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APPROVED**

**UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION**

Inquiry Into Alleged Anticompetitive  
Practices Related to Marketing Affiliates  
of Interstate Pipelines )

Docket No. RM87-5-000

**STATEMENT OF THE UNITED STATES FEDERAL TRADE COMMISSION STAFF**

January 29, 1987

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Statement of the Federal Trade Commission Staff<sup>1</sup>

I. Introduction

The staffs of the Bureaus of Competition, Consumer Protection, and Economics of the Federal Trade Commission appreciate this opportunity to respond to the Federal Energy Regulatory Commission's (FERC) Notice of Inquiry (NOI)<sup>2</sup> into alleged anticompetitive practices related to the marketing affiliates<sup>3</sup> of interstate pipelines. The specific purpose of the inquiry is to determine whether vertical integration by pipelines into the marketing of natural gas raises the costs of rival marketers that are not integrated, thereby reducing competition. FERC also seeks suggestions on possible regulatory responses if the evidence indicates that anticompetitive behavior exists.

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<sup>1</sup> This statement represents the views of the staff of the Federal Trade Commission. It does not necessarily represent the views of the Federal Trade Commission or of any individual Commissioner. The Commission has, however, authorized the staff to submit this statement.

<sup>2</sup> Federal Energy Regulatory Commission, *Notice of Inquiry into Alleged Anticompetitive Practices Related to Marketing Affiliates of Interstate Pipelines*, 18 CFR Parts 154 and 271, November 14, 1986.

<sup>3</sup> A "marketing affiliate" of an interstate pipeline is essentially a broker of natural gas that is owned by the pipeline. That is, it enters into contracts both to buy gas from producers (who may be independent of the pipeline), and to sell gas to customers, such as industrial end-users and local distribution companies. It may also arrange for the gas to be transported from producers to customers, using both affiliated and unaffiliated pipelines.

The Federal Trade Commission (Commission) is an independent agency with the responsibility for enforcing the Federal Trade Commission Act,<sup>4</sup> which prohibits "unfair methods of competition." The Commission seeks to promote competition in energy markets, as evidenced by numerous law enforcement actions and policy statements before various regulatory bodies, including FERC.<sup>5</sup> The Commission's staff has generally espoused the position that the historic practice of regulating price and entry behavior in natural gas production and distribution has hindered the ability of that industry to respond to market changes, to the detriment of consumer welfare.<sup>6</sup> Consequently, we have urged that FERC adopt policies that place increased reliance on competitive forces, whenever these policies are consistent both with FERC's statutory obligations and with underlying market characteristics.

The NOI seeks information on thirty specific issues deemed to be of relevance to the potential for anticompetitive behavior by integrated pipeline/marketers. For the most part, we do not attempt to answer each question individually, but rather direct our response to the broad structural and economic issues that cover many of the questions.

These comments are organized as follows. Section II identifies the potential anticompetitive problems that might arise under the current regulatory environment, and discusses some instances where anticompetitive activities are alleged to have taken place. Section III discusses FERC's policy alternatives. These consist of (1) continuing to allow interstate

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<sup>4</sup> 15 U.S.C. 41 *et seq.*

<sup>5</sup> See *Statement of the Federal Trade Commission Staff, Inquiry Into Purchasing Practices of Interstate Pipelines*, FERC Dkt. No. RP83-96-000, July 1, 1983.

<sup>6</sup> *Id.*

pipelines to own and operate unregulated marketing affiliates, (2) regulating the prices charged by marketing affiliates, (3) requiring pipelines to divest their marketing affiliates, and (4) restricting the access of marketers to their affiliated pipelines. Section IV is the conclusion. An appendix provides responses to some of the specific questions posed in the NOI.<sup>7</sup>

Based upon theory and available evidence, we believe that there may be instances where integrated pipeline/marketers can behave anticompetitively towards rival marketers, and thereby increase their own profits. However, we find it plausible (though by no means proven) that there may be genuine efficiencies generated by the integration of gas transmission with gas marketing. Selection of the optimal policy therefore involves balancing these efficiencies against the potential welfare losses created by anticompetitive behavior. We counsel against attempting to regulate the prices and margins received by marketing affiliates. The historical experience with wellhead gas pricing regulation suggests that such regulation is inefficient and distortionary. Instead, we recommend that FERC give serious thought to adopting a "no access" policy which prohibits affiliates from shipping on their parent pipeline. The principal virtue of this strategy lies in its flexibility. If the cost of foregone vertical efficiencies appears to be greater than originally anticipated, FERC can remove the restriction and permit marketers to purchase space from their affiliated pipelines. If the policy proves to be ineffective as a means for deterring anticompetitive behavior, FERC can then require outright vertical divestiture. Moreover, as a first step, FERC should consider strengthening its "open access" policy (i.e., whereby pipelines sell space to independent shippers on a first come,

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<sup>7</sup> We respond to questions 1, 2, 4, 6, 15, and 21.

first served basis) by requiring pipelines to give advanced notice of firm transportation capacity, and by adopting policies allowing the right to interruptible space to be vested in gas purchasers. We believe that the adoption of these policies will ultimately result in the enhancement of consumer welfare.

## II. The Regulation of Interstate Gas Pipelines

### A. The Current Regulatory Environment

To understand the competitive issues being raised in the NOI, it is useful to visualize the gas industry as consisting of three stages: (1) production, (2) transportation, and (3) local distribution. In addition, there are firms which perform none of these three functions, but which instead simply buy and sell gas on the open market. These firms are typically referred to as "brokers" or "marketers." Natural gas producers explore for gas, develop reserves, produce, and ultimately sell gas. Historically, most of this gas has been sold to pipelines, who transport the gas to consuming areas and deliver gas either to large volume direct users (e.g., electric utilities), or to local distribution companies (LDCs). The LDCs then deliver the gas to small volume users, such as households. All gas transactions do not follow this pattern, however. As an alternative, an LDC might purchase gas from a broker, who has already arranged to purchase gas from some source, such as a producer.<sup>8</sup> The broker might then arrange for a pipeline to deliver the gas to the customer.

