NATURAL GAS POLICY ACT

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ISSUE DEFINITION

The Natural Gas Policy Act of 1978 (NGPA) culminated decades of dispute over natural gas policy and was the "centerpiece" of President Carter's National Energy Act. Now there are many issues of both regulatory and legislative concern under discussion. These items were unanticipated by the framers of this difficult and delicate compromise. Generally speaking, they all stem from the fact that oil prices more than doubled in 1979 and 1980. The NGPA's framers set wellhead gas prices within the new law's framework in such a way that they would converge on oil equivalent prices -- as they were then perceived -- in real dollar terms by 1985. As events unfolded, the statutory pricing schedules that the new law contained became out of context with oil prices just a year after NGPA was passed. Additionally, there are a significant number of other unanticipated matters related to the nature of the regulated gas pipeline industry and its interaction with NGPA that came to bear.

By 1982, dissatisfaction with NGPA was becoming more vocal. Interstate gas pipelines were complaining about high wellhead prices in some cases, as well as a variety of provisions in contracts with producers which they found disadvantageous. Consumer complaints were being heard because of large increases in residential gas bills. And producers voiced concerns about the low (relative to oil) prices of some classes of old gas, as well as the price caps on "new" gas.

At issue are a large number of regulatory agency issues and legislative changes, which could have the effect of raising prices paid by consumers. On the other hand, there could well be a trade-off among some or all of these items, involving enhanced domestic gas supply, with attendant benefits measured in terms of economics and national security.

BACKGROUND AND POLICY ANALYSIS

The Natural Gas Policy Act of 1978 (NGPA) was enacted as one of five major energy bills which made up the National Energy Act, but it was unquestionably the most controversial and most difficult to enact. That was because the NGPA attempted to end a debate that had gone on for 25 years: Should the Federal Government regulate the prices at which natural gas producers sell gas to interstate natural gas pipelines?

The Natural Gas Act of 1938 (15 U.S.C. 717) (NGA) ordered the Federal Power Commission (FPC) to regulate the sale of natural gas in interstate commerce for resale. Until 1954, the Federal Power Commission, now called the Federal Energy Regulatory Commission (FERC), regulated only the interstate natural gas pipeline companies that purchased and carried gas from the producing companies, most of which were primarily oil companies, for sale to the distributing gas utilities that were subject to regulations by State utility commissions. In that year, however, the Supreme Court decided, in Phillips Petroleum Corp. v. Wisconsin (347 U.S. 672), that sales by natural gas producers to pipelines were "sales for resale" within the meaning of the Natural Gas Act, and that producers' sales should be regulated by the FPC.

The FPC attempted to carry out this mandate first on a company-by-company basis in traditional utility fashion, and then by setting ceiling prices for

sales in designated producing regions based on average costs of production. But a severe shortage of natural gas for customers outside the producing States was caused in the early 1970s by the unwillingness of producers to commit new finds to regulated pipelines when intrastate buyers could pay higher unregulated prices. The FPC attempted to set much higher incentive prices on a nationwide basis during the 1970s, but growth of intrastate markets and fall-off in new gas discoveries perpetuated the shortage. The FPC was fought in court both by consumer interests opposed to the escalating prices that resulted and by the producers, who thought the prices were too low. Meanwhile, the natural gas industry began to consider possible alternate sources of natural gas supply, such as LNG (liquefied natural gas) from overseas, methane from coal gasification, imports of natural gas by pipeline from Canada and Mexico, synthetic natural gas manufactured from liquid petroleum products, generation of methane from animal wastes and biomass, and other new or exotic sources of natural gas. The common feature of this myriad of new sources was that they presented than higher costs than did conventional natural gas -- even than unregulated gas in the intrastate market, and most of them suffered from technological, supply security, and lead-time problems.

Because they lacked adequate supplies of natural gas to serve all the customers on their lines, the interstate natural gas pipelines were forced to design and implement, under guidance from the FPC, "curtailment plans" which designated priorities among those users who would lose service when there was too little gas in the pipe. In general, electric utilities and industrial users using natural gas as fuel were deemed the lowest priority, and commercial, public and residential users were deemed the highest. Beginning in 1971, curtailments of natural gas worsened every year. Supply and deliverability problems caused notable curtailments during the very cold 1976-77 winter.

Proposals to modify or end producer regulation for natural gas sales had been made in every Congress since such regulation was imposed by the 1954 Supreme Court decision, but the healthy growth of the natural gas industry kept the issue from the front burners. With the start of the natural gas shortage, however, this changed. In the 92d, 93d, and 94th Congresses, major debates took place, but no basic statutory reform was enacted. The debates were passionate as producer interests and consumer interests championed their concepts of fairness and economic necessity, and conflicting legislation was adopted in the Senate and House without success in compromising the differences.

