

153 FERC ¶ 61,312
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 342

[Docket No. RM15-20-000]

Five-Year Review of the Oil Pipeline Index

(Issued December 17, 2015)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Order Establishing Index Level.

SUMMARY: The Federal Energy Regulatory Commission (Commission) issues this Final Order concluding its five-year review of the index level used to determine annual changes to oil pipeline rate ceilings. The Commission establishes an index level of Producer Price Index for Finished Goods plus 1.23 percent (PPI-FG+1.23) for the five-year period commencing July 1, 2016.

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SUPPLEMENTARY INFORMATION:

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Before Commissioners: Norman C. Bay, Chairman;
Cheryl A. LaFleur, Tony Clark,
and Colette D. Honorable.

Five-Year Review of the Oil Pipeline Index

Docket No. RM15-20-000

ORDER ESTABLISHING INDEX LEVEL

(Issued December 17, 2015)

1. On June 30, 2015, the Commission issued a Notice of Inquiry initiating its five-year review to establish the oil pipeline index level for the July 1, 2016 to June 30, 2021 time period.¹ The June 2015 NOI requested comment regarding (a) a proposed index level between Producer Price Index for Finished Goods (PPI-FG)+2.0 percent and PPI-FG+2.4 percent² and (b) any alternative methodologies for calculating that index level.
2. For the reasons discussed below, the Commission adopts an index level of the PPI-FG+1.23 percent. The departure from the June 2015 NOI results from (a) the use of

¹ *Five-Year Review of the Oil Pipeline Index*, 80 Fed. Reg. 39010 (July 8, 2015), FERC Stats. & Regs. ¶ 35,053 (cross-referenced at 151 FERC ¶ 61,278 at P 1 (June 2015 NOI)).

² The June 2015 NOI included a range as opposed to a specific index level because some pipelines had yet to report FERC Form No. 6 (Form No. 6) data for 2014.

FERC Form No. 6 page 700 (page 700) data that directly measures changing pipeline costs as opposed to the estimates previously used to calculate the index level³ and (b) updated Form No. 6 filings and other corrections to the data set. The Commission's indexing calculations and other data analysis are contained in Attachment A to this order. As discussed below, the Commission rejects other changes to the index calculation proposed by commenters.

I. Background

A. Establishment of the Indexing Methodology

3. The Energy Policy Act of 1992 (EPAAct 1992) required the Commission to establish a "simplified and generally applicable" ratemaking methodology⁴ that also was consistent with the just and reasonable standard of review of the Interstate Commerce Act (ICA).⁵ To implement EPAAct 1992's mandate, the Commission issued Order No. 561⁶

³ The index range presented in the June 2015 NOI was calculated based on estimates derived from FERC Form No. 6 accounting data on pages 110-111, 114, and page 600.

⁴ Pub. L. No. 102-486, 106 Stat. 3010, § 1801(a) (Oct. 24, 1992). EPAAct 1992's mandate to establish 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. *Id.* § 1804(2)(B).

⁵ 49 U.S.C. app. 1 (1988).

⁶ *See Revisions to Oil Pipeline Regulations Pursuant to the Energy Policy Act of 1992*, Order No. 561, FERC Stats. & Regs. ¶ 30,985 (1993), *order on reh'g*, Order No. 561-A, FERC Stats. & Regs. ¶ 31,000 (1994), *aff'd*, *Assoc. of Oil Pipelines v. FERC*, 83 F.3d 1424 (D.C. Cir. 1996).

establishing an indexing methodology that allows oil pipelines to change their rates subject to certain ceiling levels as opposed to making cost-of-service filings.⁷

4. In Order No. 561, the Commission committed to review the index level every five years to ensure that it adequately reflects changes to industry costs.⁸ The Commission conducted such reviews in 2000,⁹ 2005,¹⁰ and 2010.¹¹ In the 2010 five-year review, the Commission established the index level of PPI-FG+2.65, to be effective for the five-year period commencing July 1, 2011. The index level established herein results from the Commission's fourth five-year review of the index level.

⁷ Pursuant to the Commission's indexing methodology, oil pipelines change their rate ceiling levels effective every July 1 by "multiplying the previous index year's ceiling level by the most recent index published by the Commission." 18 C.F.R. § 342.3(d)(1) (2015). Oil pipeline rates may be adjusted to the ceiling levels pursuant to the Commission's regulations as long as no protest or complaint demonstrates that the index rate change substantially diverges from the pipeline's cost changes. 18 C.F.R. § 343.2(c)(1) (2015).

⁸ Order No. 561, FERC Stats. & Regs. ¶ 30,985 at 30,941.

⁹ *Five-Year Review of Oil Pipeline Index*, 93 FERC ¶ 61,266 (2000) (2000 Index Review), *aff'd in part and remanded in part sub nom. AOPL v. FERC*, 281 F.3d 239 (D.C. Cir. 2002) (AOPL II), *Five-Year Review of Oil Pipeline Pricing Index*, 102 FERC ¶ 61,195 (2003) (2000 Index Review Remand Order), *aff'd sub nom. Flying J Inc. v. FERC*, 363 F.3d 495 (D.C. Cir. 2004).

¹⁰ *Five-Year Review of Oil Pipeline Index*, 114 FERC ¶ 61,293 (2006) (2005 Index Review).

¹¹ *Five-Year Review of Oil Pipeline Index*, 133 FERC ¶ 61,228 (2010) (2010 Index Review), *order on reh'g*, 135 FERC ¶ 61,172 (2011) (2010 Index Review Rehearing Order).

B. The Kahn Methodology

5. In Order No. 561 and each successive index review, the Commission has calculated the index level based upon a methodology developed by Dr. Alfred E. Kahn.¹² The Kahn Methodology uses pipeline data from the prior five year period to determine an adjustment to be applied to a current year PPI-FG. The calculation is as follows. Each pipeline's cost change on a per barrel-mile basis over the prior five-year period (e.g., the years 2009-2014 in this proceeding) is calculated. In order to remove statistical outliers and spurious data, the resulting data set is trimmed to those pipelines in the middle 50 percent of cost changes. The Kahn Methodology then calculates three measures of the middle 50 percent's central tendency: the median, the mean, and a weighted mean.¹³ The Kahn Methodology calculates a composite by averaging these three measures of central tendency and measures the difference between the composite and the PPI-FG index data over the prior five year period. The index level is then set at PPI-FG plus (or minus) this differential, which tracks the relationship over the last five years between PPI-FG and oil pipeline costs.

¹² The Commission's use of the Kahn Methodology has been affirmed by the United States Court of Appeals for the District of Columbia Circuit. *Assoc. of Oil Pipelines v. FERC*, 83 F.3d 1424 (D.C. Cir. 1996); *Flying J Inc., et al. v. FERC*, 363 F.3d 495 (D.C. Cir. 2004).

