



Technical Bulletin #24

November 17, 1995

Natural Gas Deregulation and Opportunities for Business Development

This paper provides an overview of the regulatory structure within which natural gas is produced, transported and ultimately sold in this country. The current regulatory framework affords the development of business opportunities for the sale of natural gas beyond the traditional boundaries of the local natural gas company.

By way of summary, the natural gas marketplace is divided into three sections, as follows:

1. Producers. These are the "well-head" producers of the natural gas as it comes out of the ground. Prices of well-head natural gas used to be highly regulated, but that is no longer the case.

2. Long-Distance Pipeline Companies. These are the transporters of natural gas from the well-head to local natural gas retail companies. The rates charged by these companies used to be highly regulated by the Federal Energy Regulatory Commission, and have been substantially deregulated.

3. LDCS. Local Distribution Companies. These are companies at "the city-gate," which take natural gas from long-distance pipeline companies and distribute the gas through local pipelines to consumers or end-users.

In today's natural gas market, a consumer may negotiate directly with a producer of natural gas for a supply contract. Then, the consumer would negotiate for the transmission of that gas from the producer, via a long-distance line, to the city-gate in the community where the consumer uses the gas. Under current law, the consumer would pay a tariff for the transmission of the gas and is guaranteed that the pipeline may not discriminate against the consumer in the assessment of such tariff. The consumer is also guaranteed access to the line as long as capacity exists. Then the consumer negotiates with the LDC for access to the LDC's lines and the tariff for use of that line for ultimate delivery of the gas to the consumer. The consumer must work with both the LDC and the state's Public Utilities Commission regarding the filing of a tariff rate under whatever "bypass" regulation that state's PUC has developed. Most state's regard LDC's as necessary to protect to some extent, and will facilitate bypass approval as long as capacity exists under the tariff proceeding.

While not a perfect or simple procedure, the practical and statutory framework exists for entities other than traditional natural gas distribution companies [LDCS] to become involved in the sale of natural gas to end-user consumers.

ISSUE DEFINITION

Natural gas regulation went through an extensive transformation during the 1980s. Not only were field prices deregulated, but the regulatory format for interstate pipelines was changed as well. The Federal Energy Regulatory Commission (FERC) has dealt with these changes and their interplay with market forces, expending great effort but achieving mixed success.

A persistent surfeit of unsold domestic gas, competition from Canadian imports, and price instability resulted in efforts to streamline the regulatory process. Congress grappled with how to prudently reduce the increasingly complex regulatory burden, making it less difficult for those being regulated and making natural gas supply more responsive to market conditions. Both House (H.R. 776) and Senate (S. 2166) proposals addressed these concerns. They represented extensive industry and consumer input. No broad opposition emerged to most of the streamlining measures contained in the House and Senate bills. H.R. 776, however, contained a controversial measure regarding prorationing, which was added on the floor.

The most current FERC initiative -- Order 636, issued in April 1992 -- provided for far-reaching pipeline industry restructuring. Concern over how the new FERC regulations might play out and interact with new legislation caused the conferees to remove the natural gas provisions of the energy bill that was enacted.

BACKGROUND AND ANALYSIS

Use of natural gas has lagged behind expectations despite plentiful supply and attractive prices. Total domestic gas consumption peaked in 1973 at 22.0 trillion cubic feet (tcf), before starting a slow decline, reaching 16.2 tcf in 1986. A stronger economy subsequently created larger demand, which reached 19.5 tcf

in 1991, the highest in a decade. Demand was weak -- relative to increasing supply -- throughout the 1980s. In effect, this represented an under utilization of domestic energy resources at a time when energy imports are of heightened concern. This has spurred interest in resolving a number of lingering issues affecting gas supply and use.

The persistent oversupply of deliverable gas, often referred to as the "gas bubble," has depressed prices in field markets since the early 1980s. Low prices notwithstanding, some producers have gas that simply cannot be sold for want of transport. Beyond the plight of gas producers, larger energy policy objectives are cited by supporters of regulatory reform: to use more gas to displace imported oil, to use a resource that is more environmentally benign, and to stimulate the economy.

A considerable amount of natural gas legislative activity in the 102d Congress has focused on regulatory barriers inhibiting use of the Nation's gas resource. This underlay the Administration's National Energy Strategy as well.

