STATEMENT OF DAVID L. BODE
ASSISTANT DIRECTOR
NATURAL RESOURCES AND COMMERCE
CONGRESSIONAL BUDGET OFFICE

Before the
Subcommittee on Commerce, Consumer and Monetary Affairs
Committee on Government Operations
House of Representatives

February 13, 1984
Mr. Chairman, I am pleased to appear before your Committee to discuss natural gas pricing policy. In the past, the partial deregulation of natural gas, scheduled for January 1, 1985, has raised concerns over the anticipated rise in gas prices from regulated to "free-market" levels. But today, substantial evidence exists that the average price of gas has already risen close to market parity. Thus, from a national perspective, the major issue in gas pricing today may be improved efficiency and competitiveness within the gas market, rather than further redistribution of income from consumers to gas producers.

THE NATURAL GAS POLICY ACT OF 1978

In 1978, the Congress established as national policy the eventual deregulation of the wellhead price of natural gas. This action, embodied in the Natural Gas Policy Act (NGPA), was taken in response to regulation-induced gas shortages in the winter of 1976-1977 that caused factory closings and layoffs in the East and Midwest. The NGPA first brought interstate and intrastate gas under a common set of regulations, thereby reducing the price disparities between the two markets. To protect consumers, it maintained price ceilings for older, cheaper gas. To provide incentives for new production, it immediately deregulated gas from deep, high-cost wells and established pathways to deregulation in 1985 for other
categories of newly produced gas. The legislation sought to raise gradually
the equivalent price of most gas to the then-projected price of oil in
1985—about $15 per barrel in 1977 dollars. With the eventual depletion of
older gas fields, and the ensuing shift to deregulated, newer gas, the NGPA
would eventually lead all gas production toward its decontrolled price.

What the framers of the act could not envision was that the price of
oil on which the act was predicated would rise substantially in the interim.
By 1980, oil prices exceeded $30 per barrel, and it appeared that the gap
between oil and gas prices that the NGPA was intended to close would widen
instead. This raised concern that deregulation in 1985 would cause a sudden
rise in average natural gas prices as the controls on new gas were removed.

However, average natural gas prices soon began to climb toward oil
parity despite the NGPA controls, largely because these controls were
bypassed by the "high-cost" gas deregulated in 1978 under section 107 of the
NGPA. Gas pipeline companies could contract to buy the more readily
available high-cost gas at prices far in excess of market prices and then
average in its cost with the cheaper, regulated gas. For example, by June
1983, the price of decontrolled high-cost gas was about $6.53 per thousand
cubic feet, substantially above the average price of all gas (old, new, and
high cost), which was $2.79 per thousand cubic feet. Thus, while the NGPA
did not allow for the deregulation of all gas, it did permit the average price
of gas to reach about the same level that it would have reached had all gas been decontrolled. While this has dissipated fears of a large, general price shock in 1985, other price-related issues remain.

THE ROLE OF NATURAL GAS CONTRACTS

The oil crisis of 1979-1980 and the ensuing price shock markedly increased the demand for natural gas as a substitute for oil. But much of the new supplies were in the higher-cost categories. In their attempts to lock in these incremental supplies for the long term, many pipeline companies signed contracts that emphasized security of supply over other considerations. These contracts included "take-or-pay" provisions that obligated the pipelines to pay for gas even if it could not be marketed; "indefinite price escalators" that set the price of gas equal to some multiple of an alternative fuel, usually distillate oil; and "most favored nation" clauses that tied the price in any given contract to the highest price paid to nearby producers.

Pipelines had two principal incentives to contract for supplies in this way. First, the memory of the shortages of 1976-1977 made security of supply important to customers, regulators, and pipeline managers. Second, the Federal Energy Regulatory Commission (FERC) allows pipeline com-
panies to earn a return on the value of their pipelines only if they can demonstrate that they have enough gas under contract to keep the pipeline "used and useful." In addition, FERC prohibits large gas consumers from contracting for gas from a pipeline unless it can demonstrate its ability to satisfy their needs for many years to come. Thus, gas pipeline companies had strong economic and regulatory incentives to keep their pipelines full. In practice, this meant acquiring large amounts of gas at prices above those sustainable in competitive markets and guaranteeing the purchase of that gas through long-term contracts.

