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STATEMENT OF
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BEFORE THE
SUBCOMMITTEE ON COMMERCE, CONSUMER AND MONETARY AFFAIRS
HOUSE COMMITTEE ON GOVERNMENT OPERATIONS
IN WARREN, PENNSYLVANIA
ON
NATURAL GAS PRICES



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Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss natural gas prices. Recent price increases have been a matter of great concern to both the public and the Congress, here and throughout the nation.

My testimony today is based on completed and ongoing efforts to analyze developments in the natural gas market and evaluate the effectiveness of federal regulation of the natural gas industry. Among our current efforts is a series of case studies of why natural gas prices have increased in five cities around the country.

Although Warren, Pennsylvania, was not included in any of these case studies, we obtained some data from a major local natural gas distributor and one of its principal suppliers. These data were obtained specifically for these hearings and included to provide some local perspective. We would like to point out, however, that these local data, as well as other data referred to in this statement from various public and private organizations,

have not been independently verified. Also, all dollar amounts in this statement are in current terms and not adjusted for inflation.

My testimony will discuss the following four issues on a national and local level:

- natural gas price and use trends during the past few years,
- reasons for price increases,
- adjustments in natural gas markets, and
- assistance to consumers to help pay energy bills and conserve energy.

Before discussing these issues, I thought it might be useful to describe briefly the structure and regulation of the natural gas industry, including, where appropriate, information on northwestern Pennsylvania.

BACKGROUND ON THE NATURAL GAS INDUSTRY

The natural gas industry is comprised of three segments--production, transmission, and distribution--which are physically interconnected by a network of pipes throughout the nation. Companies in the various segments may also be related through corporate affiliations.

End-users of natural gas typically purchase their gas from one of the approximately 1,600 distribution companies throughout the nation. These companies are usually local public utilities, serving a specific market area and under the jurisdiction of a state or local regulatory body. In this part of the country, the

major distributors are the National Fuel Gas Distribution Company (National Fuel), Columbia Gas of Pennsylvania, Inc. (Columbia), and Peoples Natural Gas Company (Peoples). National Fuel serves most of the gas users in Warren County as well as gas users in 13 other counties in Pennsylvania. Columbia also serves Warren County and 25 other Pennsylvania counties. Peoples serves 16 counties in western Pennsylvania. The companies' natural gas distribution activities in Pennsylvania are regulated by the state public utility commission.

Distribution companies buy most of their supplies from interstate transmission, or pipeline, companies. These companies transport gas from producing areas to consuming areas. The Federal Energy Regulatory Commission regulates 129 interstate pipeline companies. Included among these are National Fuel's largest supplier--the Tennessee Gas Pipeline Division of Tenneco, Inc., National Fuel's other principal suppliers, and Peoples' and Columbia's principal suppliers. Intrastate pipeline companies in the producing states are generally subject to state regulation.

Pipeline companies, in turn, purchase most of their supplies from producers. These are the thousands of small, medium, and large firms which explore for, drill for, and produce gas. All domestic production is subject to federal price regulation. Texas, Louisiana, Oklahoma, New Mexico, and Kansas--in descending order--accounted for about 87 percent of production in 1982. Gas produced in Pennsylvania was less than 1 percent of total domestic production. Domestic producers supply about 95 percent of the

nation's natural gas; the remaining 5 percent is imported from Algeria, Canada, and Mexico.

NATIONAL LEVEL

Although the magnitude of recent price increases has attracted widespread attention, natural gas prices have been rising for many years. Originally, natural gas was largely a by-product of petroleum extraction, and 3 decades ago producers sold gas for less than 10 cents per thousand cubic feet (Mcf) at the wellhead. The comparable price in September 1983 was \$2.66 per Mcf. On a national basis, residential users of natural gas paid an average of \$2.98 per Mcf of gas in 1979; in 1983, they paid about \$6.06 per Mcf.