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<sup>8</sup> The broker has other sources of gas besides producers; it might, for example, purchase gas from a pipeline that wishes to dispose of excess gas inventories.

The Natural Gas Policy Act of 1978 (NGPA)<sup>9</sup> essentially eliminated federal control of wellhead gas prices,<sup>10</sup> as well as controls over entry or exit into gas production or exploration. Passage of the NGPA constituted Congressional recognition of the competitive nature of the gas production and exploration industry.

On the other hand, because gas transportation is characterized by increasing returns to scale, individual pipelines in some geographic markets may be "natural monopolies." Thus, it is not uncommon to find producers, as well as local distribution companies (LDCs) and end-users, served by a single pipeline. This creates two opportunities for the exercise of market power by pipelines. First, they may be able to act as monopsonists with respect to gas producers, which means that they will pay a sub-competitive price for wellhead gas, and second, they may be able to act as monopolists with respect to LDCs and end-users, which means that they will resell the gas at above-competitive prices. Because of this potential for anticompetitive behavior, Congress elected to retain controls over pricing, entry, and exit in the market for gas transmission services. Owing to the nature of the cost and demand conditions characterizing this service, it was felt that (at least in certain geographic markets) there existed a potential for anticompetitive market behavior. Accordingly, interstate gas pipelines are still subject to FERC regulations on pricing and investment decisions.

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<sup>9</sup> 15 U.S.C. 717.

<sup>10</sup> Some categories of gas were not decontrolled under the terms of the NGPA. However, FERC Order No. 451 (issued June 6, 1986) establishes a pricing structure approximating that which would exist under actual competitive conditions.

In recent years, FERC has attempted to develop policies that will allow gas producers and consumers to take advantage of the competitive nature of the natural gas market, while simultaneously constraining pipelines from exercising market power. The recently-promulgated FERC Order No. 436, which established an "open access" policy, is the most prominent example of this endeavor.<sup>11</sup> Many interstate pipelines now enter into contracts to carry gas that is owned by others.<sup>12</sup> Order No. 436 requires that all interstate pipelines that hold themselves out as transporters of gas for others do so on a nondiscriminatory basis. This means that the pipeline is required to sell space at (or below) the FERC tariff on a first-come, first-served basis to any shipper (e.g., a producer, an LDC, an end-user, an independent gas broker, or a marketing affiliate) who wishes to buy it. Participation in the Order No. 436 program is voluntary. If a pipeline elects to participate in the program, FERC will issue a blanket certificate for this transportation service, thereby reducing regulatory delays or impediments to these transactions. By separating the purchase of gas from the purchase of gas transportation services, Order No. 436 may provide buyers and sellers of gas with access to a much greater number of potential trading partners than they had heretofore enjoyed.

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<sup>11</sup> See FERC Order No. 436, *Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, Dkt. No. RM85-1-000, October 9, 1985.

<sup>12</sup> Traditionally, pipelines transported only their own gas.

## B. Potential Problems With the Current Regulatory Environment

As discussed above, Congress has recognized that pipelines can sometimes exercise market power, and have therefore imposed regulations on the prices charged when pipelines (as opposed to pipelines' marketing affiliates) "sell gas for resale" (e.g., sell gas to LDCs), as well as on the tariffs charged when pipelines transport gas for others. FERC has also established "open access" policies. If effective, these regulations reduce both monopoly and monopsony power.<sup>13</sup> Some opportunities for anticompetitive behavior may nonetheless remain. Many pipelines own, or are affiliated with, firms that buy and sell gas on the open market. At the present time, the prices charged by these marketing affiliates are not subject to FERC regulation.<sup>14</sup>

The ability of a pipeline to establish an unregulated marketing affiliate may create an opportunity for the pipeline to earn supracompetitive returns. If an "open access" pipeline can make it costly or difficult for independent shippers to purchase space, it may provide its marketing affiliate with the ability to behave in an anticompetitive fashion. A captive gas producer (i.e., a producer served by only one pipeline) which might otherwise have executed a competitive sales contract directly with an LDC, might have no

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<sup>13</sup> In theory, the rate-of-return regulation reduces the pipeline's incentive to act as a monopsonist, since the regulated price at which it resells the gas will be adjusted downward to reflect any reductions in the price at which it acquires the gas. However, as we explain below, if a pipeline can establish an unregulated marketing affiliate, monopsony behavior may once again become profitable.

<sup>14</sup> For example, Tenneco Corporation owns both the Tennessee Gas Pipeline Company and the Tenngasco Corporation. Tenngasco is a marketer; it buys and sells gas on the open market. When Tennessee Pipeline sells gas to an LDC, the price is regulated; when Tenngasco makes a similar sale, the price is market-determined.

alternative but to sell to a marketing affiliate (at a monopsony price), if the marketing affiliate has acquired all of the available transportation space. An LDC, if not served by other pipelines, might likewise find itself with little alternative but to buy gas from a marketing affiliate of a pipeline (at a monopoly price) if other potential gas suppliers cannot obtain space at competitive terms. Lastly, the existence of an unregulated subsidiary may permit the parent company to engage in profitable cross-subsidization between subsidiaries. In situations where one subsidiary is subject to a binding profit constraint, it may sometimes be profitable for the parent to establish an affiliate that will sell in an unregulated market. If some of the unregulated entity's costs can be incorporated into the regulated affiliate's rate base, the resulting higher tariff (and revenue) may increase the firm's overall level of profitability, even in situations where the unregulated subsidiary cannot cover all of its costs at the competitive price.

### 1. Third Party Allegations of Monopsony Power

A number of third parties have submitted documents to FERC in which they discuss possible instances of monopsonistic behavior. In a recent FERC proceeding,<sup>15</sup> Champlin Petroleum Company (an oil and gas producer) has contended that marketing affiliates can obtain superior access to pipelines through anticompetitive means. This allows them to extract "unreasonable marketing fees" from producers. Since these fees reduce the net price received by gas producers, this is simply another way of stating that marketing affiliates will exercise monopsony power against their suppliers.

