37
Utah.....	37,380	46,573	9,193	3	122	1.49
Virginia.....	2,398	2,527	129	2	5	0.06
Washington.....	20,209	17,667	-2,543	1	37	0.46
West Virginia.....	159,560	194,794	35,234	36	733	8.96
Wyoming.....	11,458	10,463	-995	7	106	1.29
<b>Total.....</b>	<b>2,555,438</b>	<b>2,696,581</b>	<b>141,142</b>	<b>413</b>	<b>8,179</b>	<b>100.00</b>

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

Source: Energy Information Administration, Form EIA-191, "Underground Gas Storage Report."

**SR5. Natural Gas Delivered to Consumers by State, 1999**  
 (Million Cubic Feet)

State	Residential	Commercial	Industrial	Electric Utilities	Delivered to Consumers
Alabama .....	43,592	28,887	204,829	20,897	298,206
Alaska .....	17,634	27,122	74,491	30,554	149,801
Arizona .....	32,827	31,242	26,246	50,876	141,191
Arkansas .....	NA	NA	NA	40,059	NA
California .....	568,355	262,681	944,597	144,796	1,920,430
Colorado.....	113,871	NA	NA	19,149	274,103
Connecticut .....	37,683	46,552	31,800	13,086	129,120
Delaware .....	8,845	6,029	21,948	19,873	56,695
District of Columbia.....	NA	NA	0	0	NA
Florida .....	13,025	35,121	142,104	319,351	509,601
Georgia .....	NA	NA	NA	20,507	NA
Hawaii .....	524	1,749	463	0	2,735
Idaho .....	17,870	12,624	33,831	0	64,325
Illinois .....	445,054	187,862	309,467	40,700	983,082
Indiana .....	NA	NA	NA	7,648	NA
Iowa.....	71,541	44,813	103,860	5,245	225,459
Kansas .....	NA	NA	NA	35,857	NA
Kentucky .....	59,662	36,301	92,683	5,585	194,231
Louisiana.....	44,525	23,541	969,981	320,367	1,358,414
Maine.....	965	2,555	2,507	0	6,028
Maryland .....	NA	NA	39,858	16,382	NA
Massachusetts .....	NA	NA	NA	8,136	NA
Michigan.....	349,334	175,362	285,977	51,136	861,809
Minnesota.....	NA	89,025	NA	6,590	NA
Mississippi.....	NA	NA	NA	101,613	NA
Missouri.....	112,803	63,897	NA	19,400	NA
Montana .....	19,684	11,931	23,091	289	54,995
Nebraska.....	40,412	28,000	39,589	4,548	112,549
Nevada.....	28,924	23,690	33,250	65,131	150,997
New Hampshire.....	6,626	NA	5,787	572	NA
New Jersey .....	NA	NA	NA	32,615	NA
New Mexico.....	39,727	30,883	NA	35,594	NA
New York.....	NA	NA	NA	181,817	NA
North Carolina .....	53,069	38,899	113,506	10,562	216,037
North Dakota .....	NA	NA	NA	0	NA
Ohio.....	NA	NA	NA	11,097	NA
Oklahoma.....	62,023	38,315	141,679	169,826	411,843
Oregon .....	37,974	28,340	NA	23,309	NA
Pennsylvania.....	240,754	143,660	242,580	10,363	637,358
Rhode Island .....	16,601	11,838	34,857	0	63,296
South Carolina .....	25,708	21,461	103,249	5,107	155,526
South Dakota .....	11,766	9,578	5,036	2,526	28,906
Tennessee .....	NA	NA	NA	3,453	NA
Texas.....	167,593	187,948	NA	1,207,294	NA
Utah.....	55,474	30,361	40,988	6,481	133,303
Vermont.....	2,585	2,409	2,819	249	8,062
Virginia .....	NA	59,723	95,232	23,459	247,439
Washington .....	NA	NA	NA	6,700	NA
West Virginia .....	NA	NA	NA	386	NA
Wisconsin.....	127,909	87,810	147,543	14,068	377,330
Wyoming .....	11,926	9,216	NA	167	NA
<b>Total.....</b>	<b>4,674,273</b>	<b>3,060,583</b>	<b>8,660,692</b>	<b>3,113,420</b>	<b>19,508,967</b>

NA = Not available.

