# 114 FERC ¶61,293 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 342

[Docket No. RM05-22-000]

Five-Year Review of Oil Pipeline Pricing Index

(Issued March 21, 2006)

AGENCY: Federal Energy Regulatory Commission.

<u>ACTION</u>: Order Establishing Index for Oil Price Change Ceiling Levels

SUMMARY: The Federal Energy Regulatory Commission (Commission) is issuing this final order concluding its second five-year review of the oil pricing index, established in Order No. 561, Revisions to Oil Pipeline Regulations Pursuant to the Energy Policy Act of 1992, FERC Stats. & Regs. [Regs. Preambles, 1991-1996] 30,985 (1993). After consideration of all the initial, reply and supplemental comments, the Commission has concluded that the PPI+1.3 index should be established for the five-year period commencing July 1, 2006. At the end of this period, in July 2011, the Commission will once again review the index to determine whether it continues to measure adequately the cost changes in the oil pipeline industry.

ADDRESS: Secretary of the Commission

Federal Energy Regulatory Commission

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## **SUPPLEMENTARY INFORMATION:**

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;

Nora Mead Brownell, and Suedeen G. Kelly.

Five-Year Review of Oil Pricing Index

Docket No. RM05-22-000

ORDER ESTABLISHING INDEX FOR OIL PRICE CHANGE CEILING LEVELS

(Issued March 21, 2006)

- On July 6, 2005, the Commission issued a Notice of Inquiry (NOI), in which it 1. proposed to continue using the Producer Price Index for Finished Goods (PPI or PPI-FG) for the next five-year period beginning July 1, 2006, to track oil pipeline industry cost changes. The Commission applies the index to oil pipeline transportation tariffs to establish rate ceiling levels for pipeline rate changes. The NOI invited interested persons to submit comments on the continued use of PPI and to propose, justify, and fully support, as an alternative, adjustments to PPI. Comments and reply comments were due September 13 and October 13, 2005, respectively.
- 2. Based on our review of the comments and reply comments received, and for the reasons discussed below, the Commission determines that the PPI plus one point three percent (PPI+1.3) should be established for the five-year period commencing July 1, 2006,

<sup>&</sup>lt;sup>1</sup> Five-Year Review of Oil Pipeline Pricing Index, IV FERC Stats. & Regs. [Notices] ¶ 35,552 (2005).

02

2

and concludes that this index satisfies the mandates of the Energy Policy Act of 1992 (Energy Policy Act).<sup>2</sup>

### **Background**

3. Congress, in the Energy Policy Act, required the Commission to establish a "simplified and generally applicable" ratemaking methodology for oil pipelines, consistent with the just and reasonable standard of the Interstate Commerce Act (ICA).<sup>3</sup> On October 22, 1993, the Commission issued Order No. 561,<sup>4</sup> promulgating regulations pertaining to the Commission's jurisdiction over oil pipelines under the ICA, and to fulfill the requirements of the Energy Policy Act. In so doing, the Commission found that using an indexing methodology to regulate oil pipeline rate changes, accompanied with certain alternative rate-changing methodologies where either the pipeline or the shipper could justify departure from the indexing methodology, would satisfy both the mandate of Congress and comply with the requirements of the ICA. The Commission found that the indexing methodology adopted in the final rule would simplify, and thereby expedite, the process of

<sup>&</sup>lt;sup>2</sup> 42 U.S.C.A. 7172 note (West Supp. 1993). The Energy Policy Act's mandate of establishing a simplified and generally applicable method of regulating oil transportation rates specifically excluded the Trans-Alaska Pipeline System (TAPS), or any pipeline delivering oil, directly or indirectly, into it.

<sup>&</sup>lt;sup>3</sup> 49 U.S.C. app. 1 (1988).

<sup>&</sup>lt;sup>4</sup> Revisions to Oil Pipeline Regulations Pursuant to the Energy Policy Act, FERC Stats. & Regs. [Regs. Preambles, 1991-1996] 30,985 (1993), 58 F.R. 58753 (Nov.4, 1993); order on reh'g, Order No. 561-A, FERC Stats. & Regs. [Regs Preambles, 1991-1996] 31,000 (1994), 59 F.R. 40243 (Aug.8, 1994), aff'd., Association of Oil Pipe Lines v. FERC, 83 F.3d 1424 (D.C. Cir. 1996).

changing rates by allowing, as a general rule, such changes to be made in accordance with a generally applicable index, and that it would ensure compliance with the just and reasonable standard of the ICA by subjecting the chosen index to periodic monitoring and, if necessary, adjustment. In determining which index to use, the Commission obtained the views of interested parties, including industry participants, shippers and others on its proposal to change its ratemaking methodology for oil pipelines. Dr. Alfred E. Kahn (Dr. Kahn) supported the establishment of an index of PPI-1 on behalf of a group of shippers, as the index that best tracked pipeline cost changes over a period of time. After extensive analysis of various suggested indices, the Commission adopted the PPI-1 index for the purpose of allowing oil pipelines to change rates without making cost-of-service filings. This index was chosen over others because it came the closest to tracking the historical changes in actual costs as reported in FERC Form No. 6 and was to be in effect for the five-year period July 1996 through June 2001. The Commission also committed to review every five years the continued effectiveness of its index.

4. In the course of establishing the appropriate index for the first review period 2001-2006, the Commission initially deviated from the methodology it had used in establishing the index as PPI-1 percent, concluding that the index should be retained as PPI-1, based upon a revision to the methodology established in Order No. 561. The Commission's order was reviewed by the U.S. Court of Appeals and remanded because the Commission departed from the Order No. 561 methodology. Specifically, the U.S. Court of Appeals found that the Commission neither adequately addressed parties' concerns over using a new methodology,

nor in the alternative articulated reasons for changing its averaging methodology applied in Order No. 561. Further, the U.S. Court of Appeals found that the Commission failed to justify its methodological shifts from Order No. 561 regarding outliers and the use of net plant. Upon remand, the Commission concluded that the most appropriate way to measure pipeline costs and rate ceilings, and to assure that the nexus drawn between them continued, was to apply the same methodology as it initially applied in Order No. 561. The Commission thus returned to the method adopted in Order No. 561 in its further analysis on remand. Utilizing the Kahn methodology which resulted in an index of an unadjusted PPI, the Commission adopted PPI as the appropriate index for the five-year period beginning July 2001. This order on remand was upheld by the U.S. Court of Appeals. <sup>5</sup> In the current five-

4

#### **Initial Comments and Initial Reply Comments**

year review, we are applying that same methodology.

5. On September 13, 2005, the Association of Oil Pipelines (AOPL) submitted its comments in response to the NOI. AOPL, as supported by a study done by its consultant, Dr. Ramsey Shehadeh (Dr. Shehadeh), contends that an index of PPI+1.3 percent rather than PPI is the appropriate index for the next five years. AOPL avers that application of the Commission's established, U.S. Court of Appeals-approved methodology shows that pipeline costs over the past five years increased at a rate of PPI+1.3 percent. AOPL maintains that the increased pipeline costs result from imposition of new safety and

 $<sup>^5</sup>$  102 FERC  $\P$  61,195 (2003), aff'd., Flying J Inc. v. FERC, 363 F.3<sup>rd</sup> 495 (D.C. Cir. 2004).

