June 17, 1988

STATEMENT OF THE UNITED STATES FEDERAL TRADE COMMISSION STAFF
Brokering of Interstate Natural Gas Pipeline Capacity
Docket No. RM88-13-000

Statement of the United States Federal Trade Commission Staff

I. Introduction

The staff of the Federal Trade Commission appreciates this opportunity to comment on the Federal Energy Regulatory Commission's (FERC) Notice of Proposed Rulemaking (NOPR) for brokering of interstate natural gas pipeline capacity. The proposed rule would allow holders of firm transportation rights on interstate natural gas pipelines to sell (i.e., broker) those rights to other customers. Under the proposed rule, these sales could take place

1 These comments represent the views of the Bureaus of Competition, Consumer Protection, and Economics, and do not necessarily represent the views of the Federal Trade Commission or any individual Commissioner. The Commission has, however, authorized the staff to submit these comments to you.

2 Inquiries regarding these comments should be directed to John Morris (202-326-3522) or Michael Vita (202-326-3493) of the FTC's Bureau of Economics.


4 A small (but increasing) number of pipeline customers purchase only transportation rights on pipelines; that is, they purchase gas transmission services from the pipeline, but procure their gas from a source other than the pipeline (e.g., a gas producer). A holder of firm transportation rights is anyone who has a right to guaranteed transportation service on a pipeline. Pipelines also sell interruptible service, which means that the service can be interrupted on short notice. Currently, most customers purchase "sales rights" rather than only transportation rights from pipelines. This means that the customer buys both gas and gas transmission services from the pipeline.
at unregulated prices only in markets that FERC determines (in separate proceedings) to be "workably competitive." In markets not found to be competitive, the transactions would be subject to a price cap.

As we discuss below, we believe that the proposed rule could lead to greater efficiency in gas transportation markets, thereby benefiting consumers of gas and gas transmission services. The competitive analysis used by the FTC in its merger investigations may help FERC identify workably competitive markets.

II. Interest and Expertise of the FTC Staff

The Federal Trade Commission is charged with the responsibility of enforcing the Federal Trade Commission Act, which, among other things, prohibits "unfair methods of competition." The FTC and its staff seek to promote competition in energy markets through law enforcement actions. Additionally, in recent years the FTC's staff has filed comments in support of greater competition in energy markets before various regulatory bodies.


including comments to FERC on the potential benefits of increased competition in gas and gas transportation markets.\(^8\)

### III. The Notice of Proposed Rulemaking

#### A. Brokering Firm Transportation Rights

The NOPR proposes to allow holders of "firm transportation rights"\(^9\) on "open access"\(^10\) interstate natural gas pipelines to sell those rights to other customers. Under the proposed rule, these sales could take place at unregulated prices only in markets that FERC determines to be workably competitive. Otherwise, the transactions would be subject to a price cap.

Currently, pipeline customers, such as local gas distribution companies (LDC's) and industrial users of natural gas, usually obtain these firm transportation rights under long term contracts, which provide for the

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\(^8\) Id.

\(^9\) See footnote 4, above.

exchange of a specific quantity of transportation services for payments determined by the applicable firm transportation tariffs.\(^1\) If a customer finds that it has contracted for more transportation services than it currently can use, it still pays the fixed costs associated with that volume of capacity for which it has contracted but does not use. FERC regulations then order the pipeline to offer to sell this unused capacity to the pipeline's other customers at a price that does not exceed that specified in the applicable interruptible tariff.\(^2\) Sales of this capacity can, however, only be made on an interruptible basis,\(^3\) and then only on a first-come, first-served basis.\(^4\) According to FERC, the absence of capacity brokering has resulted in a virtual absence of a market for short-term firm transportation rights.\(^5\) Further, because interruptible services are allocated on a first-come, first-served basis, rather than by price, these services are not

\(^{11}\) These tariffs are established in FERC regulatory proceedings.

\(^{12}\) 18 CFR § 284.9 (1987).

\(^{13}\) See footnote 4, above, for a discussion of the differences between firm and interruptible service.

\(^{14}\) Under the first-come, first-served system, a customer wishing to buy interruptible transportation on a pipeline notifies FERC and the pipeline of its request, and is then placed at the bottom of the queue. The customer receives service only if there is more than enough capacity to serve the customers who occupy the higher positions in this queue.