Natural Gas Policy Actions of the 95th Congress

The 95th Congress' first substantive enactment was emergency natural gas legislation to deal with the massive curtailments that then afflicted the Nation, caused as much by pipelines' inability to deliver gas quickly enough to deal with record-setting cold weather as by the unavailability of natural gas supply. The larger issues of producer regulation policy were avoided in the interest of haste and because the newly inaugurated Carter Administration had promised a major legislative proposal on the topic as part of the National Energy Plan submitted in April 1977.

President Carter's message transmitting the proposed legislation emphasized that natural gas was a declining resource to be husbanded. The essence of his proposal was that "new natural gas" in both interstate and

intrastate markets be subject to a ceiling price of the Btu equivalent of domestic crude oil delivered to refineries, then about $1.75 per thousand cubic feet (Mcf). A geological definition was attempted, to distinguish new natural gas from that natural gas which had already been discovered or was in production. The producing industry uniformly condemned the proposal as an extension of regulation at confiscatory prices, lower than prices then available in intrastate markets. Consumers likewise attacked it, on the basis that the ceiling price was higher than could be justified by the costs incurred by producers; but they were happier with it than the producers were. Paradoxically, had it been enacted, all other things being equal, new natural gas prices would now be deregulated and much higher than they are. The President's proposal also included provisions granting higher prices to gas from high-cost sources, and allocating the cost of the new natural gas and high-cost gas to industrial users. Elsewhere in the National Energy Plan, in the portion that became the Powerplant and Industrial Fuel Use Act of 1978, the President proposed that natural gas use be taxed and regulated out of existing industrial boiler-fuel applications and electric utility applications, and that a ban be instituted on new applications.

The House of Representatives, through the formation of an Ad Hoc Energy Committee, moved rapidly and enacted the President's plan almost intact. There were minor modifications expanding the new gas definition in the natural gas portion of the plan, and outright new gas deregulation was voted on and defeated. The Senate, however, divided the plan for referral to standing committees.

A deadlocked Senate Energy Committee, split 9-9 on both the President's plan and then on new gas deregulation, reported the President's bill without recommendation. When an early tabling vote indicated that new gas deregulation would pass instead, its opponents mounted a filibuster, and President Carter threatened to veto any deregulation measure. But cloture was invoked, so opponents began a novel filibuster by demanding roll-call votes on hundreds of amendments. Many compromise efforts were tried and failed, and the filibuster was finally broken when Vice President Mondale and majority leader Byrd succeeded in adopting a rule change making dilatory amendments out of order. President Carter apparently did not want the rest of his energy proposals held hostage to his gas proposal. The Senate swiftly enacted a Pearson-Bentsen substitute bill deregulating new gas after 2 years of price ceilings equivalent to distillate fuel oil prices. New gas was defined more broadly than in the House bill.

A conference to resolve the differences between the two approaches was begun, with numerous compromise proposals surfacing among moderate groups of conferees and then sinking after taking fire from both extremes. Most of the shots from the consumer side dealt with the cost of deregulation, the billions of dollars of additional producer revenues compared to modest increases in new natural gas reserves that were predicted. Most of the shots from the gas industry side concerned the need to produce additional natural gas to displace foreign oil, and the burdens of Federal regulation.

President Carter gradually came to agree to support eventual deregulation after an initial period of regulation in both interstate and intrastate markets at rising ceiling prices. A deal was narrowly struck, first among the evenly divided Senate conferees and the entire Energy Committee, and then with the House conferees. After an arduous drafting process by conference staff, some last-minute shifts of position by some who had opposed and some who had supported the compromise, and a Supreme Court decision in a natural gas case which added to the controversy surrounding it, the conference report

was signed.

New issues and circumstances had arisen during the lengthy conference process which affected the general support of the compromise: concerns about the enforceability of the extraordinarily complex bill; concern about the image growing abroad that the United States was unable to resolve its energy policy difficulties; and a growing surplus of natural gas reserves in producing regions, which had been prompted by the high intrastate prices and which was softening those prices and leading some producer interests to support the compromise in order to have access to the supposed pent-up demand in the interstate market. But the interstate market itself had quietly changed: Many industrial customers who had suffered due to curtailments had discovered that they could do without large amounts of the natural gas they had been buying through conservation practices, and a large number had switched to fuel oil, which had been relatively stable in price since the Arab oil embargo of 1973 and was predicted to be developing a glut on the world market. They were not eager to break their oil contracts and return to natural gas when they were still at the bottom of the curtailment priorities, when they were told that their use would be phased out, when incremental pricing would keep gas prices near oil price levels, and when long-term service of natural gas depended on better resources than many thought existed.