5

environmental regulatory obligations, voluntary security measures in the wake of 9/11 and increased energy costs. AOPL states that an index of PPI+1.3 percent will ensure that pipeline rates are "just and reasonable" while allowing efficient pipeline carriers to recover their increased costs over the next five years. These carriers, AOPL argues, will also be able to expand capacity to eliminate existing capacity constraints, and continue ongoing efforts to improve pipeline safety, efficiency, and security.

6. Lion Oil Company, National Cooperative Refinery Association, Sinclair Oil Corporation and Tesoro Refining and Marketing Company (collectively the Refiners) filed a joint response on October 13, 2005, to AOPL's September 13 initial comments. The Refiners and the Air Transport Association of America (ATA), whose comments are discussed below, are both supported by the same study prepared by their consultant, Peter K. Ashton (Mr. Ashton), who urges the Commission to keep PPI as the index. The Refiners contend that the correct analysis of FERC Form No. 6 data indicates that the Commission should maintain PPI to determine annual rate increases. The Refiners state that PPI was determined appropriately by applying the methodology described by the Commission and the U.S. Court of Appeals for the District of Columbia Circuit over the past 12 years. The Refiners claim that AOPL failed to provide any sound support for its claim that PPI+1.3 percent is the inflationary index that tracked oil pipeline cost increases the best over the past five years. The Refiners contend that Mr. Ashton demonstrated a sound analysis of the data whose results indicate the Commission's initial view in its NOI was correct: the PPI without any adjustment is the index that has best tracked oil pipeline cost increases.

- 7. On October 13, 2005, the ATA also filed a response to AOPL's comments. ATA contends that today's economic environment requires careful scrutiny of any proposed pipeline rate increases. ATA states the ability of pipelines to recover costs not generally encompassed by indexing through the cost-of-service "safety valve" or through the Commission sanctioned "security surcharge" ensures that pipelines can recover normal cost changes through indexing without, at the same time, having unjustified across-the-board burdens placed on the airline industry by implementation of an unreasonably high indexing adjustment. As mentioned above, ATA relied upon the same Ashton study as the Refiners. ATA states that its position, and that of its member airlines, is that the Commission should adopt a price index of PPI for the next five-year period.
- 8. In his Sworn Declaration, Mr. Ashton claims that he employed the same methodology in conducting his analysis of oil pipeline cost increases in the 1999-2004 period as that used and adopted by the Commission in its previous review of the pricing index, as well as by Dr. Kahn. Based on his detailed analysis of historical oil pipeline cost data from 1999-2004, employing this methodology, Mr. Ashton concluded that the PPI, without any adjustment, closely tracked oil pipeline cost increases for that period. He states that taking the midpoint between the two composite averages (middle 50 percent and middle 80 percent of the sample) yields an annual rate of increase that is virtually identical to the increase in the PPI for the relevant time period. Mr. Ashton concludes that there is no basis for modifying the current PPI index since it already appropriately tracks normal industry average costs.

- 9. In addition to conducting his own analysis, Mr. Ashton reviewed the submission of AOPL and its expert, Dr. Shehadeh. Mr. Ashton concluded that the data and analysis employed by Dr. Shehadeh are deficient, cannot be replicated, and therefore cannot be relied on. Specifically, Mr. Ashton cites the fact that much of the data pertaining to the later years of the study were compiled and supplied by AOPL, instead of Dr. Shehadeh obtaining his sample data from FERC Form No. 6. Mr. Ashton questions the lack of information concerning the source of Dr. Shehadeh's data, and the apparent lack of any attempt to validate or verify the information. Mr. Ashton states that, more significantly, in an attempt to increase the sample size, Dr. Shehadeh made numerous additions and adjustments to the Form No. 6 data for "potential omissions and potential errors," much of which was based on information supplied by AOPL. Mr. Ashton claims that Dr. Shehadeh made such adjustments without any clear indication as to exactly what those adjustments were, or how such adjustments affected the results of the study. As a result, Mr. Ashton concludes that any results of Dr. Shehadeh's study are deficient and unreliable.
- 10. The U.S. Department of Transportation (DOT) also filed comments in response to AOPL on October 13, 2005. DOT expressed no views on the precise index the Commission should choose. DOT submitted its comments to confirm certain points raised by AOPL with respect to oil pipeline regulatory obligations. DOT states that it has adopted safety regulations that impose significant obligations and costs on pipeline operators. DOT states

<sup>&</sup>lt;sup>6</sup> The DOT integrity management regulations are found at 65 <u>Federal Register</u> 75378, December 1, 2000 and 67 <u>Federal Register</u> 2136 (January 16, 2002).

that it is concerned about the capacity of the underlying infrastructure of the nation's transportation networks, including oil pipelines, to meet growing demands placed upon them.

DOT urges the Commission to consider seriously the financial commitment necessary for operators to maintain and expand pipeline system capacity.

8

11. DOT states that in the long run, its rules will prove beneficial to the public and pipelines as well, but in the short run, the ensuing costs will prove considerable, with the additional effect of reducing or deferring operator revenues. DOT estimates that, over the seven year period 2001 through 2007, initial baseline assessments would cost operators more than \$120 million; retesting, \$14.5 million annually; preparation of integrity plans, almost \$18 million; and related implementation costs, almost \$10 million the first year and \$5 million annually thereafter. DOT states it could not estimate the repair costs incurred as a result of its required testing as it is impossible to predict the number and kind of conditions that would be disclosed, but given the fact that most repairs involve excavating pipeline segments and replacing sections of pipe, along with the requisite pressure reductions required to accommodate repairs, DOT believes such repair costs would be considerable. DOT noted that in 2004 pipeline operators made more than 1,500 repairs posing immediate threats to pipeline integrity, and noted that one operator reported a single repair cost \$8 million to make. DOT therefore contends that it is imperative that the Commission factor these costs into its deliberations in choosing the appropriate index for the next five-year period. DOT believes that failure to do so could lead to various outcomes inconsistent with the public interest, such as operators being disinclined to invest in additional capacity,

- abandoning older or marginally economic pipelines as a cost-cutting measure, or operators being tempted to cut corners on safety as a way of bringing costs more in line with revenues. DOT also cites evidence demonstrating a serious underinvestment in petroleum pipeline infrastructure and underscoring that several pipeline systems of national importance lack redundancy, with consequences including higher prices and less competitive markets for petroleum products in some regions, supply disruptions and price spikes due to relatively minor service interruptions, and diversion of petroleum products to other, less efficient and desirable transportation modes.
- 12. DOT claims that the extent of capacity restrictions in the nation's pipeline infrastructure is becoming more apparent, as is the realization that the current regulatory mechanisms may not lead to appropriate reinvestment in the industry. DOT suggests that the Commission consider convening a workshop or technical conference to explore regulatory mechanisms that could facilitate critical investment in maintaining and expanding pipeline system capacity.
- On October 14, 2005, the Pipeline Safety Trust (Trust), an organization that promotes 13. fuel transportation safety through education and advocacy, filed to respond to AOPL's comments. The Trust agrees with AOPL that safety requirements on the industry have significantly increased since the last five-year review, including but not limited to the new integrity management regulations. In addition, the Trust states that it is persuaded by the 1999-2004 data contained in AOPL's draft comments (which were analyzed by AOPL using a U.S. Court of Appeals-approved methodology) that the costs on the industry have

10

increased enough to justify a PPI+1.3 percent as the pricing index for the next five years. However, the Trust requests that prior to approving PPI+1.3 percent, the FERC perform its own technical review of the accuracy and completeness of AOPL's cost data, and the reasonableness and appropriateness of AOPL's analytical methodology.