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<sup>15</sup> See FERC Order Setting Certificate Application for Hearing, Tenggasco and Tenggasco Exchange Corporation, Dkt. No. C186-168-000, September 11, 1986.

In a formal complaint before FERC, the Independent Producers Association of Mountain States (IPAMS) has alleged that two pipelines, Panhandle Eastern Pipeline Co. (PEPL) and Colorado Interstate Gas Co. (CIG), refused to disclose to it accurate transportation rates, and available capacities, for shipments of gas to end-use markets that IPAMS desired to serve.<sup>16</sup> According to the complaint, this behavior prevented IPAMS (or any other nonaffiliated shipper) from arranging sales to these markets. This, in turn, allowed the pipelines' marketing affiliates to execute sales contracts to most of the LDCs and end-users in these markets. The inability of IPAMS to sell gas directly to end-users and LDCs not only created opportunities for the exercise of market power by pipelines in downstream markets,<sup>17</sup> but also for the exercise of monopsony power in upstream markets. If producers such as IPAMS are not served by other pipelines, and cannot arrange for competitively priced transportation of gas for direct sales to end-users and LDCs, then their sales opportunities may be restricted to the pipeline's marketing affiliates. The result will be, as IPAMS contends in its complaint, below-competitive wellhead prices for gas.

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<sup>16</sup> Independent Producers Assn. of Mountain States v. Panhandle Eastern Pipeline Co., Dkt. No. CP86-584-000, June 20, 1986.

<sup>17</sup> The existence of these opportunities will depend upon the number of alternative fuel sources that are available to PEPL's and CIG's customers.

## 2. Third Party Allegations of Downstream Monopoly Power

Several petitioners have described methods by which pipelines can raise the costs of their rival marketers. Hadson Gas Systems<sup>18</sup>, a producer, marketer, and transporter of gas, has claimed that pipelines have imposed supracompetitive "imbalancing penalties" on independent shippers.<sup>19</sup> Although the marketing affiliates are subject to the same penalties, Hadson claims that the affiliates are not disadvantaged by this, since the payment of the penalty is a pure intrafirm transfer.

Hadson's claim may not be valid. First, if the penalties only reflect the costs associated with imbalances, no adverse effect on competition will exist, even if the penalties are "large" in some absolute sense. Second, in some situations the revenues from these penalties will be included in the calculation of a pipeline's allowed rate-of-return. In such cases, the firm's maximum transport rate will presumably be reduced, thus offsetting (at least partially) the cost-raising effect of the penalties.

The Minnesota Energy Issues Intervention Office (EIIO) provides another example of possible anticompetitive behavior by pipelines. Although pipelines cannot charge independent shippers transport rates in excess of the regulated tariff, the EIIO claims that the pipelines can incorporate other anticompetitive terms into the transport agreement (such as those dealing with contract duration) that have a similar effect: they raise the costs of

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<sup>18</sup> Petition of Hadson Gas Systems, Inc., Dkt. No. RM86-19-00, August 7, 1986.

<sup>19</sup> An imbalancing penalty is imposed on a shipper if its gas deliveries do not equal its nominations to the pipeline, or if its deliveries to the pipeline do not equal deliveries by the pipeline (Hadson submission, p. 46).

the independent shippers. The higher cost of its rivals allows the pipeline's marketing affiliate to raise its price, and earn supracompetitive returns.

### 3. Pipeline Behavior That Might Not be Anticompetitive

The third party petitioners have thus identified several possible examples of genuine anticompetitive behavior involving marketing affiliates. However, they also complain of several additional pipeline practices that are in fact either procompetitive, or if anticompetitive, then unrelated to the existence of unregulated marketing affiliates. For example, the Minnesota EIO claims that many pipelines have reserves of "old gas," that are still subject to FERC wellhead price regulations. The regulated price of this "old gas" is below the current market price of gas. The EIO contends that pipelines will sell this gas to their marketing affiliates, who will then resell it at the unregulated price. By doing so, they increase their total returns earned on the sale of gas.

We agree that pipelines have an incentive to pursue this strategy. However, this behavior is, at worst, without competitive implications; at best, it is procompetitive. The profit margin earned on the resale of "old gas" at an unregulated price is a competitive rent that is attributable to the increases in the market price of gas that have occurred over time. By internally transferring gas to an unregulated marketing affiliate, an owner of old gas can keep this rent for himself, rather than transferring it to consumers or to another broker. If gas output is unchanged, this practice will affect only the distribution of social surplus between producers, consumers, and independent brokers. However, it seems likely that this behavior will result in more "old gas" being brought to the market sooner

than it otherwise would have been. As a general matter, output expansions of this type are thought to be procompetitive.

The EIO also notes that affiliated marketers have detailed knowledge of the operational characteristics of their pipelines. This gives them an advantage in devising optimal transportation routes. Although we discuss this point in greater detail in section III.B below, we note here our basic view that this alleged "abuse of information" by marketing affiliates may be a genuine vertical efficiency that benefits gas consumers.

Similarly, the EIO discusses a situation where a pipeline deliberately underestimates its "throughput" in order to gain approval for a supracompetitive transport rate. The EIO maintains that this situation is especially profitable for those pipelines having marketing affiliates, since the pipeline can charge the affiliate the (lower) competitive transport rate, while charging all independent shippers the supracompetitive rate. This allegedly gives the former an advantage when competing for gas sales contracts. We argue somewhat differently. From a theoretical perspective, while the establishment of a supracompetitive tariff constitutes a competitive problem, it is a problem unrelated to the existence of marketing affiliates. Under the scenario described by the EIO, any pipeline that successfully obtained a supracompetitive tariff, whether integrated into marketing or not, would earn monopoly returns; the existence of an unregulated subsidiary merely transfers (and does not increase) profits within a particular firm.

