Natural Gas Monthly October 2004

Energy Information Administration Office of Oil and Gas U.S. Department of Energy Washington, DC 20585

Natural Gas Publications and Databases Available Electronically

All of the natural gas publications are available electronically on the EIA website. Certain natural gas data are also provided in database formats on the web site. The table below is a guide to the major natural gas products.

Product	Format	Contents
<u>Publications</u>		
Weekly Natural Gas Storage Report	HTML	Weekly estimates of natural gas in underground storage for the U.S. and three regions of the U.S.
Natural Gas Weekly Update	PDF	Analysis of current price, supply and storage data
Natural Gas Monthly	PDF, HTML, XLS	Monthly supply, disposition, and price data
Natural Gas Annual	PDF, XLS	Annual supply, disposition, and price data
U.S. Crude Oil, Natural Gas and Natural Gas Liquids Reserves	PDF, HTML	Proved reserves in the United States
Oil and Gas Field Code Master List	PDF	Listing of U.S. oil and gas field names
<u>Databases</u>		
Monthly Data	TXT	Tables 1-6, and 9 from the Natural Gas Monthly
Historical Monthly Data	EXE	Consumption and price data, 1984-present
Annual Data	XLS, TXT	Data from the Natural Gas Annual
Historical Annual Data	XLS, TXT	Data from the Historical Natural Gas Annual
Field Codes	EXE	Oil & Gas Field Code Master List
<u>Applications</u>		
EIA-176 Query System	EXE	Company filings to the Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"

PDF files are image files that can be viewed through Adobe Acrobat.

XLS (Excel) files are in spreadsheet format and are viewable and downloadable to the user's PC.

TXT files are ASCII text. They may be replications of published tables, including table titles, column and row identification, or they may be flat files with a minimum of content description suitable for input to spreadsheets or other programs.

EXE files are executables that can be downloaded then opened. Databases are distributed as self-executing Zipped archives which spawn numerous data files and documentation. Applications are distributed as self-executing Zipped archives which initially generate numerous files and then form an application which is installed on the user's PC.

Preface

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

General questions and comments regarding the NGM may be referred to Roy Kass (202) 586-4790. Specific technical questions may be referred to the appropriate persons listed in Appendix D.

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

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

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

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

Common Abbreviations Used in the Natural Gas Monthly

AGA	American Gas Association	Mcf	Thousand cubic feet
Bcf	Billion cubic feet	MMBtu	Million British thermal units
DOE	U.S. Department of Energy	MMcf	Million cubic feet
EIA	Energy Information Administration, U.S. Department of Energy	MMS	Minerals Management Service, U.S. Department of the Interior
FERC	Federal Energy Regulatory Commission	OCS	Outer Continental Shelf
IOGCC	Interstate Oil and Gas Compact Commission	Tcf	Trillion cubic feet
LNG	Liquefied natural gas		

Contents

Highlights		
Appendices A. Explanatory Notes	77 81	
Glossary	89	
Tables		
1. Summary of Natural Gas Production in the United States, 1999-2004	3	
2. Supply and Disposition of Dry Natural Gas in the United States, 1999-2004	4	
3. Natural Gas Consumption in the United States, 1999-2004	6	
4. Selected National Average Natural Gas Prices, 1999-2004	8	
5. U.S. Natural Gas Imports and Exports, 2002-2004	10	
6. Summary of U.S. Natural Gas Imports and Exports, 1999-2003	14	
7. Marketed Production of Natural Gas, by State and Federal Gulf of Mexico, 1999-2004	15	
8. Gross Withdrawals and Marketed Production of Natural Gas, by State and Federal Gulf of Mexico, June 2004	18	
9. Underground Natural Gas Storage - All Operators, 1999-2004	19	
10. Underground Natural Gas Storage - by Season, 2001-2004	21	
11. Underground Natural Gas Storage - Salt Cavern Storage Fields, 1999-2004	22	
12. Underground Natural Gas Storage - Storage Fields Other than Salt Caverns, 1999-2004	23	
13. Net Withdrawals from Underground Storage, by State, 2002-2004	24	
14. Activities of Underground Natural Gas Storage Operators, by State, August 2004	28	
15. Natural Gas Deliveries to Residential Consumers, by State, 2002-2004	29	
16. Natural Gas Deliveries to Commercial Consumers, by State, 2002-2004	33	