The compromise was truly that -- a creation of the moderate elements of both sides -- and a rough coalition of the extremes on both sides formed to oppose it. Some producers favored it, others opposed it, and potent lobbies for deregulation found themselves unable to take a firm position one way or another. Most gas pipelines and distributors accepted it with reservations about the incremental pricing provisions, realizing that these would make regaining their lost industrial customers much more difficult. The drawn-out agony of the process of compromise, the earlier filibusters, the public expectation that Congress would enact significant energy legislation, and the constant badgering from both sides, had led many Members to lean towards passage, if only to get the divisive issue behind them and turn to other things, including the 1978 election, then 6 weeks away. The proponents of the compromise were quick to capitalize on this mood by threatening to refuse to consider any other proposals should the compromise be defeated. The President fervently campaigned for the bill, citing its forecasted benefits in strengthening the dollar and the economy, and permitting interstate access to a huge "gas bubble" of surplus intrastate gas. The Senate acted first, refusing recommittal of the compromise by a wide margin and then passing the bill, 57-42 on Sept. 27, 1978.

The House vote was likely to be much closer, so the leadership wanted to combine the gas bill with the other four parts -- all also substantially changed from the original proposals -- that made up the National Energy Act, and permit one vote on the package. The key vote concerned the rule to combine the various bills for a single vote. It passed by a single vote, 208 to 207. Without their combination into a package, it is highly likely that some of those who favored the rule would have opposed the gas bill as an independent enactment. President Carter signed the Natural Gas Policy Act into law on Nov. 9, 1978, and it became P.L. 95-621. Natural gas had been the subject of the first and last enactments of the 95th Congress.

The Provisions of the Natural Gas Policy Act of 1978

As passed, the NGPA was an extremely complex law, one which completely changed the FERC's previous regulatory system for pricing natural gas at the wellhead.

Title I of the NGPA included the wellhead pricing provisions. Numerous categories of natural gas production were defined in Subtitle A, and there was some dispute about how many categories had actually been created. Their prices were set in the statute, and increased according to differing formulas reflecting escalator and inflation factors. Subtitle B provides that regulation for some, but not all, categories would end on Jan. 1, 1985, subject to being reimposed at the discretion of Congress after a period of six months for a period of as long as eighteen months. The major categories of natural gas created, by the numbers of the sections of the NGPA which created them, were:

-- Section 102, new natural gas. Intended to include genuine new discoveries of gas resources, which started its price path at about $2.08 per Mcf and rose at the rate of inflation plus about 4% per year, until all gas committed under this category is deregulated in 1985.

-- Section 103, new onshore production wells. Intended to include extension wells expanding known natural gas deposits, which started its price path at about $2.00 per Mcf, rose by inflation alone, and will be deregulated in 1985 -- except for that part sold interstate and from wells deeper than 5000 feet.

-- Section 104, flowing interstate gas. Covers gas which was already being sold to interstate pipelines prior to consideration of the NGPA, and priced according to the previous standards ($1.45 was the highest ceiling) plus inflation, and not deregulated. The section also contains language permitting FERC to set other rates that are "just and reasonable," as do section 106 and section 109.

-- Section 105, other natural gas under contract. Primarily flowing intrastate gas, limited to the lower levels of the contract price or the section 102 price to prevent full operation of contractual escalator clauses, plus inflation.

-- Section 106, rollover gas or gas resold to the same purchaser upon expiration of the earlier contract. Limited rollover and resold gas to the higher of the earlier price of $.54 per Mcf for interstate gas, and to the higher of the contract price or $1.00 per Mcf for intrastate gas.

-- Section 107, high cost gas. Identified certain potential sources of natural gas believed to cost significantly more to develop than others: gas from Devonian shales, geopressured acquifers, coal seams, and wells deeper than 15,000 feet. These four categories of gas, deregulated in December 1979, and other categories identified by the FERC, could receive special incentive prices. This has particularly been applied to "tight sands" gas, gas from relatively nonporous reservoirs.

-- Section 108, stripper well gas. Invented a distinction to benefit owners of small natural gas wells, starting their prices at about $2.22 escalted by about 4% inflation, but not deregulating them.

-- Section 109, all other categories, and specifically Alaskan gas from the Prudhoe Bay Unit. Priced in accordance with the section 104 provisions, and not deregulated.

Title II of the NGPA established the incremental pricing provisions, requiring the FERC to apply incremental pricing to industrial boiler fuel facilities served directly or indirectly by interstate pipelines within one year, and to expand that rule to apply to other industrial applications by six months later. The FERC was given much leeway in implementing incremental pricing in order to achieve the statutory objective: the maximum allocation of the higher cost of new and high-cost natural gas sold in interstate commerce to industrial customers without causing industrial customers to switch from natural gas to other fuels.