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### III. FERC's Policy Alternatives

Based on the filings of the petitioners in the proceedings discussed above, and FERC's analysis of the competitive attributes of pipeline markets in Order No. 436, we believe that pipelines may have market power in certain geographic markets. Thus, provided that FERC can obtain sufficient evidence that this anticompetitive behavior is actually occurring on a significant scale, there may be an economic justification for FERC to adopt new policies with respect to the currently unregulated marketing affiliates. In this section we discuss the policy options that are available to FERC, and attempt to assess the costs and benefits that would be associated with each approach.

#### A. FERC Should Encourage Maximum Pipeline Competition

As a general matter, the ability of a pipeline<sup>20</sup> to impose anticompetitive terms of sale on either its customers or its input suppliers rests on a lack of alternatives. These competitive alternatives could consist of other independent pipeline enterprises, or a vertically integrated pipeline subsidiary. The Justice Department Merger Guidelines discussion of vertical mergers is instructive on this point. If the structure of the production and marketing stages of the natural gas market is otherwise competitive,<sup>21</sup> the existence of fully-integrated pipeline-marketing enterprises can present a competitive problem only if (1) producers have few alternative transportation sources or customers for the gas, or (2) there are few alternative sources of

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<sup>20</sup> Or a group of colluding firms.

<sup>21</sup> FERC Order No. 436, p. II-4, indicates that FERC believes this to be true.

gas (or alternative fuel sources) for buyers. It must also be costly for producers and consumers to build their own transportation capacity.<sup>22</sup> Absent these conditions, anticompetitive behavior by integrated pipelines would be difficult to sustain. An attempt to impose a supracompetitive rate (or other cost-raising conditions) on a shipper would obviously fail if the shipper could switch to another pipeline, or build its own transportation capacity. Similarly, a pipeline would not have any market power as a buyer of wellhead gas if gas producers could costlessly switch to other buyers.

Reasoning along similar lines, selective discounts, and other superficially "discriminatory" price cuts and differentials, are generally procompetitive when undertaken in a competitive environment. As long as competition exists among pipelines, (which by assumption rules out the imposition of anticompetitive terms upon the pipeline's customers), an integrated pipeline/marketer will have an incentive to set the price<sup>23</sup> of the pipeline services at the competitive level. It cannot increase its profits by doing otherwise.<sup>24</sup> Therefore, the discretionary discounting of rates is likely to occur only in response to genuine changes in cost or demand when the

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<sup>22</sup> See "Merger Guidelines issued by Justice Dept., June 14, 1984," *Antitrust and Trade Regulation Report Special Supplement*, No. 1169, June 14, 1984. As the Guidelines note, differences in minimum efficient scale between the different stages of production (e.g., between gas producers and transportation) can sometimes make fully-integrated entry difficult. If there are large disparities between the minimum efficient scale of two adjacent stages of production, an attempt by a previously nonintegrated firm to achieve full integration can be costly, since it may force the firm to operate either (1) at an inefficiently high level of output at one stage (e.g., the production stage), or (2) at an inefficiently low level of production at another stage (e.g., the transportation stage).

<sup>23</sup> The pipeline will charge independent shippers, as well as its marketing affiliate, the competitive transport rate.

<sup>24</sup> For an analysis of this proposition, see R. Blair and D. Kaserman (1983), *Law and Economics of Vertical Integration and Control*, pp. 147-51.

pipeline is subject to competition. Because these price changes are a means by which the market adapts to new conditions, and are not devices by which rivals are handicapped, they are procompetitive, and should therefore be encouraged.

The implication of this analysis is that FERC should, to the greatest possible extent, adopt policies that increase the degree of competition among pipelines. FERC should, for example, attempt to prevent pipelines from using FERC's regulatory apparatus as a means for delaying or impeding entry by rivals.<sup>25</sup> In situations where a pipeline is considering adding new capacity to serve customers already served by a rival, the incumbent has an incentive to petition FERC to conduct a lengthy and costly certification hearing. The cost that a potential entrant must incur in response to such proceedings reduces the expected profitability of entry, and therefore makes entry less likely. The ability of incumbents to deter entry in this manner is increased in those (common) situations where entry into the "threatened" market is a minor part of a much larger expansion plan. The potential entrant might be unwilling to have its entire project delayed simply to permit entry into one particular market. As a result, there may be a large number of instances where otherwise profitable entry is never even contemplated.

FERC should therefore recognize that incumbents often will have an anticompetitive motivation for opposing entry. Such objections should be

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<sup>25</sup> A possible example of this behavior might be found in FERC Dkt. No. CP86-574-000 (November 10, 1986). In this matter, International Paper Co. (a pipeline customer) alleges that Arkla Energy Resources (an interstate pipeline) has lodged baseless complaints with FERC to prevent the Natural Gas Pipeline Co. from building a pipeline that would compete with Arkla's existing pipeline for International's business.

viewed with skepticism, and should not (except in rare cases) be allowed to delay entry. Unless the petitioner can present compelling evidence that entry will damage competition (and *not* simply a competitor), we urge that FERC disregard the protests of incumbents, and instead expedite the certification process.<sup>26</sup>

We believe that competition will be increased if FERC adopts the preceding recommendation. However, we nonetheless recognize that even if FERC is able to obtain the maximum degree of competition consistent with existing cost and demand conditions, it is still possible that some pipeline markets will remain susceptible to anticompetitive behavior. The following are FERC's policy alternatives.