Natural gas legislation in the 102nd Congress evolved independently, anticipating and mirroring the National Energy Strategy legislation proposed by the Bush Administration. Both Houses' gas legislation ultimately became bundled in comprehensive energy packages.

In the Senate, the omnibus National Energy Security Act of 1991 (S. 1220), which included natural gas legislation, reached the floor. It was withdrawn after a cloture vote was defeated, due primarily to two controversial issues, the development of the Alaska National Wildlife Reserve (ANWR) and tightening of automobile fuel economy (CAFE) standard. The withdrawal of S. 1220 did not sound the death knell for natural gas legislation. The bill was reconstituted without the controversial provisions, brought back to the floor as S. 2166, and passed by a large margin.

House legislation proceeded with an omnibus bill, H.R. 776, assembled initially by a subcommittee of the Energy and Commerce Committee. The bill moved through full Committee quickly. A subsequent rule for floor action permitted a number of amendments, including one -- voted on favorably -- limiting State authority to proration natural gas. The whole bill passed by an overwhelming margin on May 27, 1992. The natural gas provisions in H.R. 776 bill roughly paralleled the Senate legislation.

Legislation in the 102nd Congress -- Policy Intent

H.R. 776 and S. 2166 addressed many of the same policy issues. Broadly speaking, these provisions fell into the general categories of facilitating movement of more gas to markets and streamlining the regulatory process. The proposals were crafted by extensive negotiation and may have represented a degree of legislative consensus on the direction and extent of gas policy change.

Why are transportation and pipeline capacity barriers to marketing gas when 20% *less* gas is transported now than was carried 20 years ago? The answer is that current demand pattern is geographically different than it was. If additional gas is to be sold -- given the current geographic configuration of markets -- new transport facilities to relocated demand centers will be needed.

The desire to move gas to new markets was addressed by both H.R. 776 and S. 2166. These measures fit into the regulatory policy context that had been evolving since the mid-1980s, when FERC began the process of deregulating pipeline rates. Open access to pipeline transportation for any producer-purchaser pair was provided by FERC Order 436 in October 1985 and its subsequent expansion under Order 500. In the wake of these two measures, which

dramatically changed the nature of pipeline regulation, interstate pipeline rates were largely determined by market forces within a framework of regulatory review.

In situations where end-user markets are competitive, virtually all pipelines transport gas on behalf of unrelated producer-consumer pairs who own title to the gas. Competition between carriers has resulted in rates that are generally lower than those that FERC might have set under traditional regulatory procedure. Traditional regulatory procedure was based on pipelines owning and selling all gas transiting their systems, with tariffs reflecting a bundled package of transport service and gas acquisition cost.

The more competitive environment resulting from essentially deregulated transport, the subsequent deregulation of gas at the wellhead, and the gas bubble have resulted in growing gas demand in geographic markets with insufficient pipeline capacity. New or expanded capacity is desired, and there is public pressure from producers with unsold gas and would-be consumers to streamline the regulatory process for pipeline expansion permits.

Facilitating Delivery of the Gas Surplus

The adequacy of the current pipeline system configuration to meet the needs of a geographically shifting market has become a policy focal point. Both bills envisioned that gas will 'll be moved to new consumers by new or "de-bottlenecked" facilities, expeditiously constructed under fast-track regulatory permits.

Both bills provided for the fast tracking of pipeline certificates of convenience and necessity. Unopposed pipeline projects would have been expeditiously approved. If certain criteria were met, FERC would have been able to issue an Optional Certificate (OC) without holding a trial-type evidentiary hearing to determine whether the project is in the public interest. This would have allowed facility construction without regulatory delay, providing it served competitive markets and met other public interest criteria.

Ordering Facility Interconnection -- Breaking Bottlenecks. Putting together a transaction often involves linking individual pipeline segments, not all of which may be under the same ownership. Blockages in the gas transport system can be caused by lack of cooperation among parties whose transport capability is needed to complete delivery. Both pieces of legislation would have authorized FERC to order not just gas sales, but construction to facilitate a transaction as well. This means that FERC could have ordered construction by an unwilling firm of transport facilities to be used by another party. These facilities would have been paid for by the benefited party and might have been competitive with existing facilities owned by the party ordered to build them. It also would have clarified who was eligible to be the beneficiary of a transportation order. This was intended in part to resolve an ambiguity caused when an April 1990 D.C. Circuit ruling in the Hadson decision (*Associated Gas Distributors v. FERC*, 899 F. 2d 1250) overturned FERC's operating definition of exactly who was eligible to transport gas under Order 436/500. The legislation would have made clear that "everybody" was eligible.