Title III of the NGPA created permanent authorities similar to the temporary emergency authorities of the Emergency Natural Gas Act passed in January 1977, allowing the President to declare a gas supply emergency, allocate gas among pipelines, and from others who volunteer, to areas of shortage. Title IV granted agricultural users of natural gas a higher priority during curtailments than any but residential, small commercial, and other critical users. Title V presented the administrative mechanism to be used by FERC in regulation -- primarily reviewing State agency determinations of the category a given well falls in -- and provides standards for court review of the NGPA. Title VI coordinates the NGPA with the Natural Gas Act of 1938, the prior statutory basis for gas regulation, much of which applied to pipeline operations, accounting, and other aspects of the gas industry which were not affected by the NGPA.

Natural Gas Conservation

Since the NGPA's passage, and partly as a result of the NGPA, demand for natural gas has changed markedly. The conservation among residential and commercial users has been remarkable, so that even with many conversions from fuel oil and many new hook-ups, the total deliveries to these sectors have stayed stable or declined slightly. The prospect is that additional conservation will be achieved, and most observers attribute the conservation to higher prices. Some gas is used for pipeline operation, and this amount will not change much. Industrial users who must use natural gas because of its unique properties or chemical constituents and natural gas users in the agricultural and food processing chains have a higher priority for gas when curtailments occur than boiler fuel users. Their use has expanded since the NGPA, but they have also achieved much conservation and they have been affected by poor economic conditions. They are very sensitive to the long-term implications of gas supply and sensitive to price stability, since their plants are long-term investments, and they would have no alternative fuel. The outlook is for continued but cautious growth in this sector of natural gas use, not growth at the boom levels seen in the 1960s.

The key sector in natural gas demand is the large group of industrial users who use natural gas in boilers of different sizes and alternate fuel capabilities. These users are highly sensitive to natural gas price levels, and less sensitive to the long-term supply. Their alternate fuel is generally oil, mostly residual fuel oil. As they use more natural gas, their use of oil falls. The portion of industrial natural gas use in this category is not precisely known, but is at least half of the industrial demand -- the half which can rise and fall most rapidly, with the largest effects on oil imports, and with the greatest flexibility when curtailments are necessary. They have the lowest priorities for gas during curtailments, generally in order of the size of their boilers.

It is the demand of this market that will determine what the marginal gas supply will be in the next few years, and policies toward gas prices and imported oil will largely determine this demand level. Stimulating and serving this demand by making natural gas relatively cheap and available to these users over the next few years may reduce oil imports, but it may also exhaust more quickly the conventional supplies that we now depend on, requiring earlier availability of the supplemental supplies, or threatening the long-term service of higher-priority users, and it may force higher prices upon other users. In fact, what is happening at this juncture is that -- on some gas pipeline systems that have made inopportune decisions regarding the price and ancillary terms of gas purchases from producers -- there has been significant conversion to cheaper heavy fuel oil by industrial consumers. And the trend to residential gas conversion has abated as well. These pipeline systems are faced with a declining market share while remaining contractually obligated to expensive gas that will not sell in today's more competitive market. For this reason, there appears to be something of a current oversupply of deliverable, albeit expensive, gas.

Some Recent Developments Effecting the Natural Gas Situation

There have been two developments since NGPA's passage that have shaped the institutional framework in which the gas market functions. One is the amendment of the Powerplant and Industrial Fuel Gas Act of 1978 to permit existing gas-fired electric plants to burn gas during the remainder of their existence. This was accomplished as an amendment to the 1981 budget authorization bill in June 1981. This means that utilities -- which use about 20% of the nations gas now -- will continue unrestrained use.

The other matter -- which is still unresolved and is now before the Supreme Court -- regards incremental pricing, Title II of the law. Incremental pricing allocates high-priced gas to industrial consumers up to the point that they pay the equivalent of oil fuel prices. NGPA originally envisioned boiler fuel users being initially targeted for price increases up to the equivalant of relatively cheap high sulfur heavy fuel oil. Subsequently, under Phase II, more industrial users would be covered, and their prices would rise to parity with relatively expensive middle distillate.

Phase I of incremental pricing -- affecting boiler fuel users of more than 300 Mcf per day -- became effective Nov. 1, 1979. Phase II, affecting smaller industrial users to the extent necessary to cover 95% of industrial gas use, was to become effective 6 months later. A great deal of concern was expressed by industrial users and others that incremental pricing would lead to higher industrial fuel prices at a time of inflation and recession. The protection afforded residential users by incremental pricing was also challenged on the basis that, as incremental pricing forced industrial users from natural gas, the system costs of the pipelines and distributors would be allocated to the remaining customers. In addition, the cost increases of manufactured goods would be paid by their buyers. Legislation was introduced to repeal Title II in its entirety. But instead, the House of Representatives exercised the legislative veto provided in NGPA and voted overwhelmingly to veto the regulations implementing Phase II incremental pricing. This both left the statute intact and Phase I in operation.