#### **B. Regulatory Alternatives**

Through the creation of marketing affiliates, interstate pipelines may have the ability to circumvent regulation and exercise both monopoly and monopsony power, provided that they operate in markets where there is little competition from other pipelines or from other fuels. In these circumstances (and *only* in these circumstances), it may be possible to improve consumer welfare through the imposition of regulatory constraints on these affiliates. It must be stressed, however, that the imposition of constraints on firms operating in competitive markets is both unnecessary and inefficient. Imposing reforms on a national basis, without regard to

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<sup>26</sup> It is theoretically possible that entry deterrence could be efficient if a pipeline has a nonsustainable natural monopoly. In that case, entry by rivals could raise total production costs and be wasteful. While instances in which such restraint is warranted are likely to be rare, they cannot be ruled out as a possibility. See Baumol, Panzar, and Willig *Contestable Markets and the Theory of Industry Structure*, (New York: Harcourt Brace 1982), p. 197.

conditions in individual pipeline markets, will generate costs, but no compensatory benefits, in areas where competition is vigorous. This fact must be weighed carefully in making any decision to alter the existing regulatory environment.

If unregulated marketing affiliates are the vehicle by which monopoly pipelines earn supracompetitive returns, then several potential regulatory approaches to the problem exist. These are:

- (1) regulating the prices and margins received by pipelines' marketing affiliates;
- (2) requiring that the pipelines undertake the complete vertical divestiture of their marketing affiliates; or
- (3) prohibiting the marketing firms from using their affiliated pipelines.

In the ensuing sections, we briefly discuss the costs and benefits of each of these alternatives. Depending upon the results of further investigation of the magnitudes of these benefits and costs, FERC may determine that it is efficient to adopt one these policies. However, it must also be recognized that retention of the status quo (i.e., allowing regulated pipelines to own unregulated marketing affiliates) represents a fourth alternative. If the welfare gains associated with the policies listed above do not offset the corresponding welfare losses (attributable to the loss of any vertical efficiencies, and to regulation-induced resource misallocation), then the preservation of the existing environment may on balance constitute the best of these alternatives.

## 1. Regulation of Marketing Affiliates

Although the NGPA of 1978<sup>27</sup> deprived FERC of the authority to regulate most "first sales" of natural gas,<sup>28</sup> control over "sales for resale" (e.g., sales from pipelines to local distribution companies) are still subject to FERC scrutiny under the "just and reasonable" rate standard embodied in sections 4 and 5 of the Natural Gas Act.<sup>29</sup> It has been suggested by various interveners in current FERC proceedings<sup>30</sup> that sales by the pipeline affiliates should not be entitled to "first sales" status, but rather should be re-classified as "sales for resale," thereby placing the prices under FERC's review. The control of these prices will, it is argued, deprive pipelines of the ability to earn monopoly prices through the anticompetitive treatment of unaffiliated shippers.

The FTC staff urges that FERC reject this proposal. FERC has recognized in its recent rulemakings (i.e., Orders No. 451 and 436) the desirability of allowing natural gas commodity prices to be established by the interplay of market forces. FERC has stated that it believes the gas exploration and production industry to be essentially competitive. This means that the prices generated by this market are "correct," in the sense that they accurately reflect society's marginal valuation of gas output, as well as the resource costs that are incurred in the production of this output.

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<sup>27</sup> 15 U.S.C. 717.

<sup>28</sup> Most wellhead gas sales (with the exception of so-called "old gas") would be unregulated "first sales," as would any sale to an end-user, such as an industrial company.

<sup>29</sup> 15 U.S.C. 3301-432.

<sup>30</sup> See Motion to Intervene by Champlin Petroleum Co. (Champlin) in Matter of Tenggasco Corp., Dkt. No. CI86-168-000, September 11, 1986.

It follows from this that the market price serves as a proper guide to socially optimal production, consumption, and investment decisions.

We recognize that market prices may be "incorrect" in situations where pipelines can confer market power on their affiliated marketers. Nonetheless, we are skeptical that extension of price controls to cover these sales represents the best policy alternative. As a general matter, it is a difficult, if not impossible, task for the regulator to determine the optimal price structure that should prevail at any moment in time. Unless the regulator has access to timely information regarding current and anticipated demand and cost conditions, and can process this information efficiently, there is a distinct possibility that the resulting set of prices will convey incorrect incentives and information to all market participants. FERC's experience with wellhead gas pricing regulations serves as apt specific illustration of these problems. The Department of Energy characterized the old regulated price structure as inefficient, distortionary, illogical, and unnecessarily complex.<sup>31</sup> When added to the direct resource costs<sup>32</sup> associated with detailed price regulation, the costs generated by these allocative distortions would likely more than offset whatever benefits would be obtained through the implementation of this policy.

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<sup>31</sup> See FERC Order No. 451, p. 58.

<sup>32</sup> For example, the expenditures on the additional staff that would be required for carrying out this regulation.

## 2. Divestiture of Marketing Affiliates

If pipelines are earning monopoly returns through vertical integration into marketing, an obvious solution to this is simply to prohibit regulated pipelines from operating marketing affiliates. The purpose of this policy would be to prevent the type of behavior that is alleged to have occurred in the IPAMS case, described earlier in section II.B. To recount briefly, IPAMS, a group of producers, alleged that PEPL and CIG (two pipelines) manipulated the timing of their capacity availability and tariff announcements in a manner that inevitably resulted in the marketing affiliates acquiring rights to all of this space. This gave the marketing affiliates monopsony power with respect to IPAMS, and (perhaps) monopoly power with respect to downstream customers.<sup>35</sup>

There are certain clear benefits associated with a divestiture policy. It would have low administrative costs, it would avoid the welfare losses that would be generated by a distortionary regulated pricing structure, and it would doubtless deny pipelines any further opportunity to exploit market power through the establishment of unregulated subsidiaries. The major risk of divestiture is that it would eliminate whatever efficiencies might be associated with the integration of transportation and marketing.

