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FEDERAL ENERGY REGULATORY COMMISSION

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Market-Based Ratemaking for Oil Pipelines

Docket No. RM94-1-000

COMMENTS OF THE U.S. DEPARTMENT OF JUSTICE  
IN RESPONSE TO NOTICE OF INQUIRY

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On October 22, 1993, the Federal Energy Regulatory Commission (Commission) issued a Final Rule<sup>1</sup> implementing provisions of Title XVIII of the Comprehensive National Energy Policy Act of 1992 (Energy Policy Act) requiring that the Commission "issue a final rule which establishes a simplified and generally applicable ratemaking methodology"<sup>2</sup> and that the Commission "streamline procedures . . . relating to oil pipeline rates in order to avoid unnecessary regulatory costs and delays."<sup>3</sup> The Final Rule institutes a price cap system, under which pipelines are free to raise rates up to a ceiling that changes over time according to a price index.

The Final Rule did not alter the Commission's policy of permitting market-based pricing upon a showing that a pipeline lacks significant market power.<sup>4</sup> On October 22, 1993 the Commission also published a notice of inquiry inviting comments on issues relating to market-based pricing by oil pipelines and, in particular, to the determination of whether a pipeline lacks significant market power.<sup>5</sup>

The U.S. Department of Justice (Department) has a considerable interest in the issues raised by the notice of inquiry. The Department is interested in issues related to the identification of market power because of its antitrust enforcement responsibilities, and the Department previously addressed the particular issue of oil pipeline market power in two reports.<sup>6</sup> The Department appreciates this opportunity to update and elaborate its views.

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<sup>1</sup> Revisions to Oil Pipeline Regulations Pursuant to Energy Policy Act of 1992, Dkt. No. RM93-11-000, Order No. 561, 58 Fed. Reg. 58,753 (Nov. 4, 1993).

<sup>2</sup> Pub. L. 102-486, § 1801; 106 Stat. 2776, 3010 (1992); 42 U.S.C.A. § 7172 note (West Supp. 1993).

<sup>3</sup> Pub. L. 102-486, § 1802; 106 Stat. 2776, 3010 (1992); 42 U.S.C.A. § 7172 note (West Supp. 1993).

<sup>4</sup> Final Rule § IV.A.; 58 Fed. Reg. 58,757.

<sup>5</sup> 58 Fed. Reg. 58,814 (Nov. 4, 1993). The comment period was later extended to January 24. 58 Fed. Reg. 66,309 (Dec. 20, 1993).

<sup>6</sup> U.S. Department of Justice, *Oil Pipeline Deregulation* (May 1986); U.S. Department of Justice, *Competition in the Oil Pipeline Industry: A Preliminary Report* (May 1984).

## I. Initial Issues Raised by the Notice of Inquiry

Price cap regulation is well suited to be the centerpiece of a system that effectively carries out the mandate of the Energy Policy Act.<sup>7</sup> Price cap regulation combines the benefits of administrative simplicity and pricing flexibility. The result should be less costly regulation and more efficient regulated rates. Without having to justify each rate change, pipelines are allowed to set rates to respond to competition, cost changes, seasonal demand differences, and differing cost characteristics of serving individual customers.

If a pipeline has no market power, however, any regulatory constraint on pricing—even a price cap—can only impair the efficiency of pricing. Market-based pricing provides far more scope for achieving an efficient allocation of resources. The essential reason that market-based pricing may be superior to pricing under price caps is that the price for a particular movement that would prevail under competition may be significantly greater than the price cap for that movement.<sup>8</sup>

The great bulk of costs incurred by oil pipelines stem from their construction. Such costs are joint and common for numerous points of origin and destination. The regulatory allocation of such costs has been largely on a mileage basis, while the competitive cost allocation would largely reflect the differing supply and demand situations at various delivery points. Under competition, for example, the cost allocation to points also served by water transportation might be disproportionately low, while costs allocated to other points might be disproportionately high. The competitive allocation of joint and common costs could also be quite different at different times of the year because demand and supply conditions may vary seasonally. Consequently, raising prices above the price caps may promote economic efficiency by better allocating costs.

If competition can assure that significant market power will not be exercised, market-based rates can be deemed just and reasonable under the Interstate Commerce Act. The courts have recognized the Commission's discretion to rely on market forces to limit rates to reasonable levels. In *Federal Power Commission v. Hope Natural Gas*, a leading case on utility regulation, the Supreme Court held: “[I]t is the result reached and not the method employed which is controlling. It is not theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the Act is at an end.”<sup>9</sup> Thus, the Commission is free to evaluate the reasonableness of rates through

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<sup>7</sup> These comments do not address the specific scheme adopted in the Final Rule.

<sup>8</sup> Market-based pricing may also carry with it greater flexibility with respect to filing and notice requirements.