¹³ The weighted mean assigns a different weight to each pipeline's cost change based on the pipeline's total barrel-miles.

C. The 2015 Proceeding

6. The Commission initiated this proceeding on June 30, 2015, with the issuance of a Notice of Inquiry initiating its five-year review to establish the oil pipeline index level for the July 1, 2016 to June 30, 2021 time period.¹⁴ The June 2015 NOI proposed a range for the index level of between Producer Price Index for Finished Goods (PPI-FG)+2.0 percent and PPI-FG+2.4 percent. The June 2015 NOI included a range as opposed to a specific index level because some pipelines had yet to report FERC Form No. 6 data for 2014. Importantly, the NOI sought comment not only on the proposed level but also any alternative methodologies for calculating that index level. To facilitate the development of the new index and gain an understanding of the positions of the parties in advance of the filed comments, the Commission announced plans to hold a technical conference. That conference occurred on July 30, 2015.

II. Comments

7. Initial Comments filed in response to the June 2015 NOI and technical conference were due on August 24, 2015, and reply comments were due on September 21, 2015. Comments were filed by the Association for Oil Pipelines (AOPL),¹⁵ APV Shippers,¹⁶

¹⁴ June 2015 NOI, 151 FERC ¶ 61,278 at P 1.

¹⁵ AOPL is a trade association that represents the interests of common carrier oil pipelines.

¹⁶ APV Shippers include Airlines for America, the National Propane Gas Association (NPGA), and Valero Marketing and Supply Company. Airlines for America

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Liquids Shippers Group (Liquids Shippers),¹⁷ Suncor Energy Marketing Inc. (Suncor), Canadian Association of Petroleum Producers (CAPP),¹⁸ HollyFrontier/Western Refining, the Pipeline Safety Trust, and the Pipeline and Hazardous Materials Safety Administration (PHMSA). On October 16, 2015 AOPL filed supplemental reply comments. On October 21, 2015, APV Shippers also filed supplemental reply comments.

8. The commenters raised a number of issues related to the index range proposed by the Commission in the June 2015 NOI and possible alternatives for calculating the index level. The commenters advocated varying index levels, including AOPL's proposal of PPI-FG+2.47, APV Shippers' proposal of PPI-FG+0.5, and Liquids Shippers' proposal of PPI-FG+0.23.¹⁹ These proposed index levels were based upon various modifications to the Kahn Methodology, as discussed in greater detail below.

members include: Alaska Airlines, Inc.; American Airlines Group; Atlas Air, Inc.; Delta Air Lines, Inc.; Federal Express Corporation; Hawaiian Airlines; JetBlue Airways Corp.; Southwest Airlines Co.; United Continental Holdings, Inc.; and United Parcel Service Co. Air Canada is an associate member.

¹⁷ Liquids Shippers consists of crude oil or natural gas liquids producers, including: Anadarko Energy Services Company; Apache Corporation; Cenovus Energy Marketing Services Ltd.; ConocoPhillips Company; Devon Gas Services, L.P.; Encana Marketing (USA) Inc.; Marathon Oil Company; Murphy Exploration & Production Company – USA; Noble Energy, Inc.; Pioneer Natural Resources USA, Inc.; Statoil Marketing & Trading (US) Inc.; and WPX Energy Marketing, LLC.

¹⁸ CAPP represents companies that develop and produce natural gas and crude oil throughout Canada.

¹⁹ Not every party filing comments attempted to calculate a proposed index level.

III. Discussion

9. The Commission adopts an index level of PPI-FG+1.23 percent for the five-year period commencing July 1, 2016. The Commission adopts APV Shippers' proposal to use page 700 data that directly measures changing pipeline costs as opposed to the previously used Form No. 6 accounting data. The Commission rejects other modifications proposed by industry comments, including: (a) various manual data trimming methodologies, (b) the consideration of the middle 80 percent in addition to the middle 50 percent of the cost changes in the data set, (c) separate index levels for product and crude pipelines, and (d) Liquids Shippers' proposals to temporarily set the index level at PPI-FG while initiating a proceeding to revise the Commission's indexing regulations.

A. Form No. 6 Page 700

1. Comments

10. APV Shippers propose calculating the index level based upon page 700 total cost-of-service data as opposed to the Form No. 6 accounting data used in the June 2015 NOI and prior five-year review proceedings.²⁰ APV Shippers state that page 700 data is superior because page 700 data provides a direct measure of changing pipeline barrel-

²⁰ APV Shippers Initial Comments at 9-16.

mile costs.²¹ In reply comments, HollyFrontier/Western Refining, CAPP and Liquids Shippers support APV Shippers' proposal.

11. AOPL opposes the use of page 700 data to calculate the index. Among other assertions, AOPL argues that page 700 data should not be used because the page 700 total cost-of-service incorporates returns on equity (ROEs) that may be volatile due to industry-wide fluctuations in the equity markets.²² AOPL also argues that page 700 cost-of-service data may include allocations that distort the index calculation.²³

2. Discussion

12. The Commission will update its calculation of the five-year oil pipeline index to use page 700 data to measure changing barrel-mile costs. Page 700 provides a summarized total cost-of-service and a pipeline's interstate barrel-miles.

Page 700 did not exist when the Kahn Methodology was first developed in Order No. 561, and, as a result, the Commission estimated pipeline total cost changes using accounting data from elsewhere on Form No. 6. Now that page 700 is available, the

²¹ *Id.*

²² AOPL Reply Comments at 41.

²³ *Id.* at 44 (citing Shehadeh September 2015 Affidavit at 10).

Commission concludes that page 700 data provides a superior data source for use in the Kahn Methodology.²⁴

13. Using page 700 data provides four primary benefits. First, the index is meant to reflect changes to recoverable pipeline costs, and, thus, the calculation of the index should use data that is consistent with the Commission's cost-of-service methodology.²⁵

In contrast to the accounting data historically used in the Kahn Methodology as a proxy for this information, page 700 includes actual total cost-of-service data.

14. Second, using page 700 data eliminates the need to use proxies to measure capital costs and income tax costs. Because direct measures of these costs were not available

²⁴ Page 700 was created in 1994 after Order Nos. 561 and 561-A. *Cost-of-Service Reporting and Filing Requirements for Oil Pipelines*, Order No. 571, FERC Stats. & Regs. ¶ 31,006, at 31,168 (1994), *order on reh'g*, Order No. 571-A, FERC Stats. & Regs. ¶ 31,012 at 31,251. The Commission considered using Page 700 data during the 2010 Index Review. However, the Commission declined to adopt such a proposal due to erroneous reporting instructions on page 700 that caused pipelines to report mismatching data, specifically, interstate-only costs and combined intrastate and interstate throughput. 2010 Index Review, 133 FERC ¶ 61,228 at PP 83-85. The Commission was concerned that widespread mismatching data could skew the index. Following the 2010 Index Review, the Commission corrected the page 700 instructions, and the Commission also required pipelines to file corrected data from 2009 - 2011 so that page 700 could be used "during the 2015 Five-Year Index Review if deemed appropriate." *Revision to Form No. 6*, Order No. 767, FERC Stats. & Regs. ¶ 31,335, at P 19 (2012).