This is especially important for producers. Obtaining transport from wellhead to end-user markets has been a big producer agenda item for several years. Producers contend that marketable -gas, for which customers exist, remains shut-in because it is not hooked up to a pipeline system. Absent a hook-up, gas

cannot be transported. Section II 102, it is argued, would have provided the consumer earlier access to gas now shut-in for lack of gathering facilities and pipeline access.

In addition to making clear that FERC can order transport for intrastate pipelines, LDCS, interstate pipelines and "everybody" else, both bills would have required transport be provided on a non-discriminatory basis.

The Prorating Amendment to H.R. 776

A number of floor amendments to H.R. 776 were permitted by the Rules Committee. Included was one sponsored by Representative Markey, Sheuer, and others limiting States' authority to proration natural gas production for the purpose of supporting prices. Voted on by a large favorable margin, it became part of H.R. 776 as passed. It would have prohibited States from limiting output to support prices, while permitting them to regulate output in order to conserve resources and to protect the Joint rights of multiple owners of a field. The measure passed the House by a large margin.

The measure was introduced because of impending actions by Texas and Oklahoma to limit production. Deliverable gas supplies were at an all time high, exceeding demand. This resulted in low prices and shut-in production. Shut-in production can become a State concern when joint owners of a reservoir are shut in differentially, with owners producing at lower rates than their ownership share would allow. The part-owner of a reservoir having customers for his gas produces, and the less fortunate joint owner is shut in (at least partially). The issue of correlative rights enters here. Is the producer with a customer producing

only his own gas, or is he producing a portion of the reservoir rightfully belonging to another co-owner?

Oklahoma and Texas -- as well as other producing states -- have laws aimed at protecting correlative rights and conserving resources. Their goal is protecting resources, ensuring maximum ultimate recovery, and protecting the individual rights of multiple reservoir owners. Oklahoma law also permits production limits to support prices, which is prohibited in Texas.

Both States have recently promulgated measures to limit gas production. Gas prices have risen from very low levels -- near \$1.00/mcf -- to the \$2.60 area before backing down somewhat in November 1992. Critics of prorationing contend prices rose in anticipation of artificially diminished supply -- in contrast to the natural action of market forces or a very cold spring. This resulted in support for the amendment. Many producers -- and State regulators who contend that their interests are protecting individual property rights in Jointly owned reservoirs -- remain concerned about correlative rights and resource conservation. No comparable provision existed in S. 2166,

Parallel Regulatory Development at FERC -- Order 636

The same broad policy goals espoused in the legislation were also developing on a separate track at FERC. Measures to free the transportation industry of regulatory and institutional barriers hindering the movement of gas to market, and to reduce some regulatory burden, were recently put into effect. The new regulations further facilitate transport of gas by pipelines on behalf of other parties. Most gas is now sold in thirdparty transactions, and making such transportation deals more attainable is seen as a key to future growth in gas sales.

On April 6, 1992, FERC completed the natural gas pipeline deregulation process by issuing order 636. This virtually completes pipeline industry restructuring,

which began on October 1985 with Order 436. Order 636 is the outcome of the much-debated Mega-NOPR (Notice of Proposed Rulemaking), during which FERC held extensive hearings concurrently with formal public and legislative discussion on the final structure of the deregulated pipeline industry.

Order 636 delineates rules for the 'unbundling' of rates for the various services pipelines provide gas transporters and full service customers. The deregulation process that began with Order 436 has resulted in full service gas sales falling to 15% of volumes flowing through the Nation's long distance pipelines. In sharp contrast to 1985, when virtually 100% of throughput was owned by pipelines, most gas now moves on behalf of "third parties" -- buyer-seller pairs purchasing only transport services. The pipelines "merchant function" has been greatly diminished. Only 15% of gas consumers depend on pipelines to acquire, store, and transport gas for them. These are mostly small consumers, whose demands occur during the peak winter season.