One of the possible benefits of permitting pipelines to retain unregulated marketing affiliates derives from the large number of gas sources to which the typical pipeline has access. The pipeline may be particularly well informed about various operational aspects of these fields. For example, it may be knowledgeable about the differences in the quality of the gas,

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<sup>35</sup> We say "perhaps," since we do not have detailed knowledge of the competitive alternatives that might have been available to these customers.

seasonal variation in demands for each field's output, anticipated changes in rates of flow from each field, expected exhaustion dates, etc. As a result, there may be economies in information gathering. These informational economies arguably combine with the economies of gas collection to make pipelines highly efficient gas marketers. For example, these two factors may endow marketing affiliates with the capability to design highly efficient sales contracts that are tailored to the specific requirements of individual customers. It may not be possible for independent marketers to emulate this activity perfectly. Therefore, the opportunity to fashion such contracts may be lost if pipelines are barred from acting as gas marketers.

The ability of marketing affiliates to capitalize on their potentially superior access to information might be characterized as an "unfair advantage" by the independent rivals of the marketing affiliates. Indeed, some of the petitioners who requested the issuance of the current NOI have argued that access to this information is a principal source of affiliates' competitive advantage. The Minnesota EIO, for example, has claimed that because the affiliate "knows the available capacity levels within a pipeline, the changes which occur in those capacity levels, and the existence of actual capacity 'bottlenecks,' [it] can determine a viable transportation route acceptable to the pipeline. Competitors without this 'inside' information may not be able to do so."<sup>34</sup>

It is quite plausible that marketing affiliates could capitalize on this type of knowledge. It would not, however, be correct to characterize such behavior as anticompetitive. The ability to identify low cost transport routes would appear to be a genuine vertical efficiency. Furthermore,

<sup>34</sup> Minnesota EIO petition, pp. 10-11.

because of regulatory constraints, the existence of an unregulated marketing affiliate may increase an integrated pipeline's incentive to exploit its extensive knowledge of opportunities for minimizing the cost of providing delivered gas to any particular customer. A marketing affiliate may be able to retain (as profit) at least part of the cost savings from designing more efficient delivery arrangements (e.g., by arranging gas swaps with other pipelines, or rearranging its deliveries to other customers), while a regulated pipeline (which confronts regulations on both its gas and transport prices) would eventually be compelled to reduce its delivered price by an amount equal to these savings. A third party may not have sufficient information to replicate this function independently,<sup>35</sup> and cannot (because of regulatory constraints) provide financial incentives for the pipeline to make these arrangements. Even if a third party knew of such opportunities, it is questionable whether pipelines would have incentives to become "open access" carriers under the Order No. 436 program if they were not permitted to take advantage of these opportunities themselves (i.e., through their marketing affiliates). But unless pipelines elect to join the Order No. 436 program, there may be little pipeline capacity available for sale to independent shippers. Clearly, without access to pipeline space, third parties would find it difficult to exploit these opportunities.

We lack sufficient information to identify and measure all of the efficiencies that might derive from a vertically integrated market structure. However, we find it plausible that such efficiencies may exist. FERC may be able to determine whether such hypothesized efficiencies are present by

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<sup>35</sup> The Minnesota EIO submission (pp. 10-11) clearly suggests that third parties do not have access to the information necessary to carry out this function. But see footnote 36.

analyzing the behavior of marketing affiliates' market shares. Pipelines would not be able to make anticompetitive use of marketing affiliates if competition exists in pipeline markets. If one observes large market shares for marketing affiliates in competitive markets, then the existence of vertical efficiencies would be clearly suggested. The opposite conclusion would hold, however, if large shares are observed *only* in those environments where the affiliated pipelines possess market power.

If the evidence suggests the presence of efficiencies, then the implementation of a divestiture policy could be justified on economic grounds only if the associated welfare gains (attributable to the elimination of anticompetitive behavior by pipelines) would more than offset the value of these foregone vertical efficiencies. We do not know if these conditions would hold. There may, however, be alternatives to divestiture that achieve the same welfare gains, at a lower social cost.

### 3. Prohibiting the Marketing Firms From Using Their Affiliated Pipelines.

A less restrictive alternative to outright divestiture is to deny or restrict marketing affiliates from booking any capacity on their affiliated pipelines. We refer to this as a "no access" policy. Affiliates would still be free to bid for sales contracts with downstream customers (in competition with other suppliers, such as producers and other brokers), but they could not contract directly with the affiliated pipeline for transportation. Either the customer would make a separate transportation arrangement with the pipeline, or the affiliate could buy space from another independent shipper (e.g., another broker) which held title to space on the affiliated pipeline, and make its own delivery arrangements.

Whether this policy represents a sensible alternative to divestiture depends upon several factors. One of these factors is the nature and magnitude of the efficiencies from vertical integration. If these efficiencies derive principally from an affiliate's ability to capitalize on its detailed knowledge of its parent's operational characteristics, then a "no access" policy could entail substantial welfare losses.<sup>36</sup> In this instance, it is difficult to see how the competitive implications of a no access policy would differ in any meaningful respect from a policy of full vertical divestiture. This is because one of the attractions to producers or LDCs of dealing with a marketing intermediary may be the avoidance of the need to search for the least cost transportation route. They may wish to pay others to perform this service. However, if they deal with marketing affiliates (who are otherwise attractive because of their access to diverse sources of supply, etc.), under a "no access" policy, customers would find it necessary to undertake tasks (i.e., arranging for transportation and delivery) that they would prefer to avoid. In some instances this would result in their patronizing an (otherwise) less desirable intermediary, entailing a consequent loss in efficiency. Further, as we argued earlier, the exchanges of information between pipelines and their affiliates, characterized by some of the petitioners as anticompetitive, may actually be efficient. If so, these efficiencies would be lost under a no access policy.

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<sup>36</sup> This assumes that independent third parties could not generate equivalent efficiencies. As we argued earlier, it is not clear that an independent third party could ever amass sufficient information to perfectly duplicate the functions currently performed by marketing affiliates. Other third parties (e.g., see the Minnesota EIO submission, pp. 10-11) appear to share this view.

It may be the case, by contrast, that there are vertical efficiencies that do not depend upon the exploitation of this knowledge, but which would nevertheless be sacrificed under a policy of divestiture. Under these circumstances, a no access policy would represent a preferred alternative to divestiture, since it would preserve these efficiencies.