²⁵ When lamenting the difficulty of estimating industry cost changes, Order No. 561-A specifically noted that industry-wide total cost-of-service data was not then available. Order No. 561-A, FERC Stats. & Regs. ¶ 31,000 at 31,096.

when the index was first established,²⁶ the Kahn Methodology used net carrier property as a proxy for capital costs and income taxes. At that time, the Commission acknowledged the net carrier property proxy was “highly unsatisfactory” and “imperfect.”²⁷ Although net carrier property measures changes to the book value of the pipeline’s asset base, it does not incorporate changes to the costs of financing the asset base (i.e., interest costs of debt and investor demanded equity return). The relationship between net carrier property and income tax costs is similarly attenuated because income taxes are dependent upon the pipeline’s return (specifically the ROE), not merely the size of the pipeline’s asset base. Despite these flaws, the Commission used net carrier property proxy in the absence of a “better solution.”²⁸ Now that page 700 data is available, such a better solution exists.

15. Third, using page 700 data eliminates the need for an “operating ratio” to estimate each pipeline’s annual cost changes. When using Form No. 6 accounting data, the operating ratio is necessary because a pipeline’s annual total cost change cannot be calculated by simply adding (a) the annual change in operating costs to (b) the annual change in net carrier property (the proxy used for capital costs). This is because a

²⁶ *Id.* at 31,096, 31,098.

²⁷ *Id.*

²⁸ *Id.* at 31,098. When the index was established, AOPL itself argued that net carrier property was a poor measure of capital costs. *Id.*

one-year change to net carrier property is a change in the net investment in the pipeline, not the pipeline's annual capital cost consisting of the pipeline's yearly debt payments and yearly return to investors. Thus, a pipeline's annual total cost change is estimated based on a ratio of operating expenses to operating revenue, which assumes that the residual revenues equate to a pipeline's annual capital costs.²⁹ This provides, at best, a rough proxy for total pipeline cost changes. For example, the operating ratio unrealistically assumes that pipelines incur no capital costs in years in which the operating expenses exceed revenues.³⁰ This assumption is deficient because, at a minimum, a pipeline must service its debt obligations.³¹ In contrast to the rough proxy

²⁹ Using the operating ratio, the total cost change is estimated by using the two formulas below:

Total Cost Changes = Operating Costs Changes * Operating Ratio + (Net Carrier Property Changes * (1 - Operating Ratio)).

Operating Ratio = ((Operating Expense at Year 1 / Operating Revenue at Year 1) + (Operating Expense at Year 5 / Operating Revenue at Year 5))/2. If the operating ratio is greater than one, then it is assigned the value of 1 in the Kahn Methodology calculations. Applying the ratio, Total Cost Changes = (1 - operating ratio) * net plant + operating ratio * operating expenses.

³⁰ The operating ratio is set between 0 and 1 based upon the ratio of (a) operating expenses to (b) pipeline revenues. If operating expenses exceed revenues, then the operating ratio is set to 1, meaning that no weight is assigned to capital costs (net plant under the prior methodology) in the formula.

³¹ Although operating expenses may exceed revenues in a particular year, a pipeline may nonetheless be able to attain new financing for capital investments based upon anticipated future profitability. Moreover, a company may continue to pay

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provided by the operating ratio, page 700 total cost-of-service incorporates an annual capital cost based upon established ratemaking techniques.

16. Fourth, page 700 contains cost and barrel-mile data exclusively related to interstate pipeline operations, as opposed to the combined intrastate and interstate data used in prior five-year reviews. These interstate and intrastate costs do not necessarily apply to the same facilities.³² The index applies only to interstate pipelines, and thus, to the extent possible, it is appropriate to use interstate-only data to derive the index.³³

17. The Commission is also not persuaded by AOPL's arguments against using page 700 data. The Commission disagrees with AOPL's argument that page 700 data should not be used because it incorporates ROEs that may be volatile on an industry-wide basis due to fluctuations in the equity markets. The index is designed to capture changing capital costs, of which financing costs are an important component. To the extent that industry-wide equity costs change with market conditions, those changes should be captured by the index. Furthermore, the record does not support AOPL's claim that

dividends (or other payments) to investors even in years in which the company is not profitable.

³² Although sometimes intrastate and interstate shipments share parts of the same pipe, the overlap is often not exact. On other occasions, the same parent pipeline may own entirely separate interstate and intrastate facilities.

³³ Although it is unclear whether there is a substantial difference between the cost changes for interstate and intrastate service, there is no reason to base the index on combined intrastate and interstate data when an interstate-only data alternative is available.

ROEs were erratic on an industry-wide basis during the 2009-2014 period. AOPL's own calculations show that the average ROEs in the middle 50 percent stayed within a roughly 100 basis point range throughout the 2009-2014 period.³⁴ Additionally, the Commission notes that to the extent that a particular pipeline's per barrel-mile cost changes (including its equity cost changes) departed substantially from industry norms, that pipeline would not be among the middle 50 percent used to calculate the index level.

18. The Commission is also not persuaded by AOPL's argument that page 700 contains various allocations that may distort the index calculation. The allocation methodologies used by pipelines on page 700 should reflect established ratemaking practices, and thus these allocation methodologies should be sufficiently robust to calculate the index. Furthermore, some assumptions and allocations are necessary in any pipeline's measurement of its costs, including the Form No. 6 accounting data previously used in the Kahn Methodology.³⁵ In addition, to the extent a pipeline's page 700 ratemaking assumptions change over a period of time, pipelines are obligated to note them on their page 700.³⁶ Yet, despite the availability of this information, AOPL points

³⁴ Shehadeh September 2015 Affidavit at 10.

³⁵ For example, several pipelines are subsidiaries of parent companies, and, thus their Form No. 6 data include costs allocated from those parent entities.

³⁶ As instruction six on page 700 states, "If the company makes major changes to its application of the Opinion No. 154-B *et al.* methodology, it must describe such

to no specific circumstances in which such changing allocations have distorted the page 700 calculations in this proceeding. The mere presence of allocation methodologies is not a reason to reject the use of page 700 data.³⁷ Overall, the changes we make in this order to use the page 700 data eliminates the need for several assumptions and more closely aligns the index with changing oil pipeline costs.

B. Manual Data Trimming

19. APV Shippers, Liquids Shippers, CAPP, and Suncor advocate various forms of manual data trimming in addition to the statistical data trimming to the middle 50 percent. The manual data trimming proposals assume two broad forms: (1) removing from the data set pipelines that underwent expansions between 2009 and 2014 and (2) removing from the data set pipelines that appeared to report flawed or anomalous data.³⁸

changes in a footnote, and calculate the amounts in columns (b) and (c) of lines No. 1-12 using the changed application.”