<sup>9</sup> 320 U.S. 591, 602 (1944)(citations omitted).

innovative methods. As the D.C. Circuit held in the *Farmers Union* case, "Moving from heavy to lighthanded regulation within the boundaries set by an unchanged statute can, of course, be justified by a showing that under current circumstances the goals and purposes of the statute will be accomplished through substantially less regulatory oversight."<sup>10</sup>

For the foregoing reasons, the Department strongly urges the Commission to continue its policy of permitting pipelines to engage in market-based pricing upon a showing that they lack significant market power. The Department also urges the Commission not to subject market-based rates to any form of regulatory ceiling.<sup>11</sup> The essential premise of market-based pricing is that a firm without market power is unable to exploit consumers by charging monopolistic prices; price ceilings are both unnecessary and inefficient. Moreover, since competitive rates for particular movements may be significantly above the price caps, large price increases on some individual point-to-point movements should not be a sufficient basis for the repudiation of a determination that a pipeline lacks significant market power.

The determination that a pipeline lacks significant market power certainly should be subject to revisitation, but the Department believes that a pipeline should not be called upon periodically to demonstrate anew that it lacks significant market power, once the Commission has authorized it to engage in market-based pricing. Requiring such a demonstration would substantially and needlessly increase the administrative costs of market-based rate proceedings. The Department suggests that any shipper have the right to protest a market-based rate at any time on the grounds that the pipeline possesses significant market power.<sup>12</sup> The protestant of a market-based rate should have the burden of demonstrating that the pipeline possesses significant market power. To facilitate protests, pipelines charging prices in excess of the caps<sup>13</sup> should be required periodically to submit information on the basic facts that supported the determination that they did not possess significant market power.<sup>14</sup> This information should be made available for inspection by shippers and the general public.

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<sup>10</sup> *Farmers Union Central Exchange, Inc. v. FERC*, 734 F.2d 1486, 1510 (D.C. Cir. 1984). There is a more extensive discussion on this point in the Comments of the United States Department of Justice in Response to Notice of Proposed Policy Statement, Incentive Ratemaking for Interstate Natural Gas Pipelines, Oil Pipelines and Electric Utilities, FERC Dkt. No. PL92-1-000, at 3-4 (April 27, 1992).

<sup>11</sup> In a previous case, the Commission has subjected market-based rates to two different rate ceilings. *Buckeye Pipe Line Co.*, 53 FERC ¶ 61,473, at 62,681-82 (1990).

<sup>12</sup> It might be reasonable to preclude protests of rates within some band above the price caps.

<sup>13</sup> A pipeline that has been authorized by the Commission to engage in market-based pricing always has the option of setting rates within the caps.

<sup>14</sup> The relevant information is discussed in section VI below.

## II. The Definition of “Significant Market Power”

Under both the Final Rule and prior Commission policies, a pipeline is permitted to engage in market-based pricing if it is found to lack “significant market power.” Although the Commission has previously considered the definition of this term,<sup>15</sup> the notice of inquiry does not pose any questions about it. Because the proper analysis of market power issues flows from the definition of this term and from the practical implementation of that definition, any rule-making or policy statement on market-based pricing for oil pipelines should define the term and specify how the Commission will implement its definition.

A standard definition of market power is “the ability to profitably maintain prices above competitive levels for a significant period of time,”<sup>16</sup> and this definition is appropriate for oil pipelines. Determining whether a pipeline possesses significant market power, thus, requires the identification of a base price approximating the competitive level and the specification of the duration<sup>17</sup> and magnitude (in percentage or absolute terms) of a significant price increase.

This poses a fundamental problem; as a general matter, there is no reliable way (and *a fortiori* no simple, inexpensive, and reliable way) in which to determine the competitive rate for a particular movement. In assessing a pipeline’s market power, the only available benchmarks are prevailing prices and maximum permissible prices under applicable price caps. Thus, one of these prices inevitably will be used as the benchmark for assessing market power. In doing so, however, it must be kept firmly in mind that there is no reason to believe that either of these prices is a competitive price. It is possible that a prevailing price reflects an exercise of market power, and rate increases above the price cap may not entail *any* exercise of market power.

In its *Buckeye* decision, the Commission adopted an ALJ’s holding that the pipeline would have significant market power if it could raise its tariff by 15 percent for two years without losing sales.<sup>18</sup> While numerical tests are always somewhat arbitrary, this standard is not

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<sup>15</sup> *Buckeye Pipe Line Co.*, 53 FERC ¶ 61,473, at 62,666 (1990).

<sup>16</sup> U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines § 0.1 (April 2, 1992) (hereinafter cited as Horizontal Merger Guidelines). The Commission used essentially the same definition in *Buckeye*. 53 FERC ¶ 61,473, at 62,666 (1990).