\(^{15}\) FERC reports (see NOPR, p. 7) that many customers have complained about the lack of availability of short-term transportation services. There would appear to be relatively little capacity available for short-term transportation sales. As of 1987, about 85 percent of interstate pipeline capacity was still controlled by long-term contracts signed before 1987. Because FERC certificate regulations often require pipelines to continue to serve customers even after long-term contractual obligations expire, only a portion of the remaining 15 percent would be available to provide short-term firm transportation services. See Order No. 500 (Interim Rule and Statement of Policy) Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol, Dkt. No. RM87-34-000, August 7, 1987, appendix B.
necessarily allocated to the users who value the service the most. The proposed rule would permit firm transportation capacity holders to sell their firm transportation rights directly to other customers at unregulated prices in markets that FERC has determined to be workably competitive. In markets determined not to be workably competitive, FERC would establish price caps.

Permitting the brokering of firm transportation rights could result in the reallocation of these rights to users who value them the most. Brokering will also allow a new class of service (i.e., short-term firm transportation services) to be made available in the marketplace. Under the proposed rule, pipelines would continue to be required to offer for sale all unused firm capacity as interruptible capacity at or below the price specified in the applicable tariff. Therefore, it appears likely that existing classes of service will continue to be available, and that new classes of service may result from the rule. Expanding the array of available gas transportation services in this way could result in more efficient markets for gas transportation services.

16 18 CFR § 284.9 (1987); see also NOPR, p. 16.

17 The quantity of capacity available on an interruptible basis is likely to fall if brokering takes place. This, however, would reflect the efficient reallocation of capacity from lower-valued to higher-valued uses.
B. Workable Competition

FERC proposes to identify markets that are workably competitive by calculating Herfindahl-Hirschman indices (HHIs) from market share data on current capacity holders. Markets whose HHI values fall below some level would be designated as workably competitive, and FERC would permit capacity brokering to take place without price caps. It is our understanding, then, that FERC would use the HHI to establish a "safe harbor" (i.e., a set of conditions that, if satisfied, would virtually guarantee a market exemption from the price cap regulations).

Delineating appropriate safe harbors can generate a variety of social benefits. For example, the resources of government enforcement agencies can be focused on monitoring those situations where anticompetitive activities are most likely to occur. Regulated firms, in turn, have clearer guidance on enforcement procedures, and this reduces their costs of complying with the applicable regulations.

What remains unclear is (1) how FERC intends to calculate the market shares that will be used in the HHI calculations, and (2) whether FERC intends to use other criteria to identify markets that are (or are not) workably competitive.

18 NOPR, p. 39.
C. Calculating Market Shares

Computation of an HHI presumes the existence of conceptually appropriate geographic and product markets. Both the FTC and the Department of Justice (DOJ) use the HHI in assessing the competitive significance of proposed mergers. The 1984 DOJ Merger Guidelines describe a process for defining geographic and product markets for purposes of calculating an HHI. The Merger Guidelines define a geographic market as an area where a monopolist (or a group of rival firms that colludes to behave like a monopolist) could profitably impose a "small, but significant and nontransitory" increase in price above the competitive level. That is, the Guidelines ask whether this price increase could be imposed without inducing a significant number of buyers to shift to firms outside the area or inducing a significant number of sellers outside the area to begin selling in the area. Similarly, under the Merger Guidelines, a relevant product


20 See § 2.3 of the Merger Guidelines.

21 As the FTC recently observed, the relevant geographic market can also be determined by "measuring cross-elasticities of supply and demand; that is, by determining the degree to which -- within a given period of time -- price changes in one area will induce changes in the quantities of the relevant product demanded in and supplied from other areas, with all other factors affecting supply and demand held constant." B.F. Goodrich Co., No. D9159, slip op. at 13 (March 15, 1988). The Merger Guidelines approach and the "cross-elasticities" approach are quite similar, since high cross-elasticities imply a high demand elasticity. For a more detailed comparison of the two approaches, see Landes & Posner, "Market Power in Antitrust Cases," 94 Harv. L. Rev. 937, 961 at n. 43 (1981).
market is one in which a firm (or group of colluding firms) could profitably impose a "small but significant and nontransitory increase in price" without inducing a significant shift of purchases to substitute products or inducing a significant number of manufacturers to produce the product. Operationally, the term "significant and nontransitory" is often interpreted as a five percent price increase lasting one year.