#### **Exchange of Supporting Data between Parties and Filed With the Commission**

14. To expedite the index review process, AOPL and the ATA and Refiners (hereinafter referred to as Shippers) agreed to exchange source data, spreadsheets, and the detail of the methodology used to support their respective positions of PPI+1.3 percent, and PPI. On November 15, 2005, AOPL and the Shippers filed their supporting workpapers with the Commission.

#### **Subsequent Reply Comments and Responses**

- 15. On January 10, 2006, AOPL filed comments in reply to the study presented by the Shippers, contending that their study contains flawed economic analysis and incomplete and erroneous sampling of pipeline cost data. AOPL claims that, when corrected, the data presented by Shippers support an adjustment of PPI+1.56 percent, which supports AOPL's original position that the Commission should establish the index at least at PPI+1.3 percent.
- 16. On January 23, 2006, the Shippers filed a joint response to AOPL's January 10 comments. Shippers claim that AOPL's comments distort the position advocated by Shippers and present non-public data upon which AOPL based its incorrect conclusions. Shippers contend that the facts they are presenting for Commission consideration are supported by a study conducted by Dr. Paul J. Smith (Dr. Smith), a prominent mathematician

and statistician, as well as by a supplemental study performed by their consultant, Mr.

11

Ashton. Based on new data provided by AOPL, Mr. Ashton added some pipelines to his study, and reconciled much of the data supplied by AOPL with that culled from FERC Form No. 6 data. Mr. Ashton concludes that the Commission should be very cautious about establishing an index higher than the present PPI.

- 17. Dr. Smith reviewed the dataset consisting of 62 firms that Mr. Ashton originally proposed, as well as the 81firm dataset proposed by Dr. Shehadeh in his January 10 rebuttal declaration on behalf of AOPL. Dr. Smith recommends the use of the median or geometric mean to estimate the five-year cost index, given the Form No. 6 data. In both data sets analyzed, the median and geometric mean are very close together. Dr. Smith argued that the use of the arithmetic mean is clearly not appropriate for either of these data sets. Arithmetic means are not representative of data from skewed distributions.
- 18. Shippers conclude that, given the validation of Mr. Ashton's methodology, use of the geometric mean and choice of sample set, the conclusions reached by Dr. Smith, and given the real possibility of substantial errors in the FERC Form No. 6 data, the PPI should be used as the inflationary index for the next five years, or, in the alternative, the Commission should maintain the PPI and institute a rulemaking to establish new criteria and reconsider the methodology currently being used for determining such an index. Shippers contend that the fact that a significant number of large oil pipelines are substantially over-recovering their cost of service lends additional support to this conclusion.

- 19. On February 9, 2006, AOPL submitted its supplemental reply comments in response to comments made by Shippers on January 23, 2006. AOPL claimed that Shippers, even after admitting to substantial mistakes in their analysis of oil pipeline cost data, resulting in flawed evidence and testimony, nevertheless urged the Commission to adopt a new methodology for setting the price cap index or, alternatively, to retain the PPI index pending a new rulemaking. AOPL argued that the Commission should squarely reject the Shippers' new position because, despite correcting errors in data and sample selection, Shippers' position remains fundamentally flawed. AOPL argued that Shippers' own cost evidence supports a substantial upward adjustment to the current index. AOPL states that, in sum, it is clear that Shippers' real complaint is not with the methodology and cost data used by the Commission to set its price cap index, but rather with the index level the faithful application of such methodology produces. The Commission must, as required by law, apply its established, U.S. Court of Appeals-approved index standard and set PPI+1.3 percent as its new index for the next five years.
- 20. AOPL argued that, while Shippers purported to apply the Commission-approved methodology for measuring pipeline cost changes, Shippers in fact departed from that standard in several key respects. Even after correcting the data from their original analysis, Shippers' data sample omitted many eligible pipelines, failed to account for mergers, used incorrect data fields and data not reflected on FERC Form No. 6, improperly included cost data from TAPS assets that are not governed by the index and reflect entirely different

accounting conventions, and most damaging, performed key calculations in the wrong order, thereby systematically understating cost changes.

- 21. AOPL's comments addressed as well the report of Dr. Smith, cited by Shippers as a source of validation of its calculations. AOPL claimed that Dr. Smith's analysis is irrelevant to this proceeding, as he does not purport to address Mr. Ashton's analysis and expresses no opinion about the reasonableness of that analysis or its use of composite measures of central tendency. Dr. Smith advocates use of an entirely different standard, the median, does not approve of calculating cost changes in the wrong sequence, and in fact does not even analyze, much less endorse, use of the unweighted geometric mean in combination with the weighted mean and median that Mr. Ashton used. Nor, argues AOPL, did Dr. Smith analyze the middle 50 percent and middle 80 percent data sets. As a result of all this, any reliance Shippers placed on the report of Dr. Smith was misplaced.
- 22. AOPL addressed Shippers' claims that the Commission must abandon its U.S. Court of Appeals-approved standard because of "manifest errors" and because its results are sensitive to "extreme data points" by pointing out that the existence and reasonable treatment of outlier data was extensively addressed by the Commission in prior proceedings, and the Commission's methodology was specifically designed to take such an issue into consideration, specifically by employing the middle 50 percent and middle 80 percent samples. As to Shippers' claim that the Commission's methodology is flawed and it should set the index at PPI because a small minority of oil pipelines is over-recovering their cost of service, AOPL replied that the Commission recognized that, in adopting a uniform index for

14

all pipelines, inevitably some pipelines would over-earn while others will under-earn. If Shippers truly believe that individual pipelines are over-earning such that rates cannot satisfy the "just and reasonable" requirement, they can file a complaint against those pipelines. AOPL contends that the indexing methodology is not intended to drive rates to cost, but instead to make sure that any rate changes were based on expected cost changes. AOPL further states that the Commission is not subject to a statutory duty to examine whole rates when pipelines propose index rates; rather, its inquiry is limited to a comparison of changes in rates and costs from one year to another.