³⁷ The Commission similarly dismisses AOPL’s argument that using page 700 data may create illusory cost changes due to shifts involving interstate and intrastate volumes. AOPL fails to distinguish between page 700 data and the accounting estimates historically used by the Commission. Under any circumstance, increasing intrastate barrel-miles absorb a larger portion of the pipeline’s fixed costs and cause interstate barrel-mile costs to decline. Similarly, decreasing intrastate volumes absorb less of a pipeline’s fixed costs, causing the pipeline’s interstate per barrel-mile costs to rise.

³⁸ APV Shippers state that applying both of these data trimming methodologies to page 700 data would reduce the index from approximately PPI-FG+1.3 to their proposed PPI-FG+0.5.

1. Alternative Rate Treatment

a. Comments

20. Several shipper commenters advocate removing pipelines from the data set that underwent expansions, arguing that the expansions distorted index calculation. APV Shippers and CAPP propose to remove from the data set the pipelines that filed petitions for declaratory order seeking approval for committed shipper rates.³⁹ Other shipper parties solely analyzed pipeline costs. Suncor proposes to remove 36 pipelines that had shown greater than 25 percent year-over-year increases in both (a) their net plant and (b) net plant per barrel mile.⁴⁰ Liquids Shippers propose a variant that removes only those pipelines with rate base changes of 25 percent between 2013 and 2014, asserting that because these new expansions may still be ramping-up to long term throughput levels, costs per barrel-mile may be exaggerated.⁴¹

21. AOPL opposed these proposals asserting, among other arguments, that (a) this manual data trimming lacks methodological integrity and (b) statistically trimming of the

³⁹ Commission policy allows pipelines making significant capital expansions to seek committed shipper rates. Although not required, pipelines generally file petitions for declaratory order in order to ensure Commission approval of the committed rate structure.

⁴⁰ Suncor states that this adjustment would change the index to PPI-FG+0.67.

⁴¹ The Liquids Shippers presented this proposal in their reply comments. By presenting this argument so late in the proceeding, the Liquids Shippers did not provide other entities adequate opportunity to respond in reply comments.

data set (such as data trimming via the middle 50 percent or middle 80 percent) more appropriately addresses anomalous cost changes.

b. Discussion

22. The Commission declines to adopt the various proposals to manually remove from the data set pipelines making capital expansions during the 2009 to 2014 period. In the 2010 Index Review, Commission rejected a similar proposal.⁴² As explained below, comments in this proceeding have not provided a basis for the Commission to depart from its prior determination.

23. As the Commission explained in the 2010 Index Review, statistically trimming the data set to the middle 50 percent already removes anomalous cost/barrel-mile changes.⁴³ To the extent that a capital expansion caused a pipeline's per barrel-mile costs to deviate from industry norms, that pipeline's cost changes will not be among the middle 50 percent.⁴⁴

⁴² 2010 Index Review, 133 FERC ¶ 61,228 at PP 48-55 (rejecting proposal that manually trimmed pipelines that (a) experienced large rate base changes and (b) sought alternative rate treatment).

⁴³ *Id.* PP 48-55.

⁴⁴ *Id.* P 48. APV Shippers, CAPP, and Liquids Shippers incorrectly assume that all pipelines seeking petitions for declaratory order in order to implement contractual rates have experienced "extraordinary" *per barrel-mile* cost changes. Pipelines filing for committed rate structures are making significant infrastructural investments; however, because an expansion generally leads to increased throughput, an expansion does not necessarily equate to a large relative increase in barrel-mile costs. For

(continued...)

24. As the Commission also explained in 2010, it is both subjective and arbitrary to state which circumstances render a pipeline's 2009 barrel-mile costs non-comparable to its 2014 costs.⁴⁵ Pipelines operate amidst continually changing business circumstances affecting throughput and costs.⁴⁶ These manual data trimming proposals subjectively and arbitrarily focus upon one aspect, expansions, while ignoring other factors (such as changing product demand and supplies) that can also alter per barrel-mile costs.⁴⁷ As APV Shippers concede, the data set includes a wide dispersion in barrel-mile cost changes that exists independently from pipelines using alternative rate base

example, of the 10 pipelines APV Shippers exclude from the data set based upon committed shipper contracts, three of them are within the middle 50 percent of the Commission's index calculation, three of them are in the bottom 25 percent of pipelines excluded from the middle 50 percent and four of them are in the top 25 percent of pipelines included within the middle 50 percent. Attachment A, Exhibit 2.

⁴⁵ 2010 Index Review, 133 FERC ¶ 61,228 at P 49.

⁴⁶ The Commission also rejects APV Shipper's claim that other adjustments to the data set are analogous to removing pipelines that filed petitions for declaratory order for committed shipper rates during the 2009-2014 period. As discussed, *infra*, the Commission these adjustments serve a different purpose than "comparability" to justify any aspect of the Kahn Methodology.

⁴⁷ Suncor and Liquids Shippers' proposed adjustments may be particularly skewed because they manually remove pipelines from the data set based upon rate base increases of 25 percent but ignore pipelines with rate base decreases.

methodologies⁴⁸ or those experiencing expansions. As the Commission concluded in the 2010 Index Review, without attempting to assess each pipeline's underlying circumstances, the Kahn Methodology appropriately addresses extraordinary or anomalous cost changes by trimming the data set to the middle 50 percent.⁴⁹

25. Furthermore, the Commission emphasizes that the index properly reflects capital cost changes. Consistent with the EPCA 1992's mandate of general applicability, capital costs changes have always been part of the index calculation.⁵⁰ To the extent that a

⁴⁸ APV Shippers state that after manually trimming all pipelines which filed a petition for declaratory order requesting approval of committed shipper rate structures (in addition to other manual data trimming), the data set continues to include significant dispersion. O'Loughlin August 2015 Affidavit at 22

⁴⁹ Unlike the other parties, the APV Shippers did not solely focus upon rate base changes or pipelines seeking committed shipper rates. The APV Shippers also manually trimmed two pipelines that sought cost-of-service changes during the 2009-2014 period. However, this does not change the Commission's disposition of the manual data trimming issue, including the potential for bias. As an initial matter, both of these pipelines were excluded by the middle 50 percent. Attachment A, Exhibit 3. Moreover, the APV Shippers inconsistently apply their own principle that use of a non-indexing rate mechanism demonstrates that these pipelines experienced anomalous cost changes. For example, APV Shippers do not exclude pipelines (such as Colonial) that were required to file *reduced* rates as a result of the settlement of complaints against their rates. *E.g.*, *Southwest Airlines Co. v. Colonial Pipeline Co.*, 148 FERC ¶ 61,161 (2014). Because Colonial is a large pipeline, it heavily influences the weighted average in the Kahn Methodology, and its removal alone would increase the index in the Commission's own calculation from PPI-FG+1.23 to PPI-FG+1.54. Attachment A, Exhibit 4. APV Shippers' inconsistency only further emphasizes the risk of arbitrariness and bias inherent to manual data trimming methodologies.