The unbundling of rates provides a cost-accounting format (FFV, or Full-Fixed Variable) that carefully separates pipelines costs for each type of service, including transport capacity used only to meet peak demands during the winter. While this may be a benefit to large gas consumers who have the capability to manage their consumption patterns to take advantage of the lowest-cost pipeline services, small customers of merchant" gas will likely pay higher rates. This has become a concern of several State Public Utility Commissions -- as well as dependent LDCs -- who will be faced with passing on higher long-distance pipeline tariffs to residential and other small consumers. Continued expressions of concern to Members of Congress may be anticipated.

Natural Gas Legislative Initiatives Removed In Conference

As legislation was being framed in Congress, regulatory policy was evolving on a parallel track at FERC, where the goal was to restructure the pipeline industry to streamline transportation and provide broader access to ancillary pipeline services, such as storage. The result of FERC's efforts was the far-reaching Order 636 which was issued 5 months ahead of the energy bill conference. It was so complex in implication and extensive in likely impact that it effectively precluded the second layer of regulatory change that would have resulted from the energy legislation. As a result of uncertainty and concern over how the proposed law might interact with Order 636-- already completed -- the natural gas streamlining measures of the House and Senate energy bills were discarded in conference.

NATURAL GAS--AN HISTORICAL PERSPECTIVE

BACKGROUND

The History of Natural Gas Regulation

The origins of federal involvement in interstate transport of natural gas arose in the context of prior, analogous regulation of interstate sales of electric power. Large amounts of electric power had been sold across state line for a number of years. But, in 1927, the public utility commission in the state of Rhode Island attempted to fix the rates charged by a Rhode Island generator to a Massachusetts reseller. The Supreme Court held that the rates of power generated in one state and sold in another could not be regulated by either state. The Court's ruling led to assignment of the job of regulating the interstate sale of electric power for resale to the Federal Power Commission, which had been established by the Federal Water Power Act of 1920 to regulate hydroelectric sites on navigable waterways and federal property. Later, this assignment of authority was codified in the Public Utility Act of 1935.

Natural gas began to become a common article sold in interstate commerce in the 1930s, when interstate pipelines begin to be constructed to sell natural gas produced in conjunction with crude oil. This gas had been flared for many years. But--in the late 1920s--as states began to regulate the venting of natural gas, construction began on long distance pipelines which would transport gas from producing areas in the Southwest to consumers in the North East and Midwest. The same public policy sentiment that led to the Public Utility Act also led Congress 'be a similar regulatory format for natural gas. The Natural Gas Act (P.L. 75-688), passed in 1938, went a bit farther, specifying that the FPC fix "just and reasonable" pipeline rates, determine legitimate costs and prohibit discriminatory tariff practices. The Gas Act was amended in 1942 to require interstate sales for resale be at the 'lowest possible, reasonable rate."

Thus, interstate transportation of natural gas has been regulated by FERC and its predecessor agency, the Federal Power Commission (FPC), since enactment of the Natural Gas Act of 1938 (NGA). Historically, the same regulatory format used for electric utilities has been applied to interstate gas pipelines. This has meant that pipeline tariffs have been set to recover operating costs, gas purchase costs, depreciation of facilities, and a return on the undepreciated portion of assets used in the business. The NGA mandates that these rates be just and reasonable and formulated in a non-discriminatory manner.

I/ Rhode Island Public Utilities Commission v. Attleboro Steam and Electric Company, 273 U. S. 83 (1927).

Regulating Natural Gas Prices at the Wellhead

The Supreme Court interpreted the NGA, in the 1954 *Phillips v. Wisconsin* case, as extending regulation beyond interstate pipelines and back to the wellhead. The ruling mandated the regulation of natural gas prices for gas sold into interstate commerce. The FPC delayed response to the Court mandate, expecting Congress to enact legislation which would make clear its original intent that wellhead gas prices not be regulated. But no legislation came forward so, after a bit of a delay, the FPC began regulation on a producer-by-producer basis. By 1960 the regulatory logjam included 30,000 pending cases. Attempting to deal with this, the next phase of wellhead regulation aggregated producers by broad geographic areas, setting a relatively small number of Area Rates. These were based on estimated regional production costs plus a fair rate of return. Area Rates were updated periodically, with new rates being set for "new" gas as it came on line and lower rates set earlier left in force for old" gas.