23. In his Supplemental Rebuttal Declaration on behalf of AOPL, Dr. Shehadeh argues that Mr. Ashton departed from the very methodology he purported to support, failed to implement accurately either the methodology used by Dr. Kahn or by Dr. Smith, has no support in any of the testimonies given in this proceeding for his findings, and for these reasons, such findings are unreliable as a basis for selection of an index for index-based regulation of oil pipeline tariffs. Dr. Shehadeh states that the basis for the differences between his conclusions and those of Mr. Ashton consist principally of errors in Mr. Ashton's data and his flawed order of operations in implementing the methods of Dr. Kahn. Specifically, Dr. Shehadeh cites the fact that Mr. Ashton calculates his cost changes in incorrect order – he applied the geometric mean over time prior to his application of the arithmetic mean across pipelines. Dr. Kahn correctly determined annual average change in costs by employing the geometric mean on the average cumulative changes, as opposed to

Mr. Ashton, who in contrast determined the annual average change in costs by employing the average of the geometric means of each pipeline's cumulative changes.

- 24. Rather than addressing the validity of Dr. Shehadeh's assertion concerning the order of his calculations, Dr. Shehadeh claims that instead, Mr. Ashton introduced an entirely new methodology based on measures of central tendency and composite averages, purportedly based on Dr. Smith's report. Dr. Shehadeh further states that Mr. Ashton's new methodology, especially as it pertains to use of sensitive data, is flawed and therefore unreliable.
- 25. In conclusion, Dr. Shehadeh continues his support of the use of the methodology the Commission employed in its previous analysis, that Dr. Kahn validated, and that the U.S. Court of Appeals approved. According to Dr. Shehadah, Mr. Ashton's new methodology is completely unsupported by factual evidence, lacks economic foundation, and is unreliable and uninformative. Employing the same methodology used by Dr. Kahn and the Commission and endorsed by the U.S. Court of Appeals demonstrates that actual cost changes experienced by oil pipelines over the last five years almost equaled PPI+1.5 percent, and consequently, the Commission should choose as the index for the next five year period PPI with an adjustment factor no less than 1.3 percent.
- 26. On February 21, 2006, the American Trucking Association filed letter comments in response to the Commission's NOI. The American Trucking Association adopted the positions espoused by the Shippers and added no new arguments. On February 28, 2006, the

16

International Air Transport Association filed letter comments, similar to that of the American Trucking Association, in support of the Shippers and again adding no new arguments.

27. On February 24, 2006, Shippers filed additional comments, styled "supplemental rebuttal," and a "Sworn Rebuttal Declaration" of Mr. Ashton. The purpose of this filing is to rebut the Supplemental Reply Comments of AOPL, which had been filed on February 9, 2006. Shippers contend that AOPL has made two fundamental and related errors in its Supplemental Reply Comments: AOPL incorrectly states that the Shippers and Mr. Ashton have employed a new methodology; and, even if Shippers have employed a different methodology, the Commission is within its rights to rely on that methodology.

#### **Discussion**

## **Methodology to Calculate the Index Differential**

28. Since Order Nos. 561 and 561-A, the Commission has primarily relied upon Dr. Kahn's testimony<sup>7</sup> to develop the methodology to set the index differential<sup>8</sup>, which was subsequently approved by the U.S. Court of Appeals.<sup>9</sup> Within the Commission-established method, after each firm's unit cost changes are calculated and weighted, two trimmed data sets are extracted from the master data set. Both parties have constructed the trimmed data

<sup>&</sup>lt;sup>7</sup> Declaration of Alfred E. Kahn, August 31, 2000, in Review of Pipeline Pricing Index, Docket No. RM00-11-000.

<sup>&</sup>lt;sup>8</sup> To calculate the index differential, the cost index is compared to the PPI-FG average index for the same time period. The remainder of this calculation [CostIndex - (PPI - FG)] is the index differential.

<sup>&</sup>lt;sup>9</sup> Association of Oil Pipe Lines v. FERC, 83 F.3d at 1437.

17

sets of the middle 50 percent and middle 80 percent. Trimming is done to remove statistical outliers, or spurious data points that could bias the mean of the sample in either direction.

Table 1 provides a description of the statistical values of central tendency used by both parties to develop the index. The industry-wide cost index is calculated by averaging both composites on Line D and then comparing that value to the PPI-FG index data over the same period.

Line	Middle 80 percent	Middle 50 percent
A	Median	Median
В	Weighted Mean	Weighted Mean
С	Un-weighted Mean	Un-weighted Mean
D	Composite of 80% =	Composite of 50% =
	(A+B+C)/3	(A+B+C)/3

Table 1

29. Both AOPL and Shippers used the same sample (with the exception of SFPP, L.P.<sup>10</sup>) to describe the central tendency of the data, in which the cost index calculation directly follows. However, the parties have differed in the way in which they calculated the pipelines' cost increases. The result has been that both parties calculate a different pipeline

<sup>&</sup>lt;sup>10</sup> SFPP, L.P. was excluded by the Shippers because its cost as reflected in its Form No. 6 were being challenged in a current rate proceeding. The Commission conducted a review of the pipeline samples submitted by both Dr. Shehadeh and Mr. Ashton and determined that, using the Court of Appeals-approved methodology, the exclusion of SFPP, L.P. causes only a 0.02 percent decrease in the average annual cost difference. Thus, the exclusion of SFPP, L.P. still supports the use of PPI+1.3 percent.

18

industry cost index; AOPL arriving at an index of PPI+1.49 percent and the Shippers arriving at an index of PPI+0.675 percent.

30. In simple terms, AOPL and the Shippers state that they apply the same methodology but they arrive at different results. Each party calculates total industry costs<sup>11</sup> for each pipeline in the time period between 1999 and 2004, and then estimates the central tendency of the results, sums these amounts, and divides the result by the number of pipelines to arrive at the industry average cumulative change in industry costs (known as the arithmetic mean of the sample). AOPL then derives an annual percent change in industry costs for the 1999 through 2004 period by employing the geometric mean on this industry average cumulative change in costs. AOPL's methodology tracks the methodology previously used by the Commission and approved by the U.S. Court of Appeals. The Shippers, however, depart from the prior approved methodology, in that the Shippers derive the cumulative change in costs (between 1999 and 2004) for each pipeline, by calculating each year's cost change for each pipeline. The year to year cost changes are multiplied together to arrive at the cumulative cost change for that pipeline. The average cost change is determined by taking the geometric mean of that cumulative cost change.

<sup>&</sup>lt;sup>11</sup> Average total cost for an individual pipeline is the average of the change in operating cost (weighted by the operating ration) added to the average of the change in net plant (weighted by the residual, one minus the operating ratio). References to individual pipeline costs beyond this point are assumes to be average total costs.

Ashton, is fundamentally flawed.

31. We base our analysis of the calculations in this proceeding upon the U.S. Court of Appeals-approved model, and have found that the methodology used by Dr. Shehadeh for AOPL in this proceeding conforms to Dr. Kahn's U.S. Court of Appeals-approved methodology. Our analysis shows that the Shippers' methodology, as represented by Mr.