This veto let industrial gas prices remain at the equivalant of high sulfur residual fuel oil and limited incremental pricing to a relatively

narrow portion of industry. Phase I, as it remains in effect, really does little more than would otherwise be the case. Whereas the law appears to mandate that gas be incrementally priced to industrial users at middle distillate prices, the veto means that relatively few users are subject to incremental pricing at burner tip prices of about $4.00 per Mcf. The Phase II plan, seemingly mandated by NGPA, would have effected 95% of industrial use and would have resulted in incremental prices of about $6.50.

The legislative veto was overturned by the D.C. Court of Appeals in January 1982. The court ruled that this action was unconstitutional, and mandated that FERC promulgate a new Phase II plan in conformity with the NGPA's intent. This matter has been stayed, pending appeal to the Supreme Court. If upheld, Phase II will either be implemented or the basic law amended.

The Gas Market Under NGPA

When the price of crude oil doubled, the fundamental character of energy markets changed, leaving the rather inflexible NGPA pricing structure behind. Written with the goal of equilibrating oil and natural gas prices by 1985, and bringing them closer together than they had been during the interim, NGPA fell out of context with its initial legislative intent.

The changed economics of energy markets interacted with the law and produced many unintended and unanticipated results. New insights into the gas market were gained, and these led to calls for remedial regulatory actions by FERC and, initially, to calls for deregulation of at least "new" (if not all) gas. The latter were replaced, as the discussion in the 97th Congress evolved, with calls for a readjustment of prices so that oil and gas would be on a more equal footing and would reach equivalancy quicker. Opposing these proposals were consumer groups, who became more vocal regarding quite rapid price increases. Additionally, H.Res. 371 was introduced in the House with 226 co-sponsors to express the sense of the House that FERC should take no administrative action to accelerate the rate at which gas prices were being decontrolled.

The status at this juncture finds the average price of gas nationwide at about $2.75 per Mcf, roughly half the price of crude oil on a btu equivalant basis. Gas priced in accordance with NGPA varies from a few cents per Mcf to over $10, with Canadian and Mexican imports at just under $5. Under the NGPA phaseout of price ceilings, much gas will be decontrolled on Jan. 1, 1985. However, because not all classes of gas will be decontrolled, and because contracts between producers and pipelines will limit the amount of escalation for some gas that might otherwise rise to uncontrolled levels, between 40-60% of flowing oil will remain under controls or effective controls in early 1986.

How the law, changed events, and developments under the law since its enactment will play out -- viewed with the knowledge and experience gained in the past 4 years -- represents interesting policy concerns regarding the future of gas markets. What does seem to be happening now, and many economists following gas market developments feel that this is characteristic, is that pipelines with large amounts of gas controlled at low prices tend to pay very high prices for what uncontrolled gas is available to them. They also appear to allow the prices of controlled gas under contract to them to rise from lower contractual prices to maximum lawful ones. The situation can be characterized with this somewhat oversimplified example:

Assume that half of all gas were to be deregulated and half were to be controlled at $2.50. Assume further that the market clearing price for gas were $5.00. What, then, would unregulated gas sell for? A great deal of current thought, particularly among economists, would have gas prices determined by pipelines competing for supply. They would bid unregulated gas prices up to the point where they could not sell any more -- that is to say, the point where their weighted average gas cost was at the market clearing price of $5.00. Thus, the half of gas supply which is not regulated in this example would sell for $7.50.

This contradicts the old conventional wisdom, which held that pipelines would be unwilling to pay prices in excess of market clearing levels for new gas supply. The fact is that consumers -- the customers of pipelines -- are likely to be unwilling to pay above market clearing prices for whatever blend of gas pipelines have to provide. Knowing this, and having the ability to average or "roll in" various gas prices, pipelines will compete for gas supply and will bid gas up to the point where the rolled in price they charge their customers reaches the point where they can sell no more -- in other words, the market clearing consumer price.

The other part of the "new economics" which is relevant for the policy debate is a better understanding -- or at least a new perception -- of how wellhead prices are determined. Earlier thinking had wellhead prices equilibrating with the btu equivalant price of crude oil, middle distillate, or one of the types of residual fuel oil, depending on which version of this thinking was being articulated. The current perception sees wellhead prices being determined at the burner tip. This means that the market clearing for energy -- whatever that may actually be -- will determine wellhead prices. Wellhead prices will then be the burner tip price, less the local distribution utility tariff, less the long distance pipeline tariff. If, for example, burner tip prices are set in competition with 1% sulfur residual fuel, now about $27/bbl or roughly $4.25/million btu's (the equivalant of an Mcf of gas), this could back down to an implied wellhead price quite close to the present $2.75 average.