When calculating HHIs for merger analysis, the FTC and DOJ normally attempt to identify all of the likely alternatives for customers in the event that the merging firms attempted to raise prices above competitive levels. Failure to include all relevant alternative sources of supply in the market will generally result in an exaggerated estimate of the HHI, and an overestimate of the likelihood that collusive behavior could be sustained subsequent to the consummation of the transaction. If FERC's proposed

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22 See Merger Guidelines, § 2.11. As the FTC observed in B.F. Goodrich, the relevant product market can be determined by "measuring the degree to which -- within a given period of time -- price changes of a given product or service will induce changes in the quantities of a second product or service that are supplied or demanded." Slip op. at 15.

23 In the case of a transportation tariff, it may be appropriate to consider a larger increase in price. The Merger Guidelines (§ 2.11, n. 7) state that "a larger increase may be appropriate if the 'price' to be increased is a tariff or commission that constitutes a small fraction of the price of the product being transported or sold." Also see Charles Untiet, "The Economics of Oil Pipeline Deregulation: A Review and Extension of the DOJ Report," U.S. Department of Justice, Antitrust Division, Economic Analysis Group Discussion Paper No. 87-3, May 22, 1987.

24 See § 2.0 of the Merger Guidelines.

25 In principle, instances could arise where the omission of a relevant supply source causes an understatement of market concentration. Suppose, for example, that FERC erroneously assumes that only one pipeline (which has sold all 100 units of its capacity to ten equal-sized customers) provides service to a particular market, when actually there is a second pipeline (which has sold all 100 units of its capacity to a single customer) capable of serving the market. If FERC defines the market to consist only of the first
capacity brokering rule is adopted, we believe that it will be important for FERC to adopt procedures that avoid the systematic misstatement of market concentration. Computing HHIs using only data on current owners of transportation capacity could, in some instances, overstate concentration and the likelihood of collusion. In identifying those parties whose capacity should be included in the relevant market, it is important to note that firm transportation capacity is an input into the provision of an assured gas supply. If customers have access to competitively-priced alternative sources of assured gas deliveries\(^{26}\) (i.e., in addition to firm transportation services purchased from brokers), these alternatives would act as a constraint on the exercise of market power by firm transportation brokers, and thus should be taken into account when measuring concentration. These options could (under certain circumstances) include interruptible service,\(^{27}\) as well as "system sales"\(^{28}\) of gas.

\[ \text{pipeline, the HHI would equal } 1,000 \left( = 10(10)^2 \right). \] \[ \text{The correct HHI, however, would be } 2,750 \left( = 10(5)^2 + (50)^2 \right). \]

\(^{26}\) Since the brokering agreements may often be short-term in nature, the constraints on brokers' market power would possibly consist of alternative sources of short-term gas deliveries.

\(^{27}\) For example, a customer might be able to arrange for interruptible transportation on a number of different pipelines. Although the customer's deliveries from any one of those pipelines could be interrupted at any time, the probability that all of the pipelines would simultaneously interrupt deliveries may be quite low. This level of supply assurance might be an acceptable substitute for firm service on a single pipeline.

Interruptible service might also represent a competitive alternative to firm service in markets where peak period capacity utilization tends to be low.

\(^{28}\) The term "system sales" of gas refers to gas that is owned (rather than simply transported) by a pipeline and is resold to others (along with the corresponding transmission services).
Limiting the list of market suppliers solely to current owners of transportation capacity may also overstate concentration if doing so ignores reasonably predictable forthcoming changes in the market. For example, under the terms of FERC Order Nos. 436/500, customers who have contracted for firm sales rights are entitled to convert a portion of those rights to transportation rights. When sales rights are converted to transportation rights, the customer forgoes its entitlement to purchase system gas from the pipeline, but gains an entitlement to buy transportation services. For example, in each of the next five years a customer might be able to convert 20 percent of its current firm sales rights to transportation rights, until all of its sales rights have been converted.²⁹ The amount of sales capacity that would be converted to transportation capacity during an appropriate time (e.g., one year) in response to an anticompetitive price increase, and could thus be brokered, should be included in the HHI calculations. Care must be exercised in carrying out this adjustment, however. The HHI and the likelihood of collusion could also be understated if, for example, one overestimated the volume of sales rights that would be converted to transportation rights in response to a supracompetitive brokerage price.