**Note:** Totals may not equal sum of components due to independent rounding.**Source:** Energy Information Administration (EIA), Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."

**SR6. Average Prices of Natural Gas by State, 1999**  
(Dollars per Thousand Cubic Feet)

State	City Gate	Residential	Commercial	Industrial	Electric Utilities
Alabama.....	3.06	8.37	6.71	3.32	2.82
Alaska.....	1.32	3.64	2.16	1.25	1.59
Arizona.....	2.72	9.18	6.18	3.42	2.67
Arkansas.....	NA	NA	NA	NA	2.60
California.....	2.60	6.62	5.83	NA	2.76
Colorado.....	NA	5.24	NA	NA	2.69
Connecticut.....	5.03	10.49	6.59	4.18	2.72
Delaware.....	3.45	8.62	7.02	4.16	2.91
District of Columbia.....	8.88	NA	NA	—	—
Florida.....	3.36	11.91	6.51	3.99	3.10
Georgia.....	NA	NA	NA	NA	2.57
Hawaii.....	5.62	18.97	14.33	8.21	—
Idaho.....	2.23	5.43	4.77	3.30	—
Illinois.....	3.00	5.53	5.25	4.04	2.40
Indiana.....	NA	NA	NA	NA	2.98
Iowa.....	3.28	6.11	4.80	3.96	3.08
Kansas.....	NA	NA	NA	NA	2.37
Kentucky.....	3.27	5.73	5.11	3.30	3.20
Louisiana.....	2.52	6.90	5.69	2.53	2.58
Maine.....	NA	7.45	6.68	4.87	—
Maryland.....	NA	NA	NA	5.57	3.11
Massachusetts.....	NA	NA	NA	NA	2.71
Michigan.....	2.83	5.12	4.84	3.92	1.52
Minnesota.....	NA	NA	4.44	NA	2.59
Mississippi.....	NA	NA	NA	NA	2.47
Missouri.....	3.34	6.28	5.38	NA	2.64
Montana.....	2.57	5.15	5.10	4.55	4.02
Nebraska.....	3.12	5.06	4.10	3.39	2.74
Nevada.....	2.59	7.10	5.99	4.63	2.51
New Hampshire.....	3.82	7.73	NA	4.56	2.87
New Jersey.....	NA	NA	NA	NA	3.08
New Mexico.....	NA	4.61	3.26	NA	2.31
New York.....	NA	NA	NA	NA	2.84
North Carolina.....	3.33	8.32	6.31	3.73	2.85
North Dakota.....	NA	NA	NA	NA	—
Ohio.....	NA	NA	NA	NA	3.04
Oklahoma.....	2.84	5.85	5.11	3.75	2.78
Oregon.....	2.94	7.17	5.80	NA	1.96
Pennsylvania.....	3.64	8.22	8.38	4.21	3.02
Rhode Island.....	3.95	9.53	8.01	3.96	—
South Carolina.....	3.47	8.61	6.52	3.32	3.63
South Dakota.....	3.52	5.83	4.52	3.36	—
Tennessee.....	NA	NA	NA	NA	—
Texas.....	2.84	6.03	4.39	NA	2.51
Utah.....	2.98	5.37	4.12	3.02	2.64
Vermont.....	2.85	7.13	5.54	3.08	3.23
Virginia.....	NA	NA	6.04	3.91	3.19
Washington.....	NA	NA	NA	NA	—
West Virginia.....	NA	NA	NA	NA	2.98
Wisconsin.....	3.07	6.19	4.94	3.87	2.93
Wyoming.....	NA	5.28	4.50	NA	3.88
<b>Total.....</b>	<b>3.11</b>	<b>6.61</b>	<b>5.26</b>	<b>3.04</b>	<b>2.62</b>

NA = Not available.  
— = Not applicable.

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