From a different perspective, a potential drawback to the "no access" policy is the possibility that it might not prevent anticompetitive behavior. Even if a customer arranges for its own transportation, the pipeline will know the source of the gas. It may therefore be possible for the pipeline to impose anticompetitive terms on those shippers who do not buy gas from the marketing affiliate. If gas customers are aware of this possibility, they will have an incentive to purchase gas from the marketing affiliate, and the affiliate's profits will then be "artificially" enhanced due to the pipeline's exercise of market power.

#### 4. Recommendation

The paucity of information on the nature and magnitudes of the affiliate-related competitive problems and any possible vertical efficiencies necessarily makes our analysis highly speculative.<sup>37</sup> The limited available data (which consists mainly of the submissions of third party petitioners, such as the Minnesota EIIO) suggests that competitive problems may exist. They also suggest that most of the efficiencies potentially associated with the ownership of a marketing affiliate would be foregone under a no access

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<sup>37</sup> According to FERC's summary of Tenngasco's arguments, Tenngasco has claimed that its efficiency as a marketer is unrelated to its status as a pipeline affiliate. See FERC Order Setting Certificate Application for Hearing, Tenngasco Corp. and Tenngasco Exchange Corp., Dkt. No. CI86-168-000, September 11, 1986, p. 7.

policy. If true, this would suggest that the divestiture policy would be optimal, because it eliminates the anticompetitive problems with certainty, at a low administrative cost. However, we do not believe that these submissions constitute a sufficiently comprehensive body of information to support a definitive recommendation favoring divestiture.

Given this uncertainty, if FERC finds that significant competitive problems exist, for the present, the "no access" policy represents the best alternative. This policy has several advantages. First, it avoids the risks associated with price regulation. Second, in contrast to the divestiture approach, it provides FERC with a considerable degree of flexibility. Subsequent to the adoption of this policy, FERC will have the opportunity to observe a new industry equilibrium. If, at this new equilibrium, it appeared that pipelines were engaging in successful anticompetitive behavior, the divestiture remedy could readily be invoked. Conversely, if the cost of this policy (i.e., the value of any foregone efficiencies) appeared to be larger than the value of the corresponding benefits, FERC could easily rescind its order, and authorize the marketers to engage in direct transactions with their affiliated pipelines. The divestiture approach, by contrast, is reversible only at a much higher cost.

#### IV. Conclusion

We continue to believe that FERC should adopt policies that, as far as possible, allow competitive forces to determine prices and outputs. In the present inquiry, FERC wishes to determine whether vertical integration by pipelines into the marketing (i.e., the purchase and sale) of natural gas allows the pipelines to disadvantage their rivals in a way that reduces

competition. If so, FERC seeks guidance in selecting the optimal policy response to this problem.

Based on available information, it appears that in certain markets, behavior of this sort may be possible. However, we note that the evidence that a competitive problem exists is, at this point, largely anecdotal. At the same time, it appears possible that there are efficiencies generated by these vertical relationships. Therefore, should FERC determine that a competitive problem exists, the optimal policy will depend upon the relative magnitudes of (1) the welfare gains associated with the elimination of the anticompetitive behavior, and (2) the welfare losses (e.g., attributable to foregone vertical efficiencies, or regulation-induced resource misallocation) incurred when a particular policy is imposed.

FERC has open to it a variety of policy options. We believe that it would be extremely unwise for FERC to attempt to regulate the prices and margins received by marketing affiliates. The historical experience with wellhead gas pricing regulation suggests that such regulation would be inefficient and distortionary. Rather, we submit that FERC should choose from the remaining three alternatives.

If FERC has amassed sufficient information to indicate that the anticompetitive phenomena described in section II are likely to occur on a significant scale, then we believe that FERC should adopt a "no access" policy. The principal virtue of this strategy lies in its flexibility. If the cost of foregone vertical efficiencies appeared to be greater than originally anticipated, FERC could remove the restriction and permit marketers to purchase space from their affiliated pipelines (i.e., restore the status quo). If the policy proved to be ineffective as a means for deterring

anticompetitive behavior, FERC could then require outright vertical divestiture. Moreover, as a first step, FERC should consider strengthening its "open access" policy by requiring pipelines to give advanced notice of firm transportation capacity, and by adopting policies allowing the right to interruptible space to be vested in gas purchasers.

## Appendix

In the Notice of Inquiry, FERC has requested that interested parties provide answers to a set of specific questions regarding the allegedly anticompetitive behavior of pipelines and their marketing affiliates. In this section, we respond to some of those questions, or indicate where our previous analysis discusses those issues.

1. *[FERC question # 1] Which, if any, of the above-mentioned anticompetitive and discrimination concerns can be reduced to insignificance by increased competition among pipelines? Which ones will not be ameliorated by increased competition? Which ones will be worsened by competition?*

Response: As we discuss in section III.A, above, we believe that all of the concerns discussed in the NOI can be eliminated, given sufficient competition among pipelines. However, as we also note in section III.A, it is possible, given the cost and demand conditions for gas transportation, that some pipeline markets could remain susceptible to anticompetitive behavior when it is not possible to increase competition.

2. *[FERC question # 2] What measures of competition should the [FERC] develop to gauge the intensity of competition for gas and for transportation in particular markets?*

Response: A useful starting point for measuring competition in any market is an index of market concentration. Using the DOJ Merger Guidelines approach,<sup>38</sup> the "market" consists of the smallest area within which a hypothetical cartel could impose a "small but significant and nontransitory" price increase. The

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<sup>38</sup> See "Merger Guidelines issued by Justice Dept., June 14, 1984," *Antitrust and Trade Regulation Report Special Supplement*, No. 1169, June 14, 1984.

concentration index provides some information about the likely stability of such a cartel. The larger the number of firms in the cartel, the less valuable is any firm's share in the cartel's joint profits, and the greater is the incentive of each member to undercut the cartel price and expand output. Other factors held constant, the higher the concentration index, the more likely that the colluding suppliers can establish and enforce the output and price restrictions necessary to maximize joint profits.