19

32. In delineating the index differential, Mr. Ashton, in his first declaration, <sup>12</sup> claims to have accurately applied Dr. Kahn's methodology in calculating average annual cost changes, but our review found that he deviates from Dr. Kahn's methodology in certain respects. In this first attempt, Mr. Ashton determines the average annual change in unit costs for years 1999 through 2004 by calculating the <u>arithmetic average of the geometric mean</u> of each pipeline's cumulative unit cost change, as opposed to Dr. Kahn's method of calculating the <u>geometric mean of the arithmetic average</u> of cumulative unit cost change (Ashton's Decl. at p. 14). On the basis of determining the average cost change of each pipeline, the use of Dr. Kahn's methodology would calculate the cost increase between end years 1999 and 2004 by this formula: (final cost – initial cost)/(initial cost)-1. Mr. Ashton erred in this step of the calculations by taking the geometric mean of the product of the individual company's yearly cost increase. Furthermore, Dr. Shehadeh has shown that Mr. Ashton's method results in the underestimation of costs. <sup>13</sup>

<sup>&</sup>lt;sup>12</sup> Sworn Declaration of Peter K. Ashton, October 13, 2005 (p. 3).

<sup>&</sup>lt;sup>13</sup> Rebuttal Declaration of Ramsey D. Shehadeh, PH.D at 10-11, January 10, 2006 by use of a theorem known as Jensen's Inequality.

Mr. Ashton responds<sup>14</sup> to Dr. Shehadeh's rebuttal, and claims that the newly added 33. testimony of Dr. Smith supports Mr. Ashton's new methodology. However, in examining Dr. Smith's analysis, it seems that he has followed Dr. Kahn's approach (but not Mr. Ashton's) by calculating percentage cost changes for individual companies, where Dr. Smith states that "the five-year percent differences in costs as reported" for individual companies "were computed as (final cost – initial cost)/(initial cost)-1." Therefore, we cannot reconcile Dr. Smith's evidence with Mr. Ashton's statement that "Prof. Smith clearly points out that given the underlying characteristics of the data and its skewed distribution, the methodology that I employ relying on the geometric mean is the proper methodology for computing the cost increases of individual pipeline companies" (Supplemental Decl. at p. 2) Dr. Smith's testimony regarding his recommendation of the use of the geometric mean, was to describe with relative accuracy the central tendency of the data, not the calculation of the individual cost increases themselves. Further, Dr. Smith's testimony in regard to this proceeding is incomplete because he only trimmed the cost data by 5 percent, and he never analyzed the "middle 50 percent" and "middle 80 percent" data sets, which excluded "outliers," adopted by the Commission and approved by the U.S. Court of Appeals. As the Court of Appeals

<sup>&</sup>lt;sup>14</sup> Supplemental Declaration of Peter K. Ashton, January 23, 2006.

<sup>&</sup>lt;sup>15</sup> Analysis of Pipeline Index Data, submitted by Paul J. Smith, January 23, 2006.

21

stated, "[t]he object of excluding outliers is to prevent extreme and spurious data from biasing an analysis, i.e., affecting its result adversely." <sup>16</sup>

34. Also, in the same response, Mr. Ashton presents an "update" to his methodology, and supports it again with the analysis of Dr. Smith (Supplemental Decl. at p. 7). Originally, Mr. Ashton measured the central tendency of both of the trimmed data sets (80 percent and 50 percent) with the median, the weighted and the un-weighted arithmetic mean (although he still wrongly calculates the cost changes for individual companies by the geometric mean). In the update, Mr. Ashton delineates the weighted and un-weighted means by now taking the geometric mean<sup>17</sup> of the unit cost change. Mr. Ashton states that this update is justified "as Dr. Smith points out, in measuring the central tendency it is also appropriate to take the geometric mean and the median – not the arithmetic mean." The supporting evidence by Dr. Smith points out that both data sets (untrimmed) are not normally distributed. Dr. Smith states that, "the data are more accurately described by a skewed lognormal distribution than by a bell-shaped normal distribution, but that neither distribution accurately described the data." Dr. Smith then measured the arithmetic average applied to a 5 percent trimmed sample in which he concluded in his analysis that, based on the results, "the trimmed mean is

<sup>&</sup>lt;sup>16</sup> Association of Oil Pipe Lines v. FERC, 281 F.3d 239, 246 (D.C. Cir. 2002).

This geometric mean is a statistical treatment to the data to find central tendency, as opposed to the geometric mean used previously to calculate the index of costs over time. In this application, the general formula  $\overline{X}_g = \exp\left[\frac{1}{n}\sum_{i=1}^n \ln X_i\right]$  was used, where  $\overline{X}_i$  denotes the cost index of firm i.

substantially less than the arithmetic mean, illustrating how a few extremely large indices

22

affect the overall estimate" (p.5).

35. Shippers, in their Supplemental Rebuttal filing of February 24, 2006, contend that the use of the geometric mean was but a small change and an improvement to the Commission's methodology to better suit the underlying data. The Shippers' underlying belief in this order seems to be that the data in the samples that are used in the Commission's methodology are positively skewed, and therefore, Dr. Smith never had to prove that our samples were skewed. However, Dr. Smith never applied his alternative approach to our samples to determine, based on his analysis, what the best measure of central tendency would be. He contended that he proved that the geometric mean approach would be more accurate on his 5 percent trimmed sample because his result more closely matched the median, and therefore was "more robust." Dr. Smith, though, never proved that the

36. Based on the calculations presented by the Shippers through Mr. Ashton's declarations, it is clear that the methodology the Shippers use departs from the methodology presented by Dr. Kahn. Shippers have not proven that their methodology is superior to that of Dr. Kahn.

geometric mean was "more robust" on the 50 and 80 percent samples.

<sup>&</sup>lt;sup>18</sup> Supplemental Rebuttal Comments at 2; Ashton Supplemental Rebuttal Decl. at 3.

### **Reconciling the Dataset of AOPL and Mr. Ashton**

- 37. In Shippers' January 23, 2006 joint response to comments made on January 10, 2006 by AOPL, Mr. Ashton added some pipelines to his study, and reconciled much of the data supplied by AOPL and culled from FERC Form No. 6 data. Aside from a few remaining pipelines in which discrepancies appear between the data that Mr. Ashton used and the data that Dr. Shehadeh used, Mr. Ashton is prepared to accept the reconciliation and changes offered by Dr. Shehadeh in his Rebuttal Declaration. Mr. Ashton's database is comprised of 79 pipelines that account for 92 percent of all barrel-miles transported in 1999.
- 38. To investigate the data discrepancies, the Commission has examined the hard copy FERC Form No. 6 data filed by individual pipelines to determine whether complete data for these pipelines are available and whether they match the data used by Mr. Ashton or Dr. Shehadeh. We have compared, on a pipeline-by-pipeline basis, every relevant data value in Mr. Ashton's sample with the corresponding values in FERC Form No. 6. We then have applied to the reconciled data, which account for the only remaining discrepancies identified by Mr. Ashton, the methodology described by Dr. Kahn, adopted by the Commission and approved by the U.S. Court of Appeals. We now discuss those pipeline-by-pipeline comparisons.
- 39. <u>Navajo Pipeline Co. L.P. Holly Energy Partners Operating L.P.</u> Dr. Shehadeh correctly points out in Exhibit A15 of his original declaration and Exhibit 16 of his rebuttal declaration that Navajo Pipeline Co. L.P. (Navajo) was renamed Holly Energy Partners Operating L.P. (Holly) in 2004. As a result, both companies filed a FERC Form No. 6 in