End-user prices basically consist of three components: (1) the cost of purchased gas, (2) transmission expenses, and (3) distribution expenses. Of these, the cost of natural gas was the principal reason for higher natural gas prices between 1979 and 1983. Reasons for increasing natural gas prices include increased ceiling prices for gas purchased from producers, incentive prices for high-cost gas, and depletion of reservoirs of old low-cost gas.¹ Also, decreased sales levels contributed to higher per-unit transmission and distribution costs.

Pipeline purchases from producers are governed by the Natural Gas Policy Act of 1978. The act established eight major price

¹Old gas is generally defined as gas produced before enactment of the Natural Gas Policy Act of 1978.

categories of natural gas and numerous subcategories based on such factors as when and where the gas was discovered and produced.

Prices paid by pipeline companies depend on both the quantity of domestic gas in each category and the price of gas in each category, as well as the quantity and price of imported gas. Several factors affect the quantities and prices. One of these is the regular increases in ceiling prices for the various categories. For example, the ceiling price for new natural gas increased from about \$2.12 per Mcf in December 1978 to about \$3.49 per Mcf in December 1983.

Moreover, under the act's provisions, the Federal Energy Regulatory Commission established incentive prices for certain types of high-cost gas. In December 1983, this price was \$5.56 per Mcf. The Commission also removed federal price ceilings on certain other types of high-cost gas.²

The depletion of old gas reservoirs also contributes to higher natural gas prices. To maintain a stable gas supply, the continuing depletion of existing reservoirs is balanced by the addition of new ones. This turnover can lead to higher prices because production from the newer reservoirs generally commands a higher price than production from the older ones.

Costs of moving gas from the producing areas to and within the consuming areas also increased. Part of the increase was due

²The first category primarily includes gas produced from tight formations; under normal conditions gas usually seeps slowly out of such formations. The second category primarily includes gas produced from wells more than 15,000 feet deep.

to higher costs for labor, equipment, and other transmission and distribution costs. Part of the increase was also due to lower sales levels. Sales levels affect per-unit costs because many transmission and distribution costs change little even if sales decrease. Thus, the higher costs are spread over fewer units.

There is currently a surplus of gas on the market. This surplus is a dramatic change from the mid-1970's when there were gas curtailments and restrictions on new service. In fact, during that time, National Fuel limited the number of new residential customers it would hook up in Pennsylvania.

Nonetheless, over the past year or so, natural gas markets have been responding to the current surplus. For example, some pipelines have exercised their market-out provisions in certain contracts with producers which allow them to reduce the price paid for new and high-cost gas. The results of such adjustments are being reflected in gas prices. One source of estimated prices is the Department of Energy's Energy Information Administration. It projected a rise in gas prices to residential customers of only 9 percent from the third quarter in 1983 to the third quarter in 1984,³ as compared to a 17 percent rise from the third quarter in 1982 to the third quarter in 1983.

In terms of consumption, nationwide use of natural gas declined from about 20 trillion cubic feet in 1979 to about 18 trillion cubic feet in 1982. This represents a net decrease of

³Energy Information Administration, Short-Term Energy Outlook, DOE/EIA-0202 (83/4Q), Nov. 1983, table 4.

about 11 percent. However, residential consumption dropped by 7 percent, and industrial consumption dropped 15 percent during this period. The principal reasons for this decreased consumption were the weather, poor economic conditions, and higher gas prices.

LOCAL LEVEL

As mentioned earlier, we obtained some data from one of this area's major distributors--National Fuel--and its largest supplier--the Tennessee Gas Pipeline Division of Tenneco (Tennessee Gas).

National Fuel's residential users paid an average of \$2.85 per Mcf in 1979 and \$5.96 per Mcf in 1983. This represents an increase of 109 percent over that period, as compared to 103 percent on a national basis.

The factors causing these local increases are generally the same as those affecting prices nationally. Based on Energy Information Administration data,⁴ Tennessee Gas' projected purchases from producers illustrate the effect of these factors. The average price paid per Mcf increased from \$1.78 in early 1981 to \$2.86 in early 1983. This was due to increases in the price of all types of gas and the purchase of greater quantities of more expensive gas.