Thus, while a safe harbor approach offers significant benefits, care should be taken when defining markets for the purpose of calculating HHIs. Any mechanical computation of market shares that does not properly identify all competitors could lead to HHI statistics that either overstate or understate concentration and the likelihood of collusion.

²⁹ As the NOPR (pp. 15-16) states, the percentage of sales rights that can be converted may depend on a settlement approved by FERC.
D. Assessing Competition Above Threshold Concentration Levels

The NOPR does not describe how FERC intends to proceed in instances where market concentration exceeds the safe harbor threshold. Will price caps automatically be imposed, or will FERC conduct a further inquiry into the competitive conditions in the market? Depending on the threshold HHI ultimately chosen by FERC, many markets that do not qualify for safe harbor status may nonetheless be competitive. Even in concentrated markets, other factors may be present that constrain the exercise of market power. The *Merger Guidelines* and the *FTC Horizontal Merger Statement* discuss the nature and significance of these factors at some length.\(^{30}\) Here we discuss what may be the most important of these factors: the ease of entry.

It is a well-established antitrust principle that anticompetitive behavior is unlikely to be sustained when entry is easily accomplished. As the FTC noted in *B.F. Goodrich*, "[t]he absence of barriers or impediments to entry makes it highly unlikely that a merger or acquisition will have anticompetitive effects, because any effort to extract supracOMPETITIVE prices and profits will induce new entry, which will reduce prices to competitive levels."\(^{31}\) Under the method embodied in the *Merger Guidelines*, the agency examines the "likelihood and probable magnitude of entry in response to a

\(^{30}\) See § 3.2 of the *Guidelines* ("Factors Affecting the Significance of Market Shares and Concentration"), and § III of the *FTC Merger Statement* ("Non-Market Share Considerations").

\(^{31}\) *B.F. Goodrich Co.*, Slip op. at 27. Also see § 3.3 of the *Merger Guidelines*. 
'small but significant and nontransitory' increase in price." 32 A two-year time horizon is typically employed in making this assessment. If it is determined that sufficient entry would occur over this two-year period to defeat an attempted anticompetitive price increase, an enforcement action is unlikely to be brought. 33

FERC may wish to use a similar approach if it decides to adopt the proposed rule. One constraint on the exercise of market power by capacity brokers is the creation of new pipeline capacity, either by incumbents or by pipelines not currently serving the market in question. If capacity can be readily added to a market in response to an attempt to raise price above the competitive level, then such entry would likely deter price increases, making price caps unnecessary. Under such circumstances, the HHI would exaggerate the market power of incumbents, and could induce FERC to impose price caps when none are actually necessary. Consideration by FERC of the likely entry of other pipelines in response to such price increases would give a more accurate assessment of market competitiveness. Research conducted by the FTC staff suggests that pipelines in some highly concentrated markets may face a sufficient threat of expansion from nearby pipelines to render sustained anticompetitive behavior unlikely.

32 See Merger Guidelines, § 3.3.

33 If some firms can enter within one year, FERC may wish to follow the Merger Guidelines' approach and classify them as being "in the market." Under this procedure, the agency would attempt to estimate the volume of output that these entrants could sell in the relevant market, and adjust the market shares and HHI calculations accordingly. Whether a firm is categorized as an "entrant within one year," rather than as a current supplier, is not particularly important, since the implication is the same in both cases: the firm presents a constraint on the exercise of market power by the other firms in the market.
We believe that FERC may be able to distinguish between markets where potential entrants ensure competition, and where they do not. To do so, potential entrants must be identified. Potential entrants are nearby suppliers who are large enough (separately or collectively) to undermine a hypothetical cartel of current market suppliers by offsetting the output reduction that permits above-competitive pricing and creates the monopoly profits of the dominant firm or cartel. Firms are considered "nearby" if they are located sufficiently close to a market to make a pipeline hookup economically feasible.34

When analyzing capacity brokering, FERC would determine which pipelines are located sufficiently close to constrain the pricing behavior of brokers of short-term firm transportation services. The most conservative approach to determining the "nearby" pipelines (i.e., the approach that places relatively little weight on the competitive impact of entry) would be to assume that entrants expect to sign short-term (rather than long-term) contracts with customers when entrants build a pipeline, and to further assume that the entrants do not expect to sell services on these lines after the initial contracts expire. Pipeline hookups that would be profitable even if they were to be used only for this short period (e.g., three to five years) would be regarded as imposing competitive constraints on the market power