⁵⁰ Order No. 561, FERC Stats. & Regs. ¶ 30,985 at 30,951-52, *aff'd AOPL I*, 83 F.3d at 1437; 2010 Index Review, 133 FERC ¶ 61,228 at P 101.

pipeline's total cost changes are within the middle 50 percent of all pipelines, those pipelines' capital cost changes are appropriately considered in the derivation of the index.

26. The Commission rejects other arguments raised in support of manually removing pipelines undergoing expansions from the data set. The Commission rejects CAPP and APV Shippers' argument that such manual data trimming is necessary to avoid double recovery.⁵¹ In this proceeding, the historic costs are being used to estimate the future relationship between oil pipeline per-barrel mile costs changes and PPI-FG. It is contrary to basic ratemaking principles (not to mention APV Shippers' own index calculations in this case) to suggest that the use of historic cost data to estimate future cost changes leads to a double-recovery of pipeline costs. All pipelines in the data set had rates in effect which were intended to recover their costs during the 2009-2014 period. Furthermore, the fact that some pipelines sought a cost-of-service or other form of rate increase during the 2009-2014 data collection period is irrelevant. Any index filing made during the 2016-2021 period will be based upon the then-existing PPI-FG and will be for the

⁵¹ The Commission acknowledges CAPP's assertion that some committed shipper agreements include both (a) index increases and (b) additional provisions environmental health and safety cost increases. CAPP's concern appears to be that such committed rates may allow for double recovery. CAPP Reply Comments at 11. However, the vast majority of pipelines do not recover safety or environmental costs in this manner, and the index has never been calculated to exclude the effects of safety and environmental costs. To the extent that a shipper is concerned that double-recovery is being permitted in a particular petition for declaratory order or an index filing, that shipper may file a protest.

recovery of the pipeline's *future* costs – not costs incurred during the 2009-2014 data collection period.

27. The Commission adopts the same rationale that the Commission articulated in the 2010 Index Order and rejects APV Shippers' argument that because the Commission removes costs associated with Ultra Low Sulfur Diesel (ULSD) surcharges from the index calculation, it must also remove costs associated with committed shipper rates and cost-of-service filings.⁵² The ULSD surcharge involves EPA regulations solely applicable to the shipment of diesel fuel whereas all pipelines incur investment costs related to building and maintaining rate base.⁵³ Second, whereas the ULSD surcharge is solely assessed as a separate charge upon diesel shipments, rate base related costs are recovered through the primary transportation rates that apply to all crude and product

⁵² When the Commission first approved the ULSD surcharge in 2006, it explained that because these charges were recovered in a separate surcharge and not the base transportation rates, the Commission would exclude the ULSD cost data from the data used to calculate the indexed rates. *Magellan Pipeline Co., L.P.*, 115 FERC ¶ 61,276, at P 13 (2006). The ULSD surcharge applies to costs incurred due to Environmental Protection Agency (EPA) regulations that affected a subset of pipelines transporting certain diesel products. The ULSD surcharge was assessed on shippers of ULSD only, and not shippers of other distillates and the ULSD surcharge was not subject to indexing. *Id.* P 9. Unlike APV Shippers' proposal, which would require the Commission to remove entire pipelines from the calculation of the index, the Commission's ULSD surcharge policies required pipelines to separately record their ULSD related costs so that they could be removed from the calculation of the index.

⁵³ 2010 Index Review Rehearing Order, 135 FERC ¶ 61,172 at P 18.

shipments.⁵⁴ Moreover, the ULSD surcharge presents a particular set of circumstances regarding a relatively modest cost, and it does not support the fundamental modification of the Kahn Methodology as proposed by the manual data trimming methodologies.

28. The Commission also rejects CAPP's contention that the contractual rates are "cross-contaminating" the calculation of the index.⁵⁵ The calculation of the index is based upon a pipeline's costs, not the rate methodology used by the pipeline to recover those costs. In some cases, pipelines using non-indexed rate methodologies can provide useful data that helps inform our understanding of industry-wide cost experience, and, as noted above, the middle 50 percent data trimming removes pipelines with anomalous costs. Further, CAPP's argument for the manual data trimming relies upon its position that contractual committed shipper agreements reduce pipeline risk.⁵⁶ This argument is

⁵⁴ Moreover, unlike APV Shippers' proposal, the Commission does not remove pipelines from the data set based upon ULSD costs – rather the ULSD costs are removed from the pipeline's page 700 costs of service. Were the APV Shippers to attempt to exclude other costs in a manner consistent with the ULSD precedent, they would need to identify those costs and remove them from the pipeline's page 700 data. They have made no such attempt.

⁵⁵ CAPP Reply Comments at 15. The Commission further notes that the policy permitting committed shipper rates has existed for nearly 20 years. Notwithstanding increased filings requesting committed shipper rates during the 2009-2014 period, the application of the Kahn Methodology to the 2009-2014 period results in a *lower* index than the Commission developed based upon 2004-2009 data in the 2010 Index Review. This is true whether one uses the accounting data historically used by the Commission or page 700 data adopted in this order.

⁵⁶ CAPP Reply Comments at 5-9.

contrary to CAPP's argument that inclusion of such pipelines inflates the index level. To the extent that volume commitments in these agreements have reduced the pipeline's risk, the page 700 total cost-of-service would reflect this reduction in the embedded costs of equity and costs of debt. CAPP's argument provides no basis for the exclusion of pipelines with committed shipper contracts.

29. The Commission dismisses Liquids Shippers' proposal to remove from the data set pipelines with rate base changes of 25 percent between 2013-2014. Liquids Shippers' argument that these expansions are "non-recurring" is unsupported – unlike non-recurring costs in a rate case, capital investments represent a long term change in the pipeline's cost level. The proposal also errs by focusing solely on expansions without also considering other cost changes (increases or decreases) which may be "non-recurring." Moreover, Liquids Shippers' proposal is internally inconsistent. First, Liquids Shippers' proposal focuses solely on rate base increases while ignoring commensurate rate base decreases. Second, although Liquids Shippers argue that new 2014 expansions could be skewing the 2014 costs per barrel-mile upward while throughput is ramped up, the Liquids Shippers make no similar adjustments for 2008-2009 expansions which could be having a similar upward effect on 2009 costs per barrel-mile (thereby, minimizing the change between 2009 and 2014).⁵⁷ As noted elsewhere in this order, to the extent that expansions lead to

⁵⁷ Inflated 2009 costs per barrel-mile would lower the apparent cost changes over the 2009-2014 period.

extraordinary cost per barrel-mile changes, the pipelines will not be among the middle 50 percent.