During the late 1960s relatively low FPC-regulated interstate prices began to be outstripped by growing demand and rising intrastate prices in gas markets within producing States. At the same time, new gas discoveries fell below production, and gas supplies were not being replaced at the rate they were being consumed. With higher prices in intrastate markets, interstate pipelines, which could only pay relatively low regulated prices, found themselves unable to acquire gas supplies to meet growing demand. And demand for interstate gas was stronger than it would otherwise have been absent regulation because price ceilings held gas prices below market levels.

The period of Area Rate regulation lasted until 1973, when producer regulation was consolidated into a National Rate, and prices for new gas raised. Subsequent increases in the National Rate for new gas, combined with in-place Area Rate prices for old gas, resulted in a wide 'de range of prices for gas of various "vintages."

Pressure For Change in Wellhead Regulation

As interstate demand had outstripped the supply available to the interstate market, pipelines and local distribution utilities (LDCS) were forced to implement demand management by allocation. During periods of peak demand, some areas experienced severe curtailment of service.

The imbalance between supply and demand brought increasing pressure on Congress to deregulate wellhead prices. Diminished gas discoveries, attributed to low FPC price ceilings, service curtailments, the inability of interstate pipelines to acquire gas supply caused producers, pipelines, and LDCs--as well as some consumer groups--to seek field price deregulation for at least new gas.

Legislative interest in a remedy to the price-supply problem strengthened during the 1970s. Several attempts were made to deregulate gas, and a number came very close to being enacted into law. The ultimate resolution of a great deal of legislative conflict came with the enactment of the Natural Gas Policy Act of 1978 (NGPA--P. L. 95-62 1).

Cast as a compromise between consumers wanting continued price controls and producers and pipelines wishing some form of deregulation, the NGPA evolved as an extremely complex law. Over 20 different categories of gas were established, and this resulted in an array of NGPA prices that ranged from \$0.30 to as much as \$10.00 per thousand cubic feet (mcf). Price categories for existing (i.e., old) gas production were in fact a carry-over into the new law of preexisting Area and National Rates established by FERC.

During its initial years of operation, NGPA appeared to achieve a number of long sought goals. First of all, with higher new gas prices as well as the prospect of decontrol in the predictable future, gas reserve additions rose. For the first time in a decade, production was matched by new discoveries. Interstate pipelines-- whose reserve to sales ratio had become very low--began acquiring gas reserves in significant quantities. Gas markets appeared to be headed toward a long sought balance between supply and demand.

But, the supply-demand equilibrium point was overshoot as supply grew and demand shrank. Gas demand dropped during the recession of the early 1980s, a victim of macro-economic forces and a shift in industrial structure, featuring a decline of 'rust belt', energy intensive industry-y. Total demand still has not recovered to levels of the 1970s. And the geographic distribution of demand also shifted, with greatly diminished demand in the industrial North-east and Midwest persisting as demand increased elsewhere as a result of the long economic expansion. Because of improved production technology and greater exploratory effort, deliverable gas became available in nearly unprecedented volumes.

Old Gas Deregulation

The wellhead or "field" price of old natural gas was regulated for the life of the resource under NGPA price controls. Ceilings on other gas expired at the end of 1984, leaving only declining amounts of old reserves--from discoveries prior to April 20, 1977 (the date on which the law was proposed)-under controls.

In 1986, FERC issued Orders 451 and 451-A, which increased the price of remaining old gas to the highest rate allowed under NGPA. This had the effect of raising old gas ceilings to about \$3.00/mcf, which was above the then current market-clearing price.

Order 451 was largely superseded by 1989 legislation providing for the 3 year phase-out of old gas controls. A deregulation bill addressing only price ceilings moved through the Energy and Commerce Committee with little opposition. The House passed H.R. 1722 on Apr. 17, 1989, by voice vote. Similar legislation was reported out of the Senate Energy Committee and passed the Senate quickly. A conference easily resolved the only area of difference--related to deregulation of gas from newly spudded old gas wells and the bill was signed into law (P. L. 101-60). This ended a quarter-century of controversial field price regulation.

The new law provides for a phase out of controls, over a three and a half year period, on the following types of gas:

- gas from already expired, expiring, or terminated contracts between producers and pipelines,
- gas involved in new contracts;
- sales of gas not under contract at the time of the bill's enactment;
- gas from contracts that have been voluntarily renegotiated;
- gas from newly drilled wells in old fields; and,
- any other gas remaining under controls at the end of 1992.