34 Holding other factors constant, whether a pipeline hookup is economically "feasible" depends on the length of the new pipeline hookup, as well as on the length of the period for which the entrant expects to sell transmission services on the new pipeline. (We adopt the conventional definition of economic feasibility: projects are economically feasible when the present value of the expected income stream from the project equals or exceeds the cost of building the project; see Hirshleifer, Investment, Interest and Capital, 1970, ch. 3.) Pipeline connections are more likely to be economically feasible as the pipeline's service duration increases, and as the length of the pipeline hookup decreases.
of brokers; pipeline projects that would not be undertaken under these conditions, by contrast, would not be considered as "entrants" for the purposes of the competitive analysis. This approach would thus tend to limit the number of "nearby" pipelines, as it would cause the longer distance (hence higher cost) construction projects to appear less profitable.

A less conservative, but perhaps more realistic approach, would assume that entrants believe that they will be able to find buyers for at least some of the pipeline's services after the initial contracts expire. For any given price increase by incumbents, this alternative approach would cause a greater number of projects to appear profitable and thus more likely to be undertaken. Consequently, this approach would attach greater importance to the competitive effect of entry, and thereby cause fewer markets to be identified as being potentially susceptible to competitive problems.

To be a potential entrant, the "nearby" pipeline must also be able to construct its hookup within the two-year entry time period. Data received from FERC suggests that projects can sometimes be completed within two years.\(^\text{35}\) For example, the proposal to construct the Ozark Gas Transmission System contemplated a three month construction period. The proposed pipeline system included 285 miles of 20-inch transmission line, and 170 miles of 4-inch, 6-inch, 8-inch, and 10-inch lateral lines with an estimated capacity of 170,000 Mcf per day.\(^\text{36}\) Construction actually took about 6 months (early August 1981 to late January 1982). Transportation services

\(^{35}\) See, for example, Federal Energy Regulatory Commission, Office of Pipeline and Producer Regulation Staff Report, *Cost of Pipeline and Compressor Station Construction Under Natural Gas Act Section 7(c) for the Years 1982 through 1985*, pp. I-IV, (no date).

\(^{36}\) *Ozark Gas Transmission System*, Docket No. CP78-532, 16 FERC par. 61,099 (October 9, 1981), p. 61,190.
began on March 1, 1982.\(^{37}\) If the planning of this project took 18 months or less, then it would seem that all of the steps required for entry into a market (aside from satisfaction of regulatory requirements, a point discussed below) could sometimes be completed within the 2-year time period stipulated in the *Merger Guidelines*.

The threat of entry will deter the exercise of market power only if all entry requirements, including regulatory requirements (e.g., FERC entry certificates) can be satisfied within the relevant (e.g., two-year) time period. In the preceding example, Ozark first applied for its FERC certificate in September 1978, but FERC did not issue the order granting the certificate until July 1981, thus delaying entry for three years. Such regulatory proceedings can be quite time consuming; however, the length of this regulatory lag is partially (though not completely) subject to FERC's control.\(^{38}\) We recommended in a previous FERC proceeding\(^ {39}\) that FERC not allow participants threatened by competition (e.g., incumbent suppliers threatened by entry) to use FERC's regulatory powers to frustrate and delay the consummation of procompetitive transactions.\(^ {40}\) If firms do not

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\(^{37}\) *Ozark Gas Transmission System*, Docket Nos. CP78-532-000, CP82-416-000, CP78-532-008, and CP82-129-001, 22 FERC par. 61,334 (March 21, 1983), pp. 61,575-576.

\(^{38}\) Other regulations (e.g., state environmental codes) may also delay or impede the construction of interstate gas pipelines.


\(^{40}\) In its opinion and order on the Ozark matter, FERC noted that "Arkla [a competitor of Ozark] has made more objections to Ozark's rates than any other party." *Ozark Gas Transmission System* 63 FERC 61,099 n. 15.
experience undue regulatory delay, then the threat of entry will present a much more effective constraint on the exercise of market power by brokers.

IV. Conclusion

We believe that FERC's proposal to allow capacity brokering has the potential to increase economic efficiency in gas transportation markets and thereby to benefit consumers. A competitive analysis similar to the one used by the FTC in its merger investigations could help FERC identify workably competitive brokering markets. These comments have attempted to illustrate how FERC might employ the FTC method.