CURRENT CONDITIONS IN NATURAL GAS MARKETS

The recession of 1981-1982 and the simultaneous worldwide decrease of oil demand markedly changed conditions in the gas market. Gas prices historically had been lower than their oil equivalent. But as more and more high-cost gas was contracted for by pipelines and as the price of oil fell during the recession, the gap between oil and gas prices closed rapidly, and prices approached the level at which gas was as expensive to burn as oil.

Gas prices now appear to have risen to levels at which they rival other fuels. Indeed, many pipelines are now renegotiating downward the prices they pay to gas producers. For example, the average price of high-cost gas
fell by about $1 per thousand cubic feet from June 1983 to December 1983. These price declines are evidence that demand for relatively higher price gas has fallen and that pipelines can no longer raise the price their customers pay for gas without loss of markets.

As pipelines find themselves unable to sell all their gas, their take-or-pay provisions go into effect. Obligated to buy new and more expensive supplies, many pipelines are forced to cut back their purchases of the less expensive gas, which typically had been procured under less rigorous take-or-pay arrangements. The result is just the opposite of the sequence that would presumably occur in a competitive market. Further, some gas customers could actually face price increases above market levels when the remaining high-cost gas is deregulated on January 1, 1985, an artifact of contract provisions and the mix of old and deregulated gas enjoyed by particular pipelines.

When buyer-protection clauses exist, these problems could be mitigated. For example, a "market-out" provision allows the buyer to refuse delivery if the gas is determined to be unmarketable at the new price, although the conditions for determining marketability are often ill-defined. Similarly, an "if-disallowed" provision would not permit a new price to be passed through to the buyer if the FERC or a state public utility commission determined that the price was unjustified. Buyer-protection clauses have
become virtually standard in the most recent natural gas contracts, further evidence that gas prices are roughly at oil-equilibrium levels. For example, 85 percent of the natural gas contracted for in 1982 was subject to some form of market-out provision. Nevertheless, the problem of the existing contracts, under which most gas is sold, remains.

Under decontrol, gas prices could fall further only if pipelines could reorder the purchasing of their supplies, buying lower-cost gas before more expensive gas. One solution is voluntary renegotiation of contract provisions. Indeed, some pipelines and producers appear to have recognized the need for such adjustments. However, the extent of contract readjustment is not known at the present time, and probably varies widely among pipelines. Alternatively, legislation could allow pipelines to renegotiate or even dissolve their contracts with high-cost producers. If pipelines achieved this flexibility, then the oversupply of gas now available in the domestic market would put downward pressure on prices.

**NATURAL GAS PRICING AND CONGRESSIONAL ACTION**

Two proposals have figured most prominently in the deliberations of the 98th Congress: a Senate bill aimed at early decontrol, and a House bill that would roll back prices and delay wellhead price deregulation. Only
their central features are presented here. The details can be found in our recent report, *Natural Gas Price Decontrol: A Comparison of Two Bills*, copies of which have been made available to this Subcommittee.

**Gas Prices Under the Senate Bill**

The underlying philosophy of the Senate bill (S. 1715) is that consumers would benefit most if all gas, not just new gas, were decontrolled. Its premise is that increased gas supplies and competition from oil would prevent pipelines from passing on to consumers any higher prices resulting from decontrol. Temporary price ceilings would be put in place to phase gas prices toward a free market indicator by 1987, after which they would be decontrolled. Provisions for contract renegotiation would allow less expensive gas to displace the more expensive.

As pipelines escape from their high-cost gas contracts and resequence the purchase of their supplies, there would be a substantial redistribution of revenues within the natural gas industry--producers of high-cost gas would suffer while producers of low-cost, older gas would receive a substantially higher price. Redirecting revenues from high-cost to low-cost producers could encourage greater efficiency in the use of existing gas fields and in
the search for new gas supplies. This would result in both higher levels of domestic gas reserves and possible price decreases.

There are risks in the Senate proposal, however. Equalizing the wellhead prices of all the nation's gas would change the prices that many consumers pay, depending on whether the pipelines that serve them have high- or low-priced gas under contract. It is not possible, however, to ascertain which customers would be affected without detailed knowledge of local supply conditions. In addition, the ability of the Senate bill to reduce average prices (relative to NGPA levels) beyond 1987 depends upon increased volumes of low-cost gas becoming available. While some supply response is likely, its magnitude and timing are conjectural.