<sup>17</sup> Market power determinations for oil pipelines are unlikely to be sensitive to the specification of duration, within reasonable limits. If entry would occur at all, it would likely take many years, and most substitution in consumption would be very rapid. For these reasons, the duration issue is considered no further.

<sup>18</sup> *Buckeye Pipe Line Co.*, 53 FERC ¶ 61,473, at 62,666 (1990).

unreasonable.<sup>19</sup> The Department suggests, however, that the standard be rephrased in two respects.

First, the Department suggests that the Commission reaffirm its holding in *Buckeye*<sup>20</sup> that the appropriate base price for the purpose of assessing market power is the delivered price of product.<sup>21</sup> The injury that higher pipeline tariffs inflict consumers stems directly from the resulting increase in the price of oil, for example, higher gasoline prices at the pump.<sup>22</sup> Since the ultimate issue is potential injury to consumers from an exercise of market power, it is reasonable to assess market power in terms of prices consumers actually pay. This approach is also administratively convenient, because the same price increase threshold can be applied to all markets for all oil pipelines. If tariffs were used as base prices, there would be hundreds of different price increase thresholds.

For administrative convenience, the Department also suggests that the Commission not define significant market power in percentage terms, which would produce a somewhat different result for each product carried by oil pipelines because each sells at a different price. Instead, the price increase threshold should be defined in terms of cents per gallon (or barrel), which could be applied to all products transported by oil pipelines. This is in keeping with the Energy Policy Act's mandate to establish "a simplified and generally applicable ratemaking methodology."

Rephrased in terms of an increase in the price of delivered products, the *Buckeye* rule is that a pipeline possesses significant market power if it would want to raise price by at least 9.4 cents

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<sup>19</sup> The Department interprets *Buckeye* as holding that a pipeline has significant market power in a relevant market if profit maximization would induce it to raise its tariff(s) in that market by at least fifteen percent. This would be the case if a price increase of at least fifteen percent would not cause the pipeline to lose *so many* sales that the price increase would not be profit maximizing.

<sup>20</sup> *Buckeye Pipe Line Co.*, 53 FERC ¶ 61,473, at 62,666 (1990).

<sup>21</sup> This differs from the Department's approach to market delineation in the Horizontal Merger Guidelines. In that context, the Department takes the price in which a percentage increase is postulated to be "whatever is considered to be the price of the product at the stage of the industry being examined." Horizontal Merger Guidelines § 1.11. The Guidelines state that in the case of oil pipelines, the price to be increased is the tariff. *Id.* n.11. The Guidelines' treatment on this issue, however, is arbitrary and not essential to a proper analysis. The absolute magnitude of a significant price increase can be the same under any definition of the base price, provided that the percentage increase is chosen appropriately given the choice of a base price.

<sup>22</sup> At points of origin, pipeline market power could be used to depress prices received by refiners or producers. To simplify matters, the discussion below generally considers only exercises of market power in the form of raising oil prices to consumers. The Commission, however, must consider the potential for either sort of market power exercise.

per barrel or .22 cents per gallon.<sup>23</sup> The Commission should reexamine the *Buckeye* rule before promulgating any rule or policy statement on market-based pricing for oil pipelines. There is nothing magic about 15 percent or .22 cents per gallon, so the Commission could reasonably adopt a different figure as well. In determining whether .22 cents per gallon or some other figure is best, the Commission must balance the possibility that pipelines will be able to exercise of market power against the possibility that they will merely have greater scope for efficient, competitive pricing.

### III. Tests for Determining Whether a Pipeline Has “Significant Market Power”

Market power issues have proved highly contentious in Commission cases; their litigation has been very time consuming and very expensive. One reason for this is that pipelines, protestants, and finders of fact have shared no common ground on the implications of particular pieces of evidence. Shippers, carriers, and ultimate consumers would benefit from having a generally applicable methodology for determining whether a pipeline has significant market power.<sup>24</sup>

The Department recommends that the Commission adopt specific criteria under which a pipeline would be presumed not to possess significant market power. As explained below in section V, no single criterion is satisfactory, even for the purpose of establishing this presumption. Rather, the Department recommends a combination of several alternative criteria. Moreover, a presumption established under these criteria should be rebuttable. The factors affecting the degree of market power are many and complicated. While it is desirable and feasible to establish a relatively simple framework for addressing market power issues, it would be unwise and possibly unlawful to deny pipelines or protestants an opportunity to present evidence that does not fit neatly into that framework.<sup>25</sup>

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<sup>23</sup> In 1992, average pipeline revenue was 62.5 cents per barrel. *Oil & Gas Journal*, Nov. 22, 1993, at 62.