17.	Natural Gas Deliveries to Industrial Consumers, by State, 2002-2004	37
18.	Natural Gas Deliveries to Electric Power Consumers, by State, 2002-2004	41
19.	Natural Gas Deliveries to All Consumers, by State, 2002-2004	45
20.	Average City Gate Price, by State, 2002-2004	49
21.	Average Price of Natural Gas Sold to Residential Consumers, by State, 2002-2004	52
22.	Average Price of Natural Gas Sold to Commercial Consumers, by State, 2002-2004	55
23.	Average Price of Natural Gas Sold to Industrial Consumers, by State, 2002-2004	58
24.	Average Price of Natural Gas Sold to Electric Power Consumers, by State, 2002-2004	61
25.	Percentage of Total Deliveries Included in Commercial and Industrial Price Estimates, by State, 2002-2004	64
A1	. Methodology for Reporting Initial Monthly Natural Gas Supply and Disposition Data	71
C1.	Standard Error for Natural Gas Deliveries and Price to Consumers by State, August 2004	86
Fiç	gures	
1.	Production, Consumption and Net Imports of Natural Gas in the United States, 2002-2004	5
2.	Natural Gas Deliveries to Consumers in the United States, 2002-2004	7
3.	Average Consumer Price of Natural Gas in the United States, 2002-2004	9
4.	Average Price of Natural Gas in the United States, 2002-2004	9
5.	Working Gas in Underground Natural Gas Storage in the United States, 2001-2004	20
6.	Percentage of Total Deliveries Included in Commercial and Industrial Price Estimates, 2002-2004	70

1

Highlights

This issue of the *Natural Gas Monthly (NGM)* contains more timely consumption data. The state and national-level estimates of natural gas volume and price data are presented through August 2004, although electric power prices are available through June 2004.

Recent analyses of the natural gas industry are available on the EIA web site, www.eia.doe.gov, under "Featured Topics" to the right side of the home page. The first two reports listed below are updated regularly. These reports are:

- Weekly Natural Gas Storage Report -- a weekly report containing estimates of natural gas in underground storage for the United States and three regions of the United States released each Thursday at 10:30 a.m. at the EIA Web site, except for certain weeks with Federal holidays. The report, first released on May 9, 2002, contains estimates of storage for the current and prior week and comparisons to previous periods. Links are provided to papers describing survey Form EIA-912, "Weekly Underground Natural Gas Survey," and the estimation methodology.
- Natural Gas Weekly Update -- a current analysis of the industry each week, including information on natural gas spot and futures prices and storage activities. This page also provides links to numerous other EIA sites dealing with natural gas.

 Short-Term Energy Outlook -- projections of energy consumption, supply, and price by type of fuel, including natural gas, for the next 18 months.

In addition to the *NGM*, *STEO*, *Weekly Natural Gas Storage Report*, and *Natural Gas Weekly Update* which appear regularly on the EIA website, two new information products have recently been released:

- U.S. Imports and Exports: Issues and Trends 2003, which examines U.S. international trade of natural gas during 2003, as well as historical trends and an analysis of the near-term outlook for imports and exports.
 - http://www.eia.doe.gov/pub/oil_gas/natural_gas/feature_articles/2004/ngimpexp/ngimpexp.pdf.
- The Basics of Underground Natural Gas Storage, which provides an overview of storage facilities and operations.
 http://www.eia.doe.gov/pub/oil_gas/natural_gas/analysis_publications/storagebasics/storagebasics.
 http://www.eia.doe.gov/pub/oil_gas/natural_gas/analysis_publications/storagebasics/storagebasics.

Other natural gas data and analyses may be found through the "Natural Gas" section of EIA's web site. In the center section of the home page, the user should place the cursor on "By Fuel," then click on "Natural Gas" in the drop-down menu.