30. The Commission also rejects Liquids Shippers' assertion that Enbridge Energy, Limited Partnership (Enbridge Lakehead) distorts the index calculation. As shown in Attachment A, Enbridge Lakehead is not included in the middle 50 percent of page 700 per barrel-mile cost change data adopted herein. Further, to the extent that Enbridge Lakehead heavily influenced the calculations in the June 2015 NOI, this resulted from the Kahn Methodology's longstanding (and unchallenged) use of a weighted average based upon pipeline barrel-miles.⁵⁸

2. APV Shippers Additional Manual Trimming Adjustments

a. Comments

31. APV Shippers propose additional manual trimming adjustments to the data set in order to remove pipelines which they state reported 2009 data that was "non-comparable" to the pipeline's 2014 data. Toward this objective, APV Shippers propose that the Commission remove the following from the data set:

- Four pipelines that began or ceased operations during 2009 or 2014 because these pipelines' page 700 may include a full year's rate base, but only a partial year's operating costs.

⁵⁸ Enbridge Lakehead transported over 15 percent of total industry barrel-miles in 2014. Attachment A, Exhibit 7.

- Ten pipelines with significant divestitures or acquisitions between 2009 and 2014.
- Four pipelines with other operational changes or data reporting anomalies on page 700.
- Eleven pipelines that APV Shippers assert report a combination intrastate and interstate barrel-mile data on page 700.

32. AOPL opposes these proposed adjustments, claiming that such manual data trimming is prone to bias and error. AOPL states that statistical data trimming using the middle 50 percent or middle 80 percent provides a more appropriate resolution for these issues.

b. Discussion

33. The Commission declines to adopt APV Shippers' manual data trimming proposal. As previously explained, the Commission trims the data set to the middle 50 percent to address any potential distortions caused either by (a) outlying data or (b) spurious data.⁵⁹ To the extent reporting errors or other circumstances cause a pipeline's cost changes to differ significantly from industry norms, such outlying pipelines will not be among the middle 50 percent. APV Shippers have not demonstrated

⁵⁹ *E.g.*, 2010 Index Review, 133 FERC ¶ 61,228 at P 7.

that data anomalies within the middle 50 percent are distorting the Kahn Methodology's calculations.⁶⁰

34. Any potential improvement from manual data trimming is outweighed by the increase in the potential for error or manipulation. Manual data trimming requires a pipeline-by-pipeline analysis of page 700 data and subjective decisions involving that data. Fully validating APV Shippers' proposal would require the Commission and industry participants to evaluate the specific circumstances for nearly 130 pipelines.⁶¹ Consistent application of the "non-comparability" standard would also require addressing whether APV Shippers identified every possible characteristic which could render a pipeline's data "non-comparable."⁶² Without such a comprehensive review, there is no way to verify that the selective data trimming methods employed by APV Shippers do not skew the index calculation either upward or downward.

⁶⁰ Fifteen of the 41 pipelines that APV Shippers seek to remove from the data set via manual trimming remain in the Commission's middle 50 percent. Attachment A, Exhibit 10. When those 15 pipelines are manually removed from the middle 50 percent, the cost-of-service per barrel-mile increases by a very small amount, from 1.23 to 1.33. Attachment A, Exhibit 8.

⁶¹ Starting with a preliminary data set of 129 pipelines, APV Shippers manually data trim 41 pipelines. O'Loughlin August 2015 Affidavit at 21.

⁶² Under manual data trimming, the decision regarding which pipelines should be retained in the data set is as subjective (and as important) as to which pipelines to remove. Yet, as explained below, APV Shippers' methodology provides little certainty that the pipelines remaining in the data set reported "comparable data" between 2009 and 2014.

35. Illustrating the difficulty of such a process, APV Shippers concede that their manual data trimming methodology does not remove from the data set all pipelines reporting “non-comparable” data. When AOPL presented evidence that the six pipelines with the lowest per barrel-mile cost remaining in APV Shippers’ data set should have been removed under the “non-comparability” standard, the APV Shippers conceded that these six pipelines “likely had sufficient reason to be excluded.”⁶³ The failure to remove these pipelines affected APV Shippers’ index calculation.⁶⁴ Moreover, attempting to minimize the effect of retaining these pipelines in the data set, APV Shippers emphasized that additional pipelines (this time with higher cost changes) with “non-comparable data”

⁶³ O’Loughlin October 2015 Affidavit at 70. Of these six pipelines, Arrowhead Louisiana Gathering, LLC explained that a significant shift in its page 700 data was due to an accounting change. Shehadeh October 2015 Affidavit at 14-17. Another, Conoco Offshore Pipeline, experienced a leak that caused its costs per barrel-mile to temporarily spike in 2009, thereby distorting the measure of cost change between 2009 and 2014. *Id.* A third, Mobile Eugene Island divested 50 percent of its assets. *Id.* Two others reported data anomalies, Belle Rose NGL Pipeline (throughput dropping from 273 million to 6 million without any commensurate change in assets) and Total Petrochemical Pipeline US Inc. (reporting both 100 percent debt and equity capital structure). The sixth pipeline, Valero MKS Logistics LLC, showed ROE percentages of five percent in 2008 and five percent in 2010, with an unexplained spike to 16.73 percent 2009. In the last instance, it is unclear whether this spike was erroneous or in some sense captured real changing pipeline costs during the economic upheaval of the 2008-2009 recession. In any case, this type of uncertainty and the requirement for this type of subjective decision further supports the rejection of the “non-comparability” manual data trimming methodology.

⁶⁴ Removing these six pipelines alone would have raised the index level in APV Shippers’ final calculation from PPI-FG+0.5 to PPI-FG+0.9. Attachment A, Exhibit 9.

were also not removed.⁶⁵ By APV Shippers' own concession, the processes used by APV Shippers were inadequate for consistently identifying and removing "non-comparable" data.⁶⁶

36. APV Shippers have failed to demonstrate that manual data trimming should be incorporated into the Kahn Methodology. As the Commission explained both in the 2010 Index Review and this proceeding, to manually trim the data set solely based upon one factor (such as large rate base changes) is biased and has the potential to distort the index calculation.⁶⁷ On the other hand, the manual identification of every pipeline with potentially anomalous or idiosyncratic characteristics would require several highly subjective decisions. This subjective process is prone to bias and error. In contrast, statistical data trimming using the middle 50 percent is objective, transparent, and minimizes the need to analyze individual pipeline data.

⁶⁵ O'Loughlin October 2015 Affidavit at 70-71.