<sup>24</sup> Having a general methodology for determining whether a pipeline has significant market power should not mean that any party is precluded from making any reasonable argument or presenting any probative evidence relating to the market power issue. Thus, having a general methodology for determining whether a pipeline has significant market power in no way prejudices any party's rights under the Interstate Commerce Act or the Administrative Procedures Act. The ability of an administrative agency to develop and apply presumptions is well established. See *Holland Livestock Ranch v. United States*, 714 F.2d 90 (9th Cir. 1983). See also *NLRB v. Baptist Hospital, Inc.*, 442 U.S. 773 (1979).

<sup>25</sup> See, e.g., *NLRB v. St. Francis Hospital of Lynwood*, 601 F.2d 404, 413-16 (9th Cir. 1979).

#### IV. Market Delineation

Applied to oil pipelines, the traditional approach to the assessment of market power is to delineate a relevant market for each pipeline terminal and assess the state of competition in that market largely through an examination of the extent of market concentration. Based on experience in the antitrust context, the Department believes that such an approach generally is appropriate for assessing oil pipeline market power.

Market delineation is a process of drawing a line that separates important competitive factors from not so important ones. There is some arbitrariness in any line drawing, and one should not lose sight of the fact that competitive forces outside the market matter to some extent or the fact that competitive forces inside the market may differ significantly in importance.

Market delineation is generally said to be the first step in the analysis of market power issues, but before markets can be delineated, it is essential to identify potential loci for the exercise of market power, i.e., to specify precisely where, how, and against whom market power might be exercised.<sup>26</sup> There are two distinct ways in which a pipeline might exercise market power through an increase in tariffs—by raising the price of oil sold at delivery points, and by reducing the price of oil purchased at origin points. For the purposes of examining a pipeline's potential market power, it is therefore necessary to delineate markets for its various points of origin and destination.<sup>27</sup> In most of what follows, only destination markets are explicitly considered.<sup>28</sup>

The Department recommends that the Commission adopt the Merger Guidelines' approach to market delineation, which was specifically designed for the purpose of identifying market power. The Merger Guidelines define a market as a group of products and area in which they are sold over which a hypothetical, profit-maximizing monopolist would want to raise price significantly.<sup>29</sup> In any particular case there will be many possible markets under this definition,

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<sup>26</sup> For an elaboration on this point and an illustration of its importance for oil pipelines, see Gregory J. Werden, *Four Suggestions on Market Delineation*, 37 *Antitrust Bull.* 107, 108–12 (1992).

<sup>27</sup> At least as a general matter, the relevant markets for oil pipelines would not be point-to-point markets. The extent of a pipeline's market power at a particular terminal depends on the customers' alternatives for obtaining product, from whatever source. In general, a pipeline's market power would not be related to the origin of product it delivered at a terminal or to the origin of product delivered by competitors at nearby terminals. The situation is quite different for passenger transportation. Flights from Washington to New York, or from Los Angeles to Chicago, are not acceptable substitutes for the individual in Washington who needs to travel to Chicago on business.

<sup>28</sup> This is done primarily for simplicity and also because recent Commission cases have focused on destination markets.

<sup>29</sup> Horizontal Merger Guidelines § 1.0.



and the Guidelines generally treat the smallest such group of products and area satisfying this test as the relevant market.<sup>30</sup> Under the Guidelines, the scope of the relevant market depends on the definition of a significant price increase. For purposes of market delineation, the Department generally considers a price increase to be significant only if it is a least five percent.<sup>31</sup> Thus, a profit-maximizing monopolist in a relevant market delineated under the Guidelines would want to raise price at least five percent.

Under the Guidelines, mergers are subject to challenge even though they increase market concentration only moderately and leave the market far from monopoly. Such mergers would be expected to increase prices far less than the amount by which merger to monopoly would increase prices. Thus, mergers are subject to challenge under the Guidelines when they are expected to result in price increases of much less than five percent.<sup>32</sup> As the 1992 Horizontal Merger Guidelines state, the five-percent test is intended only as a methodological tool for purposes such as market delineation, and is “not a tolerance level for price increases.”<sup>33</sup>

In the *Buckeye* case, the Commission quite reasonably adopted a price increase threshold for defining significant market power, rather than one for delineating markets. The Guidelines’ approach to market delineation can be adapted to this or any given price increase threshold defining significant market power. The geographic scope of the relevant market for a pipeline terminal is that within which competition will reasonably assure that market-based pricing will lead to a price increase no greater than the threshold amount.

For example, suppose that there were just two possible sources of supply for a demand center (a city, for example): one, a pipeline terminal near the demand center; and the other, a more distant water terminal the throughput of which could be increased with no added costs.