Old and relatively inexpensive gas--costing an average of \$1.69 per Mcf in early 1983--comprised about 77 percent of Tennessee Gas' total purchases in early 1981, but such purchases declined to about 51 percent in early 1983. Conversely, new and more

⁴Energy Information Administration, Recent Market Activities of Major Interstate Pipeline Companies, DOE/EIA-0440, Jan. 1984, table B-41.

expensive gas--which cost \$3.38 per Mcf in early 1983--increased from 23 percent to 37 percent of Tennessee Gas' purchases. Finally, high-cost gas--which cost \$6.41 per Mcf in early 1983--increased from less than 1 percent of Tennessee Gas' purchases in early 1981 to 12 percent in early 1983.

Tennessee Gas representatives told us that the company has taken steps to reduce its gas costs, such as reducing its price of new and high-cost gas by twice exercising the market-out provisions in certain contracts with producers. Also, National Fuel representatives told us that the company had a proposal before the state public utility commission to reduce prices to large volume users.

Local gas consumption is also following the national pattern of decline. National Fuel's sales in Pennsylvania declined from about 75 billion cubic feet in 1979 to 54 billion cubic feet in 1983. Residential consumption decreased 22 percent, while industrial consumption decreased 35 percent.

ENERGY ASSISTANCE TO CONSUMERS

The federal government, through the Low-Income Home Energy Assistance Program,⁵ provides funding to help low-income persons pay their energy bills. Federal funding for this program amounted to about \$2 billion in fiscal year 1983 and \$1.9 billion in fiscal year 1984. States may use up to 15 percent of the funds received under the program to weatherize the homes of low-income families.

⁵This assistance was authorized by the Omnibus Budget Reconciliation Act of 1981, Pub. L. 97-35, Aug. 13, 1981.

In Pennsylvania, the Department of Public Welfare is responsible for administering the program. In fiscal year 1983, about \$5.9 million in fuel assistance grants was provided for approximately 20,500 of National Fuel's Pennsylvania customers, or an average of \$304 per customer.

Another type of assistance is available to identify opportunities to save energy. Federal law⁶ requires that utilities like National Fuel offer energy audits to their customers. These audits, conducted by trained specialists, are designed to identify the energy and cost savings likely to be realized through the purchase and installation of conservation or renewable-resource measures.

By the end of 1983, National Fuel completed 1,116 audits. National Fuel estimates that the cost of each audit is \$180, but under the program, a utility cannot charge a customer more than \$15, which is the amount National Fuel charges. The remaining costs are added to the company's operating costs and recovered from all customers.

In addition, the Department of Energy has provided funding since 1977 to help weatherize the homes of low-income families through such improvements as roof or attic insulation, weatherstripping, caulking, and storm doors and windows.⁷ Total weatherization funding, including low-income home energy assistance funding, for fiscal year 1983 and estimated for fiscal year

⁶National Energy Conservation Policy Act, Pub. L. 95-619, Nov. 9, 1978.

⁷The Department's program was authorized by the Energy Conservation and Production Act, Pub. L. 94-385, Aug. 14, 1976.

1984 was about \$500 million annually. We evaluated the Department's weatherization program in its first 3 years.⁸

In these reports, we identified problems that hampered the program, such as incomplete or inadequate weatherization work, lack of reliable data on energy savings resulting from the program, and weak program monitoring at local, state, and federal levels. Our follow-up of the Department's efforts to correct these problems disclosed some actions toward assuring quality workmanship and strengthening program monitoring through issuance of monitoring guidelines and use of contractors for monitoring.

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Mr. Chairman, this concludes my statement. We will be pleased to respond to your questions.

⁸Evaluation of Four Energy Conservation Programs--Fiscal Year 1977, EMD-78-81, Nov. 21, 1978; Slow Progress and Uncertain Energy Savings in Program to Weatherize Low-Income Households, EMD-80-59, May 15, 1980; Uncertain Quality Energy Savings and Future Production Hamper the Weatherization Program, EMD-82-2, Oct. 26, 1981.

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