⁶⁶ APV Shippers relied upon certain filters for determining which pipelines to scrutinize further. O'Loughlin September 2015 Affidavit at 31-32; O'Loughlin October 2015 Affidavit at 66-71. As discussed above, these filters were not sufficient for identifying those pipelines that needed to be evaluated in order to consistently apply APV Shippers manual data screening methodology. Most of the anomalies identified by AOPL were apparent from the data reported on Form No. 6, and, to the extent that AOPL obtained this information from other filings with the Commission or other sources, it is not clear why a manual trimming methodology should exclude this information.

⁶⁷ 2010 Index Review, 133 FERC ¶ 61,228 at P 49.

37. Further, contrary to APV Shippers' arguments, manual data trimming is not a mere extension to the existing processes in the Kahn Methodology. The Commission disagrees with APV Shippers' claim that the Commission already makes other adjustments to the data set to ensure "comparability."⁶⁸ The adjustments made by the Commission have served a different purpose. The Commission's removal of pipelines with incomplete data is inapposite to the manual data trimming proposed by APV Shippers. It is mathematically impossible to evaluate a pipeline's year-on-year changes in barrel-mile costs when no such data exist. Thus, those pipelines with incomplete data cannot be incorporated into the data set.⁶⁹ In contrast, APV Shippers propose to remove pipelines that have reported the data necessary to evaluate annual barrel-mile cost changes. The use of an objective measure not to incorporate those pipelines that mathematically cannot be used is distinct from the subjective process proposed by APV Shippers.

38. Likewise, the Commission rejects APV Shippers' analogy of manual data trimming to the Kahn Methodology's traditional treatment of mergers. Historically, when two pipelines have combined, the Commission has added separate costs the pipelines reported on Form No. 6 in the first year of the data set (e.g. 2009) and compared

⁶⁸ O'Loughlin August 2015 Affidavit at 17.

⁶⁹ 2010 Index Review Rehearing Order, 135 FERC ¶ 61,172 at P 15.

this sum to the newly combined company's costs in the last year of the data set (e.g. 2014). Without this step, the absorbed pipeline's cost data would be needlessly discarded.⁷⁰ Commission efforts to preserve cost change data should not be confused with an effort to ensure "comparability." On the contrary, a merger may change several aspects of company operations and significantly alter the pipeline's business circumstances. Preserving data, not "comparability," was the justification for the Kahn Methodology's historic treatment of mergers.⁷¹

39. The Commission also rejects APV Shippers' analogy to the Kahn Methodology's full utilization of the data on Form No. 6 in order to correct missing or erroneous data. As APV Shippers note, when data has been missing or erroneous in one portion of a pipeline's Form No. 6, the Commission has sometimes substituted data from elsewhere

⁷⁰ If a pipeline is completely absorbed by another pipeline, this pipeline no longer reports Form No. 6 data and such data would not be available for measuring cost changes.

⁷¹ We further note that APV Shippers' treatment of mergers and divestitures is not analogous to the Kahn Methodology's treatment of mergers and divestitures. As opposed to preserving data, APV Shippers propose to remove from the data set (a) pipelines that sold a portion (not all) of their pipeline assets and (b) the pipeline that acquired those assets. This step is not justified. Notwithstanding the asset transfer, many of the pipelines that APV Shippers propose to remove have filed page 700 data over the entire 2009-2014 data collection period. Moreover, there is no evidence that these asset transfers are improperly influencing the index level. A merger may cause a pipeline's barrel-mile costs to go up or down depending upon the barrel-mile costs of the transferred asset. Of course, if the acquiring or purchasing pipeline experienced particularly large (or small) barrel-mile cost changes, those pipelines would be trimmed by the application of the middle 50 percent.

on the Form No. 6.⁷² Such substitutions, which utilize data that the pipeline has already reported on Form No. 6, are not akin to manual data trimming that completely removes pipelines from the data set in an effort to achieve an undefinable “comparability.”⁷³

C. Middle 80 Percent Data Trimming

1. Comments

40. AOPL urges the Commission to determine the index using an average of applying the Kahn Methodology to the (a) middle 50 percent and (b) middle 80 percent. In the June 2015 NOI, the Commission trimmed the data set to the middle 50 percent, which

⁷² 2005 Index Review, 114 FERC ¶ 61,293 at PP 43-44 (reconciling operating revenue data from different sections of the Form No. 6). In addition, a similar process has been applied to the use of Form No. 6 page 700 barrel-mile data for missing or erroneous barrel-mile data reported on Form No. 6 page 600. Although APV Shippers raise methodological objections to this particular adjustment, this issue has been rendered moot by the Commission’s adoption of page 700 data.

⁷³ The Commission further dismisses APV Shippers’ reference to the 2010 Index Review Rehearing’s statement that “Although the Kahn Methodology removes from the data set those pipelines that reported erroneous or incomplete data, erroneous or incomplete data differ from the accurately reported actual costs Valero and ATA seek to remove using the rate base screening methodology.” APV Shippers Initial Comments at 22 (citing 2010 Index Review Rehearing Order, 135 FERC ¶ 61,172 at P 15). Placed in proper context, this statement is not an endorsement of manual data trimming for erroneous data. This comment regarding erroneous data was made solely in the context of rejecting an analogy made by Valero. Elsewhere, the 2010 Index Review order explained that the Commission uses the middle 50 percent to remove pipelines reporting spurious (i.e. erroneous) data. 2010 Index Review order, 133 FERC ¶ 61,228 at P 7. As discussed above, the specific analogies made by APV Shippers to prior Commission applications of the Kahn Methodology do not support the adoption of their proposed manual data trimming.

removes the 25 percent of pipelines with the greatest cost increases and the 25 percent of pipelines with the greatest cost decreases. AOPL states that the Commission should also consider the middle 80 percent because: (a) the accuracy of the middle 80 percent data is supported by its conformity to a lognormal distribution and (b) using the middle 80 percent accounts for more barrel-miles.⁷⁴

41. CAPP,⁷⁵ HollyFrontier/Western,⁷⁶ Liquid Shippers,⁷⁷ and APV Shippers⁷⁸ assert that the middle 50 percent is a superior data source because, among other reasons, the middle 50 percent removes more anomalous and erroneous data.

2. Discussion

42. The Commission rejects AOPL's proposal to calculate the index based upon both the middle 80 percent and the middle 50 percent.⁷⁹ In the 2010 Index Review, the Commission determined that the index should be calculated based upon the middle

⁷⁴ AOPL Initial Comments at 4; Shehadeh August 2015 Affidavit at 8.

⁷⁵ CAPP Reply Comments at 15.

⁷⁶ HollyFrontier/Western Reply Comments at 7.

⁷⁷ Liquids Shippers Reply Comments at 13.

⁷⁸ APV Shippers Reply Comments at 17-19.

⁷⁹ AOPL's proposal averages the results by applying the Kahn Methodology using the middle 50 percent of the data set and the middle 80 percent of the data set. This would raise the index level from the approximately PPI-FG+1.2 to PP-FG+1.65 when applied to the page 700 data.