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<sup>30</sup> Horizontal Merger Guidelines § 1.11, 1.21. Under the Merger Guidelines, a relevant market is delineated for each product and each point at which it is sold. Since many products are carried by oil pipelines, separate markets should be delineated for each. (Substitutability in supply (e.g., the ability of oil refineries to alter the mix of refined products) plays no role in market delineation under the Guidelines. Horizontal Merger Guidelines § 1.0.) It may well turn out that delineating separate markets does not matter, but that should be a fact-based conclusion and not an assumption. There could be good substitutes for some products shipped by oil pipelines but not for others, and pipelines should be free to argue, for example, that natural gas is in the relevant market for heating oil. It is assumed for the purposes of these comments, however, that there are no good substitutes for any products transported by oil pipelines. The geographic scope of the relevant markets also may be different for different products. For the most part, these comments focus on gasoline.

<sup>31</sup> Horizontal Merger Guidelines § 1.11.

<sup>32</sup> Neither the Guidelines nor any other antitrust policy statement by the Department specify how large the expected price increase must be to trigger a challenge.

<sup>33</sup> Horizontal Merger Guidelines § 1.0.

Further suppose that the geography is such that the delivered price from the water terminal to *any* point in the demand center cannot be less than that from the pipeline terminal unless the delivered price from the water terminal is lower to *every* point in the demand center.<sup>34</sup> Because barge transportation is a competitive industry, the cost of using water transportation would serve as a cap on pipeline rates, and the amount by which the pipeline tariff to the terminal would be likely to rise is simply the incremental cost of supplying the demand center from the water terminal instead of the pipeline terminal. The major component of this incremental cost would be the incremental trucking costs associated with using the more distant water terminal instead of the closer pipeline terminal. An estimate of incremental trucking costs from the more distant water terminal would, thus, provide a reasonable estimate of the maximum extent to which rates would be likely to rise under market-based pricing.

Available evidence suggests that incremental trucking costs are roughly .016 cents per gallon per mile.<sup>35</sup> If we assume that this figure is correct and that the f.o.b. price at the water terminal is initially the same as at the pipeline terminal, then it follows that the pipeline would maximize profits by raising price up to the point at which the delivered price of product from the water terminal was just above its price. If the critical threshold is taken to be .22 cents per gallon, as suggested by the *Buckeye* case, then the water terminal should be considered to be in the relevant market only if it is within 14 miles of the pipeline terminal.

The foregoing example considers the simplest possible case, producing the narrowest possible relevant market. The relevant market may be substantially larger if the geography is not as assumed, and the delivered price from the water terminal to some points in the demand center can be less than that from the pipeline terminal, without the delivered price from the water terminal being lower to every point in the demand center. In that event, any price increase would lead to some loss of sales. The profit-maximizing price increase would be determined by trading off higher profits earned on the customers retained, against profits foregone on the customers not retained. The pipeline would be inclined to increase price by a smaller amount than in the previous example, for any given amount of competition from the water terminal. For example, demand is uniformly distributed along a line segment that has the

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<sup>34</sup> This can arise in several ways. One is for the demand center to consist of a single point, such as an airport. Another is for both the pipeline and water terminal to be on the same side of the demand center, but both outside it, and for there to be no customers served by the pipeline terminal outside the demand center.

<sup>35</sup> In a recent case, a Commission ALJ noted trucking costs of .08 cents per gallon for every additional five miles. *Williams Pipe Line Co.*, 58 FERC ¶ 63,004, at 65,016 (1992), cited by Commission Staff Proposal for Revisions to Oil Pipeline Regulation Pursuant to the Energy Policy Act of 1992, at 35 n.60. (March 1993).

pipeline and water terminals at its endpoints, then the water terminal is in the relevant market if it is within about ninety miles.<sup>36</sup> With other distributions of customers, relevant markets may be larger or smaller.

Market delineation is much more complicated if there are several competitors and if the competitors' prices are not fixed by competition (or regulation). One must first identify the margins of competition between the pipeline terminal in question and the other sources of supply with which it competes. Second, one must determine, based on incremental trucking costs, how each margin of competition would shift as price increased at the pipeline terminal and the volume of sales that would be lost as the margin of competition shifted. Third, one must determine the profit-maximizing price increase in light of the identified effects of price increases. Fourth, one must repeat this entire process for the original pipeline together with its closest competitor, for those two together with their closest competitor, and so on, until a group of competitors is identified that would maximize profits by increasing price by at least some threshold amount.<sup>37</sup>

The Department cannot recommend the use of arbitrary markets such as "BEAs," which are areas into which the Department of Commerce has partitioned the United States for statistical purposes. On average, BEAs might be roughly the proper size, and they represent demand centers, since they are drawn around cities. However, properly delineated relevant markets and BEAs both vary in size a great deal, and there is no reason to believe that there is a high degree of correlation between the size of the two.