Whatever the current or future market clearing gas price may be, in contemporary discussion regarding this figure it is often given in terms of a fraction of crude oil prices. For example, much current thought holds that the market clearing price either is or should be about 70% of the crude price. The American Gas Association claims the current market clearing price to be about 60%. In any case, the current average wellhead price is somewhat less than half current crude price equivalancy.

The Natural Gas Market -- Developments During 1982

1982 has been a confusing year for energy prices generally. Oil prices, for example, rose fairly sharply during mid-year in the face of very soft demand, presenting something of a paradox. Now, natural gas prices appear to be following a similar pattern. Pipelines which heretofore had been hard pressed for new supplies made commitments for several types of higher-cost gas. Apart from higher-priced new, but still controlled gas (section 102), pipelines also bid for expensive gas in section 106 and section 107. Section 107 gas consists of uncontrolled deep gas (from zones below 15,000 feet) and other difficult-to-produce gas now controlled at about $5.50. In toto, the average price of gas in both interstate and intrastate pipeline systems rose, approximating market clearing levels. On some pipeline systems, gas costs rose to above market clearing levels, which meant that some of the more price

sensitive customers reduced or halted completely their gas purchases. The result has been an apparent surplus of deliverable gas, with numerous reports of shut-in wells and with scattered reports of gas being flared.

In the face of this seeming oversupply, 1981 turned into a banner year for gas reserve additions. Responding to record drilling activity, new reserves for the first time since 1968 exceeded production. 21.3 tcf of gas was discovered, exceeding production by about 10%. Now producers appear to be having difficulty marketing the gas they found, or at least finding takers for their new gas at the prices they likely anticipated when drilling the wells in 1980 or 1981.

There are two realities that appear to have created this situation, wherein gas prices are rising and supplies remain in the ground. The first is that pipelines have committed themselves to more gas than they can absorb at prices which -- on average -- are escalating rapidly. Many pipelines are finding themselves over-committed and, in some instances, tied into take or pay contracts, which require payment for minimum amounts of gas regardless of whether the pipeline takes the gas or not. These payments -- for gas not actually taken -- are automatically passed on to end users thru the purchased gas adjustment clauses that virtually all pipelines have in their tariff provisions. Unit prices of gas actually sold therefore rise to pay for gas never delivered. This raises the average cost of gas sold on that pipeline system.

Additionally, many pipelines formed their own production affiliates. Pipeline affiliated production is allowed the highest prices for that gas sold in third-party, non-affiliated transactions, and this includes unregulated section 107 gas too. Pipelines, in the aggregate, have strong incentives to take their own affiliates' production and gas under take or pay contracts in preference to other gas that may be lower priced. And other gas does tend to be lower priced, because take or pay and production affiliates tend to be relatively recent phenomena and involve the newer, most expensive of NGPA gas.

All this tends to define a cascading problem. Gas flowing in the Nation's pipeline system now has escalated to the point where not all the available production can be sold. In backing out unsold supplies, pipelines can, and in some cases actually do, raise the average unit price of flowing gas. The higher prices mean lower sales, and this could become a recursive theme.

The second reality is that the market clearing price for gas is much lower, in relation to oil fuel prices, than most students of the industry (policymakers included) thought it was when NGPA was being crafted. What is becoming an increasingly clear fact of life is that burner tip prices have to be competitive with oil fuels, specifically residual fuel. But burner tip prices embody both long-distance and local pipeline utility tariffs, as well as the wellhead price of the gas. The likely burner tip market clearing price is the Btu equivalant of residual fuel, and the likely wellhead market clearing price will be this less the utility tariffs involved. While this is something of an oversimplification -- since not all utility tariffs are equal (they vary, for example, with length of haul from the gas field) and resid isn't necessarily the alternative, or competitive, fuel in all cases -- the example delineates a set of economics that determines prices. And today these economic forces seem to indicate that many types of gas prices are too high to be sold.

Standing between the burner tip and wellhead are the long-distance and

local distribution pipeline utilities. In order for the market conditions at the burner tip -- where prices are determined -- to affect wellhead prices, price signals must be transmitted through two independent entities -- the local distribution utility and the long-distance pipeline -- back to the also independent producer. This process is really new. In the past, gas pipelines typically could sell all the gas they could get, and they have never had to exercise the option of passing price signals back down the pipe to the wellhead. How well this will work is now in the process of being tested.

Recent months have seen some price signals begin to get passed back down the pipe. One of the first signs of this has been the decline in the prices of deep (unregulated) section 107 gas. Some gas in this class reached the $10 mark, but many pipelines have had great trouble with the highest-priced gas and have renegotiated contract prices or otherwise gotten out of excessively expensive commitments or are in the process of doing so.