- 2004. Mr. Ashton is correct in noting that the 2004 data reported by Dr. Shehadeh comes from only one company, Navajo, and is only partial year data. The Commission agrees that the 2004 data for Navajo and Holly can be aggregated to provide data for the complete year. However, the Commission takes issue with the values Mr. Ashton reports for carrier property and total barrel-miles. A review of Navajo's 2004 FERC Form No. 6 reveals carrier property totaling \$10,186,371 and barrel-miles totaling 4,095,048,097. Holly's 2004 FERC Form No. 6 reports carrier property totaling \$22,788,803 and total barrel-miles of 3,330,670,969. Thus, the Commission will use \$32,975,174 for carrier property and 7,425,719,066 for total barrel-miles.
- 40. Olympic Pipe Line Company On March 31, 2003, Olympic Pipe Line Company (Olympic) resubmitted its 2001 FERC Form No. 6 to report changes to carrier property, accrued depreciation, and operating revenue. Mr. Ashton is correct to use the data contained in the resubmitted FERC Form No. 6. However, Mr. Ashton fails to reflect the operating expenses provided in the updated FERC Form No. 6 and continues to use the figure reported in Olympic's original 2001 FERC Form No. 6. Thus, the Commission will use the updated \$59,520,702 for Olympic's 2001 operating expenses.
- 41. <u>Premcor Port Arthur Pipeline Company</u> Mr. Ashton states that he did not include Premcor Port Arthur Pipeline Company (Premcor) in the dataset he used to calculate oil pipeline costs changes because Premcor lacked complete FERC Form No. 6 data. Dr. Shehadeh agrees with Mr. Ashton on this point. No data is reported for accrued depreciation for the years 2001-2004 even though Premcor did report accrued depreciation in 1999-2000.

25

Without complete data for all six years, a company cannot be included in the dataset.

Therefore, the Commission agrees with Mr. Ashton's recommendation that Premcor be excluded from the analysis.

- 42. Cypress Pipe Line Company, LLC Mr. Ashton criticizes Dr. Shehadeh's use of barrel-mile data for Cypress Pipe Line Company, LLC (Cypress) in 1999 from page 700 of the FERC Form No. 6, rather than data reported on page 600. Mr. Ashton states that the agreed-upon source for barrel-mile data is page 600 of the FERC Form No. 6. Despite this criticism, Mr. Ashton himself elects to use data from page 700, not data from page 600 as he describes. Cypress, however, errs by reporting the number of barrels received into the system, rather than total barrel-miles. This is evident from comparing line 32 of page 600, grand total of barrels received into system, with page 600 line 33a; the numbers are identical. By contrast, line 4 of page 700 reports total throughput in barrel-miles as 78,558,341.83. Thus, the Commission will use 78,558,342 for Cypress's 1999 throughput in barrel-miles.
- 43. Mr. Ashton raises another substantive issue with respect to the reconciled dataset contained in Dr. Shehadeh's rebuttal declaration. Mr. Ashton notes that there are differences between the operating revenues for five pipelines reported on the FERC Form No. 6, page 114, and FERC Form No. 6, page 301. Specifically, these discrepancies occur with respect to Mobil Pipe Line Company, Mustang Pipe Line Partners, Osage Pipe Line Company, LLC, San Pedro Bay Pipeline Company, and SouthTex 66 Pipeline Company, Ltd.

26

44. In order to rectify these differences, the Commission adjusted its cost calculation to use the figures endorsed by Mr. Ashton. However, the use of Mr. Ashton's figures proved immaterial as the result still supports the use of PPI+1.3 percent as the new oil index. When the Commission adopted the page 301 data for those pipelines for which Mr. Ashton noted discrepancies, and applied the U.S. Court of Appeals-approved methodology, the results changed by less than 0.01 percent.

### **Indexing Methodology**

- 45. In the January 23, 2006, response of Shippers to AOPL's January 10 comments, Shippers assert for the first time that, as an alternative to using the current methodology for determining adjustments to PPI after conducting a five-year review, the Commission should continue to use the current unadjusted PPI for the time being and institute a rulemaking to establish a new methodology for determining what the oil pipeline rate change index should be over the next five years. Shippers contend this is appropriate because there are serious defects in the Commission's current index review methodology. AOPL responded to this assertion on February 9, 2006.
- A6. Notwithstanding Shippers' assertions to the contrary contained in their Supplemental Rebuttal Comments of February 24, 2006, Shippers' suggestion that the Commission should embark upon a new rulemaking proceeding to establish a new method for calculating pipeline cost changes to compare to changes in PPI is beyond the scope of our five-year review as set forth in the NOI that instituted this proceeding. In the NOI, the Commission asked for comments on whether and to what extent the PPI should be adjusted to better

reflect those cost changes, not whether the method for determining pipeline costs should be changed. The NOI specifically stated:

The Commission proposes to continue to utilize PPI for the next five-year period as the index to track changes to the costs of the oil pipeline industry and to apply to rate ceiling levels for oil pipeline rate changes. The Commission invites interested persons to submit comments on the continued use of PPI and to propose, justify, and fully support, as an alternative, adjustments to PPI. (NOI, ¶ 4)

The parties have filed numerous comments reflecting their positions on what adjustments should or should not be made to the PPI upon review, and only as a last-minute item has anyone suggested that the Commission embark on a course of discarding the Commission's current five-year review methodology of determining pipeline cost changes to compare to changes in the PPI-FG over the five-year review period. The information provided by Shippers is insufficient to persuade us that our method should be discarded. Beyond these issues, no one has suggested that the Commission look to change to an index other than PPI-FG as representative of oil pipeline industry-wide costs.

47. Shippers first contend the use of FERC Form No. 6 data make application of the cost standard inaccurate. They claim that the data contained in the FERC Form No. 6 is sporadic, incomplete, and contain substantial errors. Shippers point out that out of 186 FERC regulated pipelines, only 79 pipelines have provided sufficient Form No. 6 data to warrant being included in the database for analysis. They believe the 42 percent sample is too small to justify the continued use of Form No. 6 data.