Gas Prices Under the House Bill

An alternative approach to natural gas pricing is found in H.R. 2154, proposed by Congressman Gephardt. Its underlying premise is that consumers are best protected in the short term by direct regulatory controls. In the long run, the House bill shares the market orientation of the NGPA and the Senate bill—eventually the wellhead price of all gas would be decontrolled.
The House proposal would defer most of the pricing provisions of the NGPA by two years. Had the bill been enacted on January 1, 1984, it would have rolled back the price allowed each category of gas under the NGPA to the allowed price on January 1, 1982, in effect cancelling the price increases granted over the past two years. In addition, it would cap the price of high-cost and imported gas. Once reestablished at these levels, gas prices would be allowed to escalate at three-quarters of the rate of inflation; by contrast, the NGPA allows gas prices to increase by the full inflation rate. The House proposal would then allow those categories of gas that were to be decontrolled under the NGPA in January 1985 to be decontrolled in January 1987.

The effect of the House bill would be to keep natural gas prices lower throughout the 1980s than they would have been under the NGPA. This would yield a small, yet positive, increment to the economy at large. However, lower wellhead prices would also discourage additions to gas reserves and lead to higher gas imports.

Comparing the Alternatives

Three conclusions can be drawn by comparing these alternatives. First, the tradeoffs between the House and Senate approaches involve lower
prices and smaller gas reserves in the former case, and higher prices and
greater gas reserves in the latter. Second, these are short-term trade-
offs--by 1990 the differences in delivered gas price among the alternatives
essentially vanish. And third, the price differences up to 1990 are small
both in absolute terms and relative to the price increases of the past several
years.

This suggests that natural gas policy should be concerned with
efficient markets as well as consumer price. Three features of these bills
seek to strengthen the economic signals between buyer and seller: provi-
sions for adjustments in gas contracts; "contract carriage" status for pipe-
lines; and increased regulatory authority for the FERC.

**Contract Adjustments.** Both the Senate and House bills would severely
limit the ability of take or pay requirements and indefinite escalators to
raise prices above market levels. Although the approaches taken in each bill
differ in detail, their net effect would be to transfer some of the risk
associated with marketing natural gas from pipelines to producers.

**Contract Carriage.** Both the Senate and the House proposals would
require pipelines to carry gas at the request of any producer or any other
pipeline, as long as capacity was available and as long as doing so would not
interfere with the pipeline's obligations to its existing customers. This
arrangement, termed mandatory contract carriage, would be similar to the common carrier status of railroads. It would add flexibility and competitiveness to gas markets by expanding the number of producers each potential gas purchaser could do business with. The Senate bill would also extend this requirement, on a limited basis, to local distribution companies (which buy gas from pipelines and sell it to local users). If it met fairly rigorous criteria, a local gas user, such as a factory, could negotiate directly with a producer and secure contract carriage all the way from the wellhead to the user's facility.

Mandatory contract carriage, however, raises concerns with the allocation of fixed costs between residential and industrial users. In general, only industrial users are large enough to contract directly with producers. To the extent that industrial customers switched to contract carriage, pipelines and distribution companies could be forced to assign more of their fixed costs to residential customers. This could result in far higher residential gas bills. The FERC and state utility commissions could avoid this situation, however, by incorporating fixed costs into the rates they compelled pipelines to charge for contract carriage.

**Increased Regulatory Authority for FERC.** Both the Senate and House bills would allow the FERC to limit the extent to which a pipeline could pass through its purchased gas costs to local distribution companies and final
consumers. Under the NGPA, federal regulators may prohibit the pass-through of gas costs that reflect fraud or abuse. The Senate bill would expand this authority, allowing FERC the discretion to prohibit full pass-through for gas priced in excess of 110 percent of the indicator price defined by the bill. The House bill would give FERC still broader authority to disallow costs that do not reflect an effort to "minimize amounts paid for natural gas." FERC would continually review and publicly post all gas contracts in order to fulfill this responsibility.

CONCLUSIONS

In summary, Mr. Chairman, natural gas prices, on average, appear to have reached market levels already. This means that their future direction will be more closely linked to the price of oil than to any other factor. Thus the principal concern with natural gas policy is the efficient communication of economic signals between buyer and seller. Current contract provisions and regulatory practices may impede those signals and could result in price increases above market levels in some locations in 1985. Congressional action, such as that recently considered by both the House and Senate, could relieve this problem and improve the long-run functioning of natural gas markets.