During the summer of 1982, producers selling new gas began to face great difficulty. Marketing gas at prices above $3.00 became difficult, because pipelines were either overcommitted under pre-existing gas contracts or could not absorb gas which would raise their weighted average or delivered price. In fact, pipelines that made commitments to higher priced gas were in no position to take advantage of new offers of supply that might be priced below earlier contractual commitments. Whether or not pipelines are willing or able to renegotiate the higher of their gas contracts to take advantage of what appears to be a near-term oversupply will be tested in the months ahead. To some extent, this will provide an indication of how well gas markets work, with important implications for the price control debate.

A bottom-line policy consideration seems to be developing. In the current market, wellhead prices in the $2.75/Mcf area seem to translate into burner tip prices at about market clearing levels. If this is actually true, then those favoring deregulation of wellhead prices could make a very convincing point -- that immediate decontrol would not raise prices, at least in the current energy pricing environment. Those opposing decontrol would likely argue that the pipeline industry has yet to prove it can deal effectively with producers in terms of keeping gas supply prices economically. They would question pipelines ability to contract at the wellhead such that gas can be delivered at market clearing prices. It is likely that the next 6 to 12 months will yield an indication of who is correct.

Administrative Issues Before FERC

In the context of NGPA and prices being out of step with those of oil, there are a number of administrative matters under consideration at FERC which are relevant to the policy discussion. Among the more important are the following issues:

* "Vintaging" -- Gas in sections 104, 106, and small amounts in section 109 is price controlled in several tiers based on the "spud" date of the well. Prices of section 104 gas range from about $2.25 for old gas down to 27 cents per Mcf for "oldest" gas, for example. After some discussion of the pro's and con's of having such a wide dispersion of old gas prices, FERC issued a Notice of Inquiry (04/28/82) on the matter in order to collect information. It should be emphasized that this is not a rulemaking, although it could lead to one. The goal here is to determine the wisdom of placing all old gas in one, higher priced class. This would raise the average price

of gas substantially.

The vintaging matter is often associated with what has come to be called the market ordering problem or market disorder. What has happened is that the old gas provides "a cushion" so that pipelines can acquire gas at much higher prices than it could be sold for on its own. This gas can be made marketable by averaging its price in with old gas, so that the blend price is competitive at the burner tip. This has led to purchases of unregulated section 107 gas at attention-focusing prices, some above $10.00. It has likely led to repricing of other gas under contract at below-ceiling prices, and to purchases of gas at high-ceiling prices which would be uneconomic without the "cushion."

Additionally, intrastate pipelines assert that they are at a comparative disadvantage relative to intrastate systems since they have had historically higher gas acquisition costs and less of a cushion. Hence, they are unable to bid successfully for new supply against the comparatively better cushioned interstates. This has become a regional issue of some concern.

* Near Deep Gas -- With gas from zones below 15,000 ft. unregulated, FERC has issued a Notice of Proposed Rulemaking regarding gas from the 10,000 to 15,000 ft. zone. The proposal would raise the price of gas from these strata to 150% of its NGPA price. This would create incentive for deeper drilling -- where gas prospects are better -- and would create disincentives to drill all the way to 15,000 ft. simply to qualify for a higher price.

* Gas Produced in Deep Water -- FERC went through all the administrative procedures needed to raise the price of gas produced from waters 300-feet deep or deeper by 200% in excess of the statutory rate. However, the commission never brought the matter to a vote, and the issue is now in limbo.

* Cap on Sec. 107 gas -- There has been informal discussion about placing a floating ceiling on unregulated gas in this class, perhaps tying it to 70% of crude prices. This gas has sold for $10 in some cases.

* Incremental pricing -- If the Phase II ruling is sustained, the Commission may have to promulgate a new incremental pricing rule. Some preliminary study is now ongoing at the staff level regarding what type of Phase II plan may be brought forward.

Legislative Issues

The 97th Congress has been disinclined to take up the natural gas regulation issue with any vigor. Hearings were held by the Senate Energy Committee in November 1981 and March 1982. Similarly, the House Synthetic and Fossil Fuels Subcommittee held hearings in July and August 1982. Little in the way of consensus, much less legislation, emerged from these hearings. Two similar pieces of legislation, H.R. 5866 (Gramm) and S. 2074 (Johnston) seem to capture the essence of thought of those seeking deregulation. The main provisions of those bills are:

* Repeal of the Powerplant and Industrial Fuel Use Act of 1978, which constrains natural gas use;

* Repeal of incremental pricing;

* 3-year phaseout of all price ceilings, aimed at converging gas prices on

70% of crude oil equivalancy by Jan. 1, 1985. Removes all FERC authority for post-1985 price controls;

* Capping high cost gas (section 107) at 70% of crude equivalancy;

* Facilitating intrastate pipelines access to Outer Continental Shelf Areas now primarily reserved for interstate pipelines;

* A variety of provisions aimed at giving pipelines legislative authority to deal with disadvantageous producer contracts.