- 48. The FERC Form No. 6 data is the only systematic source of information regarding the past costs and revenues of oil pipelines. As previously mentioned, Mr. Ashton concedes his sample contains 79 pipelines that account for over 92 percent of the 1999 total barrel-miles. In defending Order No. 561-A on appeal to the D.C. Circuit on this very issue, the Commission stated that "[t]here is... no reason to believe that samples representing between 10% and 33% of the industry, taken from the median range of the industry cost data, were too small to produce reliable results." In addition, the Shippers argued before the U.S. Court of Appeals that the, "[d]ata submitted to FERC have become increasingly accurate, thus eliminating the need for a proxy." Further, the U.S. Court of Appeals agreed that it is evidently uncontested that the reported data have become more accurate.
- 49. Second, Shippers express concern that a significant number of oil pipelines are not complying with FERC Form No. 6 filing requirements. Specifically, Shippers were concerned that the Commission has not consistently enforced these filing requirements nor has it examined the Form No. 6 data and required corrections of the errors noted by Mr. Ashton in his supplemental declaration.
- 50. The Commission disagrees with the Shippers' assertion that the Commission has not consistently enforced the accurate and timely filing of FERC Form No. 6 data. In 1994, the Commission addressed additional revisions to the Form No. 6 in Order Nos. 571 and 571-

<sup>&</sup>lt;sup>19</sup> See, Brief for Respondent Federal Energy Regulatory Commission, <u>Association of Oil Pipelines</u>, v. Federal Energy Regulatory Commission, No. 94-1538, at 36 (July 24, 1995).

<sup>&</sup>lt;sup>20</sup> See, Flying J Inc. v. FERC, 363 F.3d 495 (D.C. Cir. 2004).

29

A,<sup>21</sup> including adding a new page 700. The information included in the Form No. 6 was determined at the time to be the minimum necessary for Shippers to assess filed rate changes under Order No. 561.

- 51. Prior to 2000, FERC Form No. 6 required that a pipeline include its annual cost of service, operating revenues, throughput in barrels, and throughput in barrel-miles. The Commission found that the Form No. 6 data was inadequate to monitor the reasonableness of a pipeline's filed rates. Thus, the Commission proposed the addition of the following reporting requirements: operating and maintenance expenses, depreciation expense, AFUDC depreciation, amortization of deferred earnings, rate base, rate of return, return on rate base, and income tax allowance. Since the Form No. 6 is intended to be both a financial and ratemaking document, <sup>22</sup> these additional requirements ensured that the Commission had the financial, operational, and ratemaking information needed to carry out its regulatory responsibilities to monitor the oil pipeline industry in a dynamically changing environment.
- 52. In Order No. 620, the Commission required pipelines to maintain workpapers that fully support the data reported on page 700 including but not limited to the total cost-of-

<sup>&</sup>lt;sup>21</sup> Order No. 260, 47 FR 42327 (Sept. 27 1982); FERC Stats & Regs. [Regulations Preambles January 1991 – June 1996] ¶ 31,006 (Oct. 28 1994). Order No. 571-A, 60 FR 356 (Jan. 4, 1995); FERC Stats & Regs. [Regulations Preambles January 1991 – June 1996] ¶ 31,012 (Dec. 28, 1994).

 $<sup>^{22}</sup>$  Cost of Service Reporting and Filing Requirements for Oil Pipelines, FERC Stats. & Regs. [Regulations Preambles 1991-1996]  $\P$  31,006 at 31,169 and FERC Form No. 6, p.i, I.

30

service calculations and all of its associated components.<sup>23</sup> In addition, Order No. 620 provides that the Commission or its staff may request that a pipeline make its work papers available for review.<sup>24</sup>

- 53. Finally, Shippers submit that the U.S. Court of Appeals-approved methodology is no longer reliable because the results are sensitive to small changes in the sample size. Mr. Ashton argued in his Supplemental Declaration that the results achieved by using the Commission's methodology accords undue weight to extreme data points at the high and low end of the spectrum, with high cost oil pipelines exerting a disproportionately strong impact. Using Dr. Smith's "trimmed percent sample," Mr. Ashton notes that by simply removing the four highest and lowest pipelines from the data set, the cost index fell from a range of PPI+0.66 percent and PPI+0.69 percent to PPI+0.58 percent and PPI+0.68 percent (middle 80 percent and 50 percent respectively). <sup>25</sup>
- 54. The sensitivity analysis Mr. Ashton includes in his Supplemental Declaration does not provide a reasoned basis for the Commission to abandon its current methodology because the existence and proper treatment of "outlier" data were extensively addressed in prior

 $<sup>^{23}</sup>$  FERC Stats. & Regs. [Regs. Preambles]  $\P$  31,115 (Dec. 13, 2000); 65 FR 81335 (Dec. 26, 2000).

<sup>&</sup>lt;sup>24</sup> Staff examined each pipeline's compliance with the requirements for reporting additional information on page 700 of the FERC Form No. 6. After substantial follow-up contacts by staff, with the 183 jurisdictional oil pipelines, only 12 pipelines were not in compliance and expressed the need for additional accounting help in executing a complete Form No. 6. Staff referred the pipelines to either the Association of Oil Pipelines personnel or staff resources for advice.

<sup>&</sup>lt;sup>25</sup> Supplemental Declaration of Peter K. Ashton at 22-24.

Commission proceedings, and the current U.S. Court of Appeals-approved methodology was specifically designed to take this matter into account. To minimize the risk that extreme and/or erroneous observations bias the result, the Commission uses only the middle 50 percent and 80 percent of the relevant cost data, thus ensuring that the index is not driven by statistical outliers.

#### Possible Over-Recovery of Costs-of -Service by Large Pipelines

55. Shippers point to the fact that a significant number of large oil pipelines are substantially over-recovering their cost-of service as further support for maintaining the PPI without adjustment as the appropriate index for the subsequent five-year period. Shippers maintain that the index methodology was designed to enable pipelines to recover costs by permitting them to increase rates at the same pace as they are predicted to experience cost increases. Shippers contend that the role of the index is to accommodate normal cost changes, not to guarantee recovery of all costs at any time and in full. Shippers state that a concern of the Commission was that under an indexing system, rates would diverge from actual costs and the resulting rates would fail the just and reasonable test. According to Shippers, this concern has proven to be well founded, as evidenced by data reported on FERC Form No. 6 which indicate that a number of interstate pipelines have been charging indexed rates that permit them to substantially over-recover their cost-of-service. Shippers provide a table containing the self-reported cost-of-service of fourteen pipelines during the 2002-2004 period that were subject to indexing regulation, the total interstate operating revenues of these pipelines, and the amount by which each of these pipelines have been overrecovering its self-reported cost-of-service. Shippers conclude that clearly an increase in the current index will further increase the amount of over-recoveries by these pipelines.

56. AOPL responds that this argument is flawed as a matter of regulatory policy and lacks any basis in evidence. The PPI index reflects the year-to-year changes in industry costs in general and, as such, reflects changes in the "average" oil pipeline's cost of service. Under the indexing system, existing rates remain subject to the Commission's complaint process. If Shippers believe that individual pipelines are over-earning such that their rates cannot satisfy the just and reasonable requirement for oil pipeline rates, their remedy would be to file complaints against those pipelines. AOPL further argues that another reason why overearning pipelines do not represent a flaw in the Commission's index methodology is that the index governs rate changes based on "grandfathered" rates. AOPL claims that the rates of most oil pipelines are deemed to be just and reasonable, thereby establishing a "baseline" for future rates. Therefore, to the extent a carrier was over-earning in 1992, the indexing methodology was not intended to drive those rates to cost, but instead to make sure that any rate changes were based on expected cost changes. As to Shippers' comparison of the cost of service to revenues for their small sample of pipelines, AOPL points out that five of those fourteen pipelines have, in whole or in part, "market-based" rates and as such are not fully subject to the index. In addition, AOPL claims that another of the pipelines on their list has rates based on a rate negotiated with Shippers in 2002. For all the above reasons, AOPL disputes the position taken by Shippers.