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<sup>36</sup> It is assumed for the purposes of this example that demand is totally inelastic at each point and that the F.O.B. prices at the pipeline and water terminals are initially equal. The portion of the line segment served by the pipeline terminal is the portion within which the delivered price from the pipeline terminal is less than that from the water terminal. If the total length of the segment is  $d$  miles and incremental trucking cost  $t$  cents per mile, then the portion of the line segment served by the pipeline terminal is  $(dt - p)/2t$ , with  $p$  representing the price increase by the pipeline from the initial level. Assuming that marginal cost,  $c$ , equals a third of the pipeline's initial price, the profit-maximizing price increase above the initial level is  $dt/2 - c$ . This expression can be rearranged to solve for  $d$ :  $2(p + c)/t$ . If the initial pipeline tariff is equal to the national average of 62.5 cents per barrel (see supra note 23) or 1.49 cents per gallon, and  $t$  is .016 per gallon per mile, then  $d$  must be at least 89.6 miles before the pipeline will raise price by at least the price increase threshold of .22 cents per gallon.

<sup>37</sup> The threshold price increase is the same as that used in the proceeding examples only for the initial iteration, with a single competitor in the candidate market. In subsequent iterations, with several competitors in the candidate relevant market, competition in the candidate market would be expected to keep price below the monopoly level. For this reason, the price increase threshold used for market delineation must be greater than the price increase threshold used to define significant market power. This point is elaborated in footnote 49.

## V. Market Structure Criteria

The assessment of competition in a delineated relevant market generally begins with the assignment of market shares and the measurement of market concentration. The proper measure of market share is that which best indicates a firm's ability to compete. The Department has tended to use capacity-based measures of market shares for homogeneous products industries such as oil pipelines, at least to the extent that reliable capacity-based measures were available. Two capacity measures could be used for an oil pipeline—the throughput capacity of the pipeline at each terminal, and the capacity of each terminal itself to deliver or receive product. Pipeline throughput capacity has the significant advantage that it is much more readily observable than terminal capacity. Moreover, if as is reasonably likely, expanding terminal capacity is both inexpensive and rapid, then terminal capacity is not a meaningful constraint. For these reasons, the Department recommends the use of throughput capacity.<sup>38</sup>

Market shares, however, should not be strictly based on throughput capacity. At many points on many pipelines, throughput capacity is very large relative to the size of the relevant market. In such circumstances, it makes little sense to assign a larger share to a pipeline that can supply ten times the total consumption in the market than to a pipeline that can supply twice total market consumption, or perhaps, than to a pipeline that can supply half of total market consumption. If all pipelines are essentially capacity unconstrained, then all should be assigned equal market shares.<sup>39</sup> Thus, in a market with  $n$  competitors, the Department suggests that all pipelines be assigned market shares of  $1/n$  if all have capacities of at least  $1/(n - 1)$  times total market consumption. If not all pipelines in a market satisfy this condition, a more complicated procedure should be applied.<sup>40</sup>

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<sup>38</sup> The principal objection to throughput capacity as a measure of market share may be that there could be an opportunity cost associated with diverting product from one location to another, but this is not a sufficient basis for rejecting the use of throughput capacity. The opportunity cost may well be zero if the pipeline has excess capacity or if it has competitive markets in which it can reduce volume with no opportunity cost.

<sup>39</sup> This might not be appropriate if there were substantial differences among pipelines' marginal costs.

<sup>40</sup> The Department suggests that the pipelines be assigned shares based on imputed capacities derived through an iterative procedure. In the first iteration, pipelines with capacities less than  $1/(n - 1)$  times total market consumption are placed to one side, leaving  $m$  pipelines. In subsequent iterations, the process of setting pipelines aside continues until the remaining  $m$  pipelines all have capacities of at least  $1/(m - 1)$  times total market consumption, or until a single pipeline remains and its capacity exceeds total market consumption. If more than one pipeline remains after the final iteration, each is imputed a capacity of  $1/m$  times total market consumption. If a single pipeline remains after the final iteration, it is imputed a capacity equal to total market consumption. All of the pipelines placed to one side during any of the

In many cases, pipelines<sup>41</sup> will not be the only competitors in a relevant market. In product destination markets, water terminals and local refineries may be competitors, and they should be assigned capacity-based shares as if they were pipelines.<sup>42</sup> In product origin markets, local consumption may be a competitor.<sup>43</sup> In crude destination markets, water terminals and local crude production may be competitors. In crude origin markets, local refineries may be competitors. In each case, the criterion for determining whether such possible competitors are in the relevant market should be their presence within the defined geographic market boundaries.

The Department uses the Herfindahl-Hirschman Index (HHI) for measuring market concentration<sup>44</sup> and suggests that the Commission do so as well. The HHI is computed by summing the squares of the shares of all of the firms in the market. Thus, the HHI ranges in value from near zero to 10,000, in the case of a monopoly market. The use of a market power presumption based on the market HHI is appropriate since competition normally will adequately prevent a pipeline from exercising market power unless the market is highly concentrated.<sup>45</sup> The

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iterations are imputed their actual capacities.