The only item on the natural gas agenda that actually came close to a vote this Congress was H.Res. 371. This represented a statement by the anti-deregulation forces that NGPA should not be administratively tampered with. As such, it encapsulates the pro-regulation sentiment at this time: preserve the status quo. H.Res. 371 was intended to be a device to bring political pressure to bear on FERC, halting the progress of administrative procedures oriented toward raising the price of old gas, specifically that in section 104. It was introduced with 226 co-sponsors, but was never acted upon. In spite of this, those opposing administrative measures raising gas prices cite the measure as indicative of the "sense of Congress" that NGPA's statuatory pricing structure should not be tampered with.

LEGISLATION

H.Res. 371 (Dingell et al.)

Expresses the sense of the House that the Federal Energy Regulatory Commission should take no action to accelerate the decontrol of wellhead natural gas prices.

H.J.Res. 467 (Corcoran)

Provides for the expiration of the waiver of laws granted for the Alaska natural gas transportation system unless the Federal Energy Regulatory Commission issues, on or before Dec. 15, 1983, a final certificate of public convenience and necessity for the approved transporation system. Prohibits any Federal financial assistance for the transportation system after approval of this resolution. Introduced Apr. 29, 1982.

H.R. 5645 (Hartel et al.)

Amends the Natural Gas Policy Act of 1978 to declare unenforceable any take-or-pay clause of any contract which is entered into on or after enactment of this Act and which is applicable to any first or subsequent sale of natural gas. Introduced Mar. 1, 1982; referred to Committee on Energy and Commerce.

H.R. 5646 (Hetel et al.)

Amends the Natural Gas Policy Act of 1978 to declare unenforceable indefinite price escalator clauses in natural gas contracts. Applicable to any first or subsequent sale of natural gas. Introduced Mar. 1, 1982; referred to Committee on Energy and Commerce.

H.R. 5866 (Gramm)

Repeals the Powerplant and Industrial Fuel Use Act of 1978. Terminates the incremental pricing requirements of the Natural Gas Policy Act of 1978. Repeals provisions of the Public Utility Regulatory Policies Act of 1978 relating to retail policies for natural gas utilities. Provides for the decontrol of natural gas. Introduced Mar. 17, 1982.

H.R. 5923 (Collins, J., by request)

Amends the Federal Energy Administration Act of 1974 and the Department of Energy Organization Act with respect to the disclosure of energy information obtained from Federal agencies. Repeals specified energy information reporting requirements under the Energy Supply and Environmental Coordination Act of 1974, the Federal Energy Administration Act of 1974, the Department of Energy Organization Act, the Powerplant and Industrial Fuel Use Act of 1978, and the Emergency Energy Conservation Act of 1979. Introduced Mar. 23, 1982.

H.R. 5954 (Mottl et al.)

Amends the Natural Gas Policy Act of 1978 to repeal provisions providing for the decontrol of natural gas prices. Introduced Mar. 24, 1982.

H.R. 6331 (Young, R., et al.)

Amends the Natural Gas Policy Act of 1978 to: (1) eliminate the monthly indexing of wellhead natural gas prices; and (2) allow increase in such prices prior to the expiration of natural gas price controls only to the extent justified by increases in the cost of producing natural gas. Introduced June 3, 1982.

H.R. 6850 (Young, R.)

Amends the Natural Gas Policy Act of 1978 to provide for continuation of price controls beyond 1985. Eliminates the monthly indexing of wellhead natural gas prices. Allows increase in such prices prior to the expiration of natural gas price controls only to the extent justified on the basis of increases in the cost of producing natural gas. Introduced July 22, 1982.

S.Res. 331 (Chafee et al.)

Expresses the sense of the Senate that the Federal Energy Regulatory Commission should take no action to accelerate the decontrol of wellhead natural gas prices. Introduced Mar. 3, 1982.

S. 2074 (Johnston et al.)

Repeals the Powerplant and Industrial Fuel Use Act of 1978. Amends the Public Utility Regulatory Policies Act of 1978 to repeal provisions relating to retail policies for natural gas. Provides for the deregulation of committed or dedicated natural gas under the Natural Gas Policy Act of 1978.

S. 2292 (Metzenbaum et al.)

Amends the Federal Power Act to require the Federal Energy Regulatory Commission to approve, upon application by a public utility and after examination of the propriety of the costs involved, the inclusion in the wholesale rate base of construction work in progress with respect to: (1) construction of pollution control facilities; or (2) conversion of oil or gas-fired facilities. Provides that public utility charges based upon costs

associated with other construction work in prograss shall be considered unreasonable.

S. 2358 (McClure by request)

Authorizes the Federal Energy Regulatory Commission to assess and collect fees from natural gas companies, public utilities, and common carriers for services and privileges rendered under its regulatory programs.

ADDITIONAL REFERENCE SOURCES