57. The Commission is not subject to a statutory duty to examine the whole rate when an oil pipeline proposes an indexed rate change. Rather, our inquiry is limited to a comparison of the changes in the rates and costs from year to year. We recognized in adopting a uniform index for all pipelines that inevitably some pipelines would over-earn while others will under-earn. It is a fact simply inherent in an industry-wide pipeline index. Shippers' use of a sample of fourteen pipelines culled from the entire data set of pipelines being analyzed only serves to emphasize this point. Further, Shippers' own calculations show that many of these pipelines actually experienced a decrease in their over-recoveries over the short time period being considered. In addition, even though Shippers' calculations may accurately measure over-recovery for a few pipelines, AOPL shows that, based on Page 700 information for 2003 and 2004, pipeline revenues were 20 percent below booked costs of service. For the above reasons, the Commission finds that the existence of such over-recoveries does not mean that PPI is the most appropriate index.

## **Structural Changes in the Oil Industry**

58. Shippers claim that structural changes in the oil industry ensure that adequate capital will be available to pipelines if they charge rates determined by the PPI index level. They point to the emergence of publicly-traded partnerships such as master limited partnerships (MLPs) and limited liability companies that have elected to be taxed as partnerships. According to Shippers, MLPs have resulted in increased concentration in the pipeline industry, and are the forms through which many pipelines subject to indexing are owned. To evaluate the impact of indexing, Shippers state that the environment of MLPs must be

reviewed as well. According to Shippers, MLPs continue to enjoy good access to capital markets, and the number, size and total amount of capital raised by MLPs continues to grow. Shippers argue that MLP's success at capital raising is being accompanied by an active acquisitions market as well as by partnerships' continued investment in energy infrastructure (organized growth) projects, thus proving that raising capital is not a problem for the oil industry. Shippers also argue that another important consideration is the use of funds generated from pipeline operations. Shippers state that MLPs generally distribute all available cash flow to unit-holders in the form of quarterly distributions (similar to dividends). Thus, Shippers contend, one cannot assume that increases in rates resulting from an increase in the Commission's index will be used to offset any increased costs for safety, efficiency and security, or to fund capital expansion. Shippers conclude that no basis exists for the proposition that extraordinary rate increases must be approved across-the-board in order to provide sufficient capital for oil pipelines to expand and operate their systems in a safe and secure environment. On the contrary, Shippers contend, the available evidence suggests that more than sufficient capital is presently available at rates determined by the PPI to achieve these objectives.

59. AOPL responds that the Shippers are attributing what is occurring for only a small sample of the entire pipeline industry (approximately 38 energy-related MLPs exist as of August 2005) to the entire industry. AOPL states that what happens with MLPs means absolutely nothing for the majority of oil pipelines that are not owned and operated by MLPs. According to AOPL, the very purpose of the five-year review of the cost index is to

ensure that pipeline rates keep pace with cost changes in the industry so that past levels of capital investment can be maintained. AOPL argues that, to preserve adequate capital investment, the Commission must adopt a price index consistent with its cost standard of at least PPI+1.3 percent.

60. The fact that oil pipelines have been able to attract capital in the past does not establish that they would be able to do so in the future if the Commission fails to set an index that is adequate. We believe the continuation of the methodology used in Order No. 561 to arrive at the new index accurately captures costs in the interstate oil pipeline transportation sector, and will produce an index sufficient for pipelines to maintain their capital investment. We find adherence to the Order No. 561 methodology supports an oil index of PPI+1.3 for the next five years. Finally, we find that no party has made a convincing showing that the Order No. 561 methodology is no longer adequate for computing the oil index.

# Continuation of the Current PPI and Impairment of Pipeline Expansion

61. Shippers claim that, contrary to the brief filed by DOT, the current PPI index will not impair the ability of pipelines to expand their systems or invest sufficient capital in environmental, safety and security measures, and dispute AOPL's contention that failure to increase the PPI by 1.3 percent would deter such investment. Shippers restate their contention that the current index has in no way slowed pipeline expansion. They argue that the rate of increase in trunk revenues at a level greater than the increase in pipeline costs and the PPI indicates a widening of pipeline profit margins during the 1999-2004 period. Shippers point out as well that the Commission has anticipated that certain costs, such as

those related to environmental, safety and security measures, might not be covered by an index and have provided pipelines with the ability to address such issues. Specifically, a pipeline can upon demonstration that it is affected by uncontrollable circumstances that preclude it from recovering all of its prudently-incurred costs under the indexing system, depart from indexing and make a cost-of-service showing to justify a rate greater than the index ceiling rate.

- 62. The Commission disagrees with Shippers on two levels. First, the brief filed by DOT specifically stated that DOT expresses no views as to the precise index the Commission should choose. DOT's submittal simply was a confirmation of certain points raised by AOPL with respect to regulatory obligations. DOT stated that it has adopted safety regulations that have imposed significant obligations and considerable costs on pipelines as they moved to compliance with such regulations. Based on concerns about the capacity of the underlying infrastructure of the nation's transportation network, including oil pipelines, to meet the growing demands placed upon it, DOT urged the Commission to consider the financial commitment necessary for pipelines to maintain and expand their system capacity in light of these new regulations.
- 63. Second, we disagree with Shippers that the pipelines can expand their systems and handle environmental, safety and security measures based on the present PPI index, without any need to increase that index. The ability of pipelines to accomplish what Shippers claim they have in terms of system expansion and environmental, safety and security measures is due in no small part to the appropriateness of the current index level. There is no guarantee

that in the future pipelines will retain that ability unless the Commission once again adopts

37

an index that allows the pipelines to recover their expected cost increases.

64. DOT has suggested that the FERC consider convening a workshop or technical

conference to explore regulatory mechanisms that could facilitate critical investment in

maintaining and expanding pipeline system capacity. The Commission acknowledges the

potential need for increased capacity of the nation's oil transportation system, and

appreciates the concerns expressed by DOT in this matter. The current proceeding is limited

to consideration of the appropriate index for oil pipeline ratemaking. We will continue to

monitor oil pipeline performance, and if appropriate, at some future date, may convene such

a technical conference or workshop.

The Commission orders:

Consistent with our review and verification of the sample pipeline Form No. 6 data,

and the application of the previously approved Order No. 561 methodology to that data, the

Commission determines that the appropriate oil pricing index for the next five years, July 1,

2006 through June 30, 2011, should be PPI plus a 1.3 percent adjustment.

By the Commission.

(SEAL)

Magalie R. Salas, Secretary.