This treatment is similar to one previously used by the Department and to one that was proposed more recently by the Commission staff. See U.S. Department of Justice, *Oil Pipeline Deregulation* 32 (May 1986); Commission Staff Proposal for Revisions to Oil Pipeline Regulation Pursuant to the Energy Policy Act of 1992, at 42-43 (March 1993). The HHI resulting from the treatment suggested here may equal that produced by one or both of the other suggested treatments. When it equals neither, it will exceed the HHI resulting from the treatment previously used by the Department, and it will be exceeded by the HHI resulting from the treatment proposed by the Commission staff.

<sup>41</sup> For the purposes of identifying competitors and assigning them shares, there is no basis for treating private or intrastate pipelines, which are not regulated by the Commission, any differently from regulated interstate pipelines. On the other hand, capacity committed under long-term arrangements may be reasonably excluded in assigning market shares, so private pipeline capacity might not affect market shares.

<sup>42</sup> This is what should be done in principle, but if the Commission adopts the Department's suggested criteria for creating a presumption of no significant market power, there will be no need to ascertain water terminal capacities.

<sup>43</sup> The Department suggests that the universe used to compute shares in product origin markets be local production, but that there not actually be shares assigned for local consumption. This reasonably treats local consumption as competitive. Thus, if two pipelines each had capacities of 10, local production was 25, and local consumption was 5, then each pipeline would be assigned a share of 40, yielding an HHI of 3200.

<sup>44</sup> Horizontal Merger Guidelines § 1.5.

<sup>45</sup> While concentration generally is the most important factor in determining market performance, many factors other than concentration are relevant as well. A presumption based on just the HHI is justifiable, however, because it greatly simplifies market-based pricing proceedings in keeping with the mandate of the Energy Policy Act, without limiting the substantive protections of the Interstate Commerce Act.

Department<sup>46</sup> and the Commission staff<sup>47</sup> have previously advocated an HHI threshold of 2,500,<sup>48</sup> and it would be reasonable for the Commission to consider concentration in the relevant market below this level as sufficient to create a rebuttable presumption that a pipeline does not possess significant market power.<sup>49</sup>

The Department recommends that the Commission allow a pipeline to create a rebuttable presumption that it does not possess significant market power using either of two additional market structure standards. First, a pipeline with a sufficiently small market share should be presumed not to possess significant market power, notwithstanding the level of market concentration. The Department suggests 15 percent as the threshold market share.<sup>50</sup>

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<sup>46</sup> U.S. Department of Justice, Oil Pipeline Deregulation 29–30 (May 1986).

<sup>47</sup> Commission Staff Proposal for Revisions to Oil Pipeline Regulation Pursuant to the Energy Policy Act of 1992, at 44–45 (March 1993).

<sup>48</sup> This recommendation was made in the context of a choice between traditional cost-of-service regulation and deregulation. U.S. Department of Justice, Oil Pipeline Deregulation 30 (May 1986). The adoption of price caps in the Final Rule alters the cost-benefit analysis, suggesting that a lower threshold may be appropriate. On the other hand, several other factors suggest that a higher threshold may be appropriate now. The 2,500 threshold is used in the comments merely to establish a presumption, whereas in the 1986 report, it was virtually a safe harbor. The approach to market delineation suggested by the comments will often result in substantially smaller markets than that used in the earlier reports. Finally, the method of accounting for pipeline excess capacity suggested in the comments may yield far higher HHI figures than the method used in the earlier reports (see note 40).

The HHI threshold suggested here exceeds the 1,800 threshold used in the Guidelines (Horizontal Merger Guidelines § 1.51) primarily because it is used in a different way. The 1,800 threshold in the Merger Guidelines is used as a level of concentration that triggers intensive scrutiny. The outcome of this scrutiny often is that a merger is permitted even though the HHI exceeds 1,800. The 2,500 threshold for oil pipelines is used as a level of concentration that establishes a presumption regarding the adequacy of competition, a presumption protestants are free to rebut through any number of arguments. The Commission may find competition to be inadequate to protect consumers even if the HHI is below 2,500.

<sup>49</sup> The choice of an HHI threshold for the purpose of implementing a market power presumption is inextricably intertwined with the delineation of the relevant market. Recall that the price increase threshold used in market delineation is related to, but not necessarily the same as, the price increase threshold defining significant market power. In translating the price increase threshold defining significant market power into a price increase threshold for market delineation, it is necessary to make allowance for that fact that the equilibrium price with several firms will be less than that with monopoly, other things being equal. Given a particular expectation about the relationship between concentration and prices, either the HHI threshold or the price increase threshold for market delineation can be freely chosen, but the choice of one of the two thresholds dictates the choice of the other. See also note 37.