Post-Deregulation Price Developments

Since deregulation of natural gas began, prices have continued a downward drift. Falling energy prices in general, increased supplies of producible domestic gas reserves, imports from Canada, and weak demand have all contributed to very low field prices. The average wellhead price declined steadily during the 1980s, falling from \$2.5 l/mcf in 1985 to \$1.72 in 1990. While the downward trend may have slowed or even bottomed, it is improbable that field market prices will increase during the next few years.

PIPELINE REGULATION-DEVELOPING PROBLEMS UNDER NGPA

NGPA appeared to be operating as intended without unanticipated problems, in large part due to skillful implementation by FERC, until about 1983. At that point, falling energy prices coupled with falling gas demand interacted with pipelines gas acquisition prorating in a way that would ultimately change the fundamental nature of gas deregulation,

What occurred was that pipelines in their urgency to replenish depleted inventories entered into contracts with producers for more gas than they could resell. Take-or-pay (TOP) provisions of gas supply contracts required pipelines to pay for a specified amount of gas whether taken or not.

In addition to lining up more gas than they could subsequently market, pipelines also paid prices which were, at least with hindsight, too high. This was particularly true for uncontrolled gas or gas with incentive NGPA prices. Pipelines were able to pay above market prices, then average high prices with the cost of old gas, and to still have a marketable weighted average price.

Pipelines began to make the deficiency payments called for by TOP language. They also began to seek ways to avoid TOP penalties by selling gas to non-traditional customers at below cost. These so-called "off-system sales" were approved by FERC under the theory that it was more desirable to have pipelines recoup part of the cost of purchased gas than forego the whole TOP amount. The courts, however, found discriminatory the practice of selling gas to some customers below actual cost and attempting to recoup the revenue shortfall from the regular consumers of the pipelines system supply. FERC was directed to remedy the situation.

Producers of new, unsold, or undertaken gas were also complaining that pipelines were backlogged with TOP gas. Large industrial and LDC consumers began seeking access to pipeline transport to take advantage of low prices offered by producers with unsold gas. The political and economic groundwork was being laid for open access transport or common carriage of third-party gas.

Historically, interstate pipelines had only carried gas which they owned, and the change that would occur proved traumatic for that industry.

To comply with a court directive ending discriminatory discount sales of TOP gas, FERC issued Order 436 in June 1986. This provided for voluntary participation in a FERC-approved, pipeline-formulated, open access transport plan. Each pipeline wishing to participate would file rates and tariff provisions conforming to Order 436 guidelines. Virtually all interstate pipelines have filed Order 436 transportation tariffs, and these transport plans have ultimately been accepted by FERC, often modified in either a settlement conference or a full-scale regulatory proceeding.

Adding to the TOP controversy was Order 380. With this action, FERC allowed customers of interstate pipelines to unilaterally exit from their minimum bill contracts. (These are virtually the same device as TOP, except describe the relationship between pipelines and LDCs.) Order 380 allowed LDCs and other contract customers of pipelines to purchase unsold gas from producers directly, and have it transported via Order 436 transport programs.

While an important factor in facilitating the new regulatory climate of open access transport, Order 380 exacerbated the TOP problem. Pipelines had contracted for gas supply to meet obligations for LDC and other firm customers. With Orders 380 and 436, these consumers began purchasing only transport services and not gas supply from pipelines. With the customer exodus, pipelines still remained obligated to producers under TOP contracts. They began incurring mounting liabilities. The issue of who--pipeline, producer, or LDC--should bear the TOP burden, and in what proportion these parties might be responsible, became contentious.

In June 1987, the D.C. Court of Appeals vacated Order 436. While agreeing with the basic open access transport principle, and reaffirming FERC's authority to make this change in the regulatory format, the Court found that pipelines themselves were bearing too much of the TOP burden. Order 436 was remanded to FERC with instructions to spread the TOP burden more equitably. The August

1987 response was Order 500, which provided for sharing of a portion of TOP costs with producers (under an extremely complex formula), absorption of 25% of costs by pipelines, and a passing on of the remainder (part directly and part indirectly) to customers.

The ultimate objective of Order 500 was to resolve TOP, which had proven to be an impediment to efficiency in the marketplace. Pipelines were given until Mar. 31, 1989, to settle TOP costs and file tariffs for pass through of up to 75%. In October 1989, the D.C. Court of Appeals ruled that FERC could not impose such a filing deadline. Thus, TOP will continue as an issue, at least as long as accumulated gas purchase costs remain to be passed onward.