One must, however, also pay attention to the "other factors" (e.g., ease of entry, homogeneity of products and buyers, extent of nonprice competition, magnitude of interfirm cost differences) that affect the likelihood of collusion in a market. Collusion may be difficult to sustain, despite high concentration, if other characteristics of the market make mutual agreement untenable. One may conclude, upon evaluation of these items, that competitive outcomes are possible, even when the market consists of only a few competitors.

The DOJ Merger Guidelines<sup>39</sup> recommend the use of the Herfindahl-Hirschman Index (HHI) of concentration. The HHI is determined by the distribution of market shares for the entire market, but gives proportionately greater weight to the market shares of the largest firms. Under specific well-defined theoretical conditions, the HHI can be shown to be related to

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<sup>39</sup> *Id.*

certain measures of industry performance.<sup>40</sup> However, we note that in instances where all firms have sufficient capacity to support large increases in output, the size distribution of firms may not be particularly important. In these situations, some measure of the number of competitors in the market may suffice.

An HHI statistic calculated solely from information on incumbents' market shares does not tell us whether the cartel will be profitable if it were to attempt to collude to reduce output and increase price. Whether the attempted collusion is profitable depends, to a large extent, on the size of potential entrants. Studies of the horizontal structure of pipeline markets tend to overestimate the market power of pipelines if no adjustment is made for potential entry.

The identity of potential entrants should be rigorously defined in the context of antitrust markets. Explicit assumptions or estimates should be made about the output elasticity of the competitive fringe, the elasticity of market demand, and the size of the dominant firm(s). The selection of potential entrants therefore considers a number of factors that are expected to affect the likelihood of successful collusion.

Nearby pipelines should be considered potential entrants if they are large enough to expand output sufficiently in the local market to undercut any collusive agreement which excluded the

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<sup>40</sup> See R. Dansby and R. Willig, "Industry Performance Gradient Indexes," *American Economic Review*, 69 (June 1979), 249-60, and J. Ordover, *et al.*, "Herfindahl Concentration, Rivalry, and Mergers," *Harvard Law Review*, 95 (1982), 1857-74.

potential entrant. This requires that the potential entrant be located sufficiently close to the market to justify economically the investment in the pipeline hookup. In addition, the potential entrant must have access to sufficient throughput (e.g., excess capacity or interruptible sales during peak demand periods) to expand significantly output in the new market. In the shorter run, therefore, sales data may represent a better proxy for the ability to supply new markets than capacity data, if the potential entrant has other contractual commitments.

A similar analysis should also be performed on current suppliers. It must be determined whether there are any factors that would constrain the ability of these firms to expand their output in the face of a cartel price. Thus, a complete analysis of competition in natural gas markets is much broader than an examination of the degree of concentration among current producers, or of the effects of entry on concentration.

3. *[FERC question # 4] Should [FERC] impose jurisdiction over the marketing affiliates of pipelines?*

Response: FERC should not regulate the prices received by marketing affiliates (see section III.B.1). Jurisdiction should be established only to permit the execution of the policies described in section III.B.3.

4. *[FERC question # 6] Should [FERC] adopt a per se rule that:*

*(a) Marketing affiliates not be permitted access to the affiliated pipeline.*

Response: See sections III.B.2 and III.B.3.

5. [FERC question # 15] Should a distinction be made between a sale by a marketing affiliate of an interstate pipeline which seeks to transport the gas which is purchased and sold through the affiliated pipeline, as opposed to other transactions by such affiliates?

Response: See section III.B.3.

6. [FERC question # 21] What other measures should [FERC] take to prevent undue discrimination by interstate pipelines in favor of their marketing affiliates through the granting of preferences?

Response: If the "open access" policy is to succeed in markets where conditions indicate that a competitive problem is likely, FERC must modify its procedures to make it easier for independent shippers to obtain both firm and interruptible transportation space. Currently, pipelines are not required to give advance notice of the availability of capacity (and the corresponding tariff) for firm transportation. Independent shippers cannot arrange for space if they are not aware of its existence or its price. This failure to disclose information has allegedly facilitated anticompetitive behavior.<sup>41</sup> Some shippers have contended that pipelines have refused to inform them of the availability of space and rates for particular routes until after all of this space has been booked by the pipeline's marketing affiliate. In some markets this behavior may leave many buyers and sellers of gas with few competitive alternatives to the marketing affiliate.

Pipelines typically have substantial advance knowledge of the impending availability of capacity for firm transportation. It is

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<sup>41</sup> See Independent Producers Association of Mountain States v. Panhandle Eastern Pipeline Company and Colorado Interstate Gas Company, FERC Dkt. No. CP86-584-000, June 20, 1986.

possible, therefore, that competition in these markets could be increased if pipelines were required to notify the public of the existence of this space (as well as the accompanying rates) well in advance of its actual booking. If such a policy were adopted in markets susceptible to anticompetitive effects, independent shippers might, under the "first come, first served" capacity allocation rule established in Order No. 436, have an opportunity to reserve the space that is necessary for the execution of certain types of sales contracts. FERC may therefore wish to perform a more detailed analysis of this proposal, to determine whether it would generate benefits in excess of any offsetting costs.

In the case of interruptible transportation, FERC must develop a specific policy for determining queue positions that does not discourage competition among gas suppliers. It appears that under FERC's current policy, an end-user which is now buying from a marketing affiliate may find itself "sent to the end of the line" for interruptible space if it switches to an alternative gas supplier. This loss of space will be costly to end-users; accordingly, it gives them an incentive not to switch to competing gas suppliers.

These incentives could be altered by developing a policy whereby the right to interruptible space could be vested in purchasers, rather than suppliers. This would provide buyers with a greater degree of flexibility in choosing among competing sources of gas, and thus increase the overall competitiveness of natural gas markets. We suggest that FERC evaluate the benefits and costs that are likely to be generated by such a policy.