<sup>50</sup> A pipeline with at most fifteen percent of the market would be unable to affect prices significantly if, as normally would be the case, its rivals accounting for the great bulk of throughput were able to expand shipments easily. If the carriers accounting for the great bulk of throughput were capacity

Second, a pipeline should be presumed not to possess significant market power if it is constrained from increasing price by more than the threshold for defining significant market power by the presence in the relevant market<sup>51</sup> of a competitor with a price that can be treated as fixed due to market forces or regulation. The most likely such competitor is a water terminal.<sup>52</sup> As previously noted, water transportation is a competitive industry. Thus, a pipeline should be presumed not to possess significant market power at a particular terminal if a water terminal in its relevant market and has a delivered oil price comparable to that with the pipeline. Sufficient to demonstrate this should be the fact that the demand center served by the pipeline terminal currently receives significant deliveries from the water terminal.<sup>53</sup>

A host of other factors may be relevant to a determination of whether a pipeline possesses significant market power, but none are suitable for use in establishing presumptions. For example, a pipeline would not possess significant market power if a price increase significantly above competitive levels would quickly induce entry of a new pipeline or other competitor; however, there is no good way in which to determine whether that is the case, and it is not particularly likely.

Pipelines should be free to argue that they do not possess significant market power on any basis they choose, and not just on the basis of the criteria outlined above. The Commission should consider such factors as the effects vertical integration and buyer power if pipelines make arguments along such lines. Vertical integration into pipelines may protect shippers from an exercise of market power, and large buyers may have some bargaining power over a pipeline.

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constrained, the reason may well be that regulated rates are below competitive levels. Under competition one normally would expect that price would rise to ration scarce capacity.

<sup>51</sup> This relevant market would be delineated using as the price increase threshold that used to define significant market power.

<sup>52</sup> Another possibility is an oil pipeline subject to price caps and with significant excess capacity.

<sup>53</sup> The ability of water transportation to constrain a pipeline's exercise market power depends on the potential for expanding the throughput of the competing water terminal. The Department, however, does not propose that the Commission require pipelines to make a showing about the potential for expanding the throughput of competing water terminals because it is highly likely that water terminal throughput is sufficiently expandable. Relatively little expandability should be sufficient to prevent an exercise of market power because oil pipeline tariffs are greatly in excess of short-run marginal cost. Under such circumstances, a pipeline will not find it profitable to substantially reduce deliveries in order to drive up price, since it loses a substantial contribution to cost recovery on each foregone unit of sales. Moreover, the presumption is rebuttable, so a protestant is free to submit evidence that water transportation is not sufficiently expandable. The Commission should also consider whether the available evidence supports the Department's analysis.

## **VI. Procedural Matters**

A pipeline requesting market-based rates should be required to submit to the Commission a detailed description of the pipeline, indicating the location of all terminals and the demand center(s) served by each. The pipeline should also be required to indicate the throughput of the pipeline at each terminal, the capacity of each terminal (if available), and the average or typical product prices at each terminal.

The pipeline should also be required to submit materials supporting whatever claim(s) the pipeline chooses to make with respect to market power. This would include a proposed relevant market delineation along with a detailed explanation of the rationale and evidence in support of it. It would also include total market consumption for destination markets, total market production for origin markets, and information on competitors in the relevant market on the basis of which shares could be assigned. Only information relevant to the pipeline's chosen market power presumption(s) or other argument(s) need be submitted. For example, if proximity to a water terminal is the pipeline's chosen presumption, then only information about market delineation and the water terminal need be submitted.

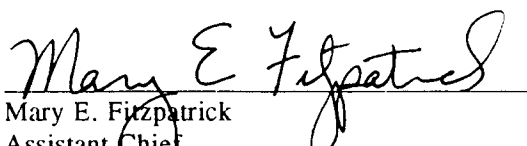
A protestant should be entitled to make either of two sorts of arguments: that the pipeline erred in delineating the relevant market, assigning shares, or in some other way; and that the pipeline possesses significant market power notwithstanding the showing it has made. With respect to the former sort of argument, a protestant should be required to file the same materials that the pipeline is required to file. With respect to the latter sort of argument, it is difficult to be much more specific than to require a protestant to submit appropriate supporting materials. The Department suggests that protestants submit a written study of the issue supporting their conclusion. In the case of protests filed after market-based pricing has been approved, protestants should also be required to explain what change in circumstances justifies reopening the issue and why.

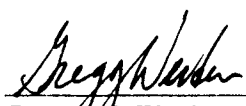


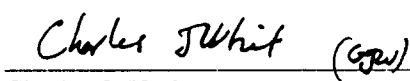
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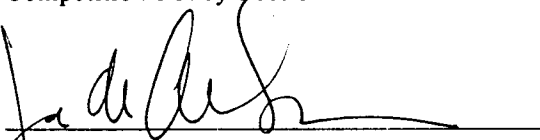
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