To some extent, TOP costs represent the price tag of pipelines maintaining a portfolio of gas contracts on behalf of LDCs and other customers. With most-but not all--gas now sold directly by producers to consumers, the question arises of how pipelines should maintain gas inventory for customers unable to line up their own supplies. One concept currently under discussion goes by the name of gas inventory charge (GIC). Referred to by critics as TOP by another name, the GIC concept now being worked out at FERC is an attempt to avoid future TOP problems and to create incentives for pipelines to provide system supply for customers who are unable to supply themselves from field markets. The basic concept centers on billing customers for a portion of the cost of maintaining system supply, based on their monthly consumption. Shortfalls below a specified demand level would be penalized, because they are in effect the precursors of a future TOP problem.

Bypass and Optional Expedited Proceedings for Facilities Construction

To increase competition further, Orders 436/500 allow third-party transporters to bypass parts of the gas pipeline system that pose bottlenecks. Inadequate facilities or gas systems whose tariffs were too high could be circumvented by building new pipelines or using competing gas systems. Optional Expedited Certificates (OEC) were provided for with the apparent intent of facilitating relatively small new pipeline construction projects by putting them on a regulatory fast track. Some transporters began to bypass local distribution companies (LDCs), and a number of additional bypass proposals are on the OEC fast track. Additionally, OEC has been used by FERC to fast track some larger, controversial pipeline projects, Bypass, and in some cases OEC as well, has raised concerns among LDCs that pipelines will compete for their revenues and customers, particularly large industrial customers.

Most LDCs have different price structures for industrial and residential consumers. LDCs' unit costs of serving large volume users are lower, and to some extent their rates reflect this. But historically these economies were not fully reflected in tariffs. Tariffs are approved by Public Utility Commissions (PUC) in the States where the LDC does business. LDCs, with PUC approval, often charge large users more, and use these monies to offset lower charges to residential and commercial customers.

Since the actual cost of service for a large industrial consumer is often lower than the LDC tariff, in some cases, an entrepreneur can build a new pipeline and provide competitive service for less than the LDC tariff. This has started to happen in a number of situations.

Some LDCs have reacted to the competitive threat by reducing tariffs to likely bypass customers. While this helps them retain their customer base and a portion of revenue that would otherwise be lost, revenue is nevertheless reduced. Since these monies had previously been used to keep residential and small commercial rates down, the LDC will seek, presumably by increasing tariffs, to recoup the shortfall resulting from bypass competitive pricing. Thus, it can be

seen how the bypass issue might become a consumer issue, as well as a concern for state utility commissions responsible for LDC tariffs.

NATURAL GAS MARKET RECAP

For the early 1990s, natural gas markets are accommodating to deregulation of pipelines as well as production. Wellhead prices have virtually been freed of price controls as the result of processes underway since 1978. While prices reacted to NGPA by rising for 4 or 5 years after enactment, they subsequently spiraled downward, and may have bottomed. But NGPA particularly in its early years--resulted in an increased supply of producible reserves as rising prices triggered a wave of exploration and development projects. This resulted in technological improvements which--despite the price decline--appear to be sustaining a level of reserve addition that results in the near-replacement of each years gas production.

The status of pipelines has changed more dramatically. Until the middle 1980's, pipelines had never transported gas other than that which they owned themselves. Now, over 80% of gas flowing through long distance pipeline systems is being carried on behalf of other gas owners. Historically, pipelines provided only 'full service' to their customers. They acquired gas, stored and transported it, and marketed it. The only way consumers not located in a gas field could have bought gas was from a pipeline. Today, little gas is actually marketed by pipelines. Pipelines--accustomed to doing more--are left with only transportation portion of the gas business. And gas transportation has turned into a competitive service, with competition between multiple pipeline companies in a given geographic market driving down rates and profits.

This situation has created a pipeline "identity crisis". What should the exact nature of pipeline business be? And what services should pipelines stand ready to provide customers who depend on "full serve gas" because they are unable to manage complete transactions on their own.

This remains to be sorted out. The exact nature of the pipeline business will be determined by regulatory process at- FERC over the next few years. Periodically, the Congress examines pipeline regulatory policy and legislation may ultimately help shape the pipeline business as well.