50 percent alone.⁸⁰ As the Commission explained in the 2010 Index Review, the middle 50 percent, more effectively than the middle 80 percent, excludes pipelines with anomalous cost changes while avoiding the complexity and distorting effects of subjective, manual data trimming methodologies.⁸¹

43. The record in this proceeding does not provide a basis for altering that position. We are not persuaded by AOPL's argument that the middle 80 percent should be considered merely because it conforms to a lognormal distribution. Conformity with a particular statistical distribution may generally support the accuracy of the middle 80 percent data. However, by definition, costs at the top (or bottom) of the middle 80 percent deviate significantly from the cost experience of other pipelines.⁸² To the extent that the middle 80 percent data conforms to a lognormal distribution, outlying cost increases per barrel-mile will not be offset by similarly outlying cost decreases. Thus, using the middle 80 percent would skew the index upward based upon these outlying cost

⁸⁰ As the Commission explained in the 2010 Index Review, this returned the Commission's policy to the application of the Kahn Methodology in Order No. 561, which based its calculation of the index on the middle 50 percent alone. 2010 Index Review, 133 FERC ¶ 61,228 at P 60. Although the middle 80 percent was used in the 2000 and 2005 reviews, the Commission made this change without providing a rationale for the change or explaining the departure from previous practice. *Id.* Once the issue was presented to the Commission in the 2010 Index Review, the Commission determined that the middle 50 percent alone provided a more appropriate means for trimming the data sample. *Id.* P 61.

⁸¹ 2010 Index Review, 133 FERC ¶ 61,228 at PP 60-63.

⁸² *Id.* P 61.

increases, which is contrary to the objective of the index to reflect normal industry-wide cost changes.

44. Similarly, the Commission rejects AOPL's argument that the middle 80 percent should be used merely because it contains more barrel-miles. The Kahn Methodology aims to capture the central tendency of the data set so that the index is not distorted by outlying costs. Pipelines in the middle 80 percent, as opposed to the middle 50 percent, are more likely to have outlying cost changes which could result from idiosyncratic factors particular to that pipeline.⁸³ By considering the entire data set (without manual trimming)⁸⁴ and then applying statistical data trimming to the middle 50 percent, the Commission addresses these issues via a methodology that is objective and transparent.⁸⁵

⁸³ The middle 80 percent of the Commission's page 700 data set includes 30 of the 41 pipelines identified by APV Shippers as warranting exclusion from the data set because they have anomalous data during 2009-2014, including 10 of the 12 pipelines APV Shippers excluded because they filed cost-of-service rate increases or petitions seeking approval of committed shipper rates. Attachment A, Exhibit 10. In contrast, the middle 50 percent includes only 15 of the pipelines APV Shippers seek to manually trim from the data set, and, in particular, only three of the 12 pipelines APV Shippers proposes to exclude due to cost-of-service rate filings or committed shipper rates. *Id.*

⁸⁴ The data set consists of pipelines that have filed complete data and are subject to the indexing regulations.

⁸⁵ It is also not the case that the middle 50 percent represents a narrow or selective sector of the industry. On the contrary, the Commission began with a page 700 data set that, prior to statistical data trimming, includes more pipelines (130) than AOPL's data set (123). Once the middle 50 percent has been applied, the statistically trimmed data set includes more than 50 percent of industry barrel-miles. Attachment A, Exhibit 1. Although this is a lower percentage than in some prior reviews, this is not a sufficient

(continued...)

D. Crude versus Product Pipelines**1. Comments**

45. APV Shippers state that if the Commission declines to adjust the data set for large capital expenditures and other erroneous data, the Commission should establish separate indices for crude and product pipelines. APV Shippers state that, using page 700 data without data trimming, the middle 50 percent of crude pipelines had an index differential of PPI-FG+3.36 percent and the middle 50 percent of petroleum product pipelines showed an index differential of PPI-FG+0.4 percent.⁸⁶ APV Shippers state that these differentials result from significant crude pipeline projects over the past few years. AOPL and Liquids Shippers oppose the use of separate indices for crude and product pipelines.

2. Discussion

46. The Commission declines to adopt the proposal to use different indices for crude and product pipelines. Contrary to APV Shippers' claim that the differences in the index differentials result from wide-spread crude pipeline expansions, the discrepancy primarily

basis to risk including more outlying data. Moreover, much of the difference in barrel-miles from the 2010 Index Review can be attributed to the fact that Enbridge Lakehead, a pipeline representing over 15 percent of the barrel-miles in the data set, was in the middle 50 percent in 2010, but is not in the middle 50 percent in this proceeding. *Compare* Appendix A, Exhibit 1 *with* AOPL, Initial Comments, Docket No. RM10-25-000, Declaration of Ramsey Shehadeh, Appendix B.

⁸⁶ APV Shippers Initial Comments at 42 (citing O'Loughlin August 2015 Affidavit at 91).

occurs due to (a) the effect of two very large crude pipelines which happen to have above average cost changes and (b) one very large product pipeline which happens to have below average cost changes. Data discrepancies caused by only three pipelines do not justify the claim that crude and product pipelines as a whole are experiencing dramatically different cost changes.⁸⁷ Moreover, to the extent that a somewhat disproportionate number of crude pipelines recorded outlying barrel-mile cost changes, this issue is sufficiently addressed by application of the middle 50 percent to the combined data set of all pipelines.⁸⁸

⁸⁷ The relatively large crude pipelines are (a) Enbridge Lakehead and (b) Mid-Valley Pipeline Company. The very large product pipeline is Colonial Pipeline Company. These pipelines have a disproportionate effect because the Kahn Methodology uses a weighted average in conjunction with a simple average to measure the central tendency. Although the size of these pipelines makes their data particularly relevant for assessing industry-wide barrel-mile cost changes, data from such a small number of crude pipelines (2 out of 60) or product pipelines (1 out of 48) appears insufficient to demonstrate an extreme difference between crude and product pipelines costs. Simply removing the effect caused by those few pipelines' data reduces the differential between crude and product pipelines from 295 basis points, as calculated by APV Shippers, to a much smaller differential of 48 basis points, or PPI-FG+1.14 (crude pipelines) and PPI-FG+0.66 (product pipelines). Attachment A, Exhibit 11.

⁸⁸ Of the pipelines in the middle 50 percent of page 700 data used by the Commission, the included product pipelines (excluding Colonial, as explained *supra*) would result in an index level of PPI-FG+1.05 and crude pipelines would have an index level of PPI-FG+1.14. Attachment A, Exhibit 12.

E. Liquids Shippers & CAPP Proposal to Set Index at PPI-FG and to Revise Commission Regulations to Abandon Indexing

1. Comments

47. Liquids Shippers state that the Commission should temporarily set the index at PPI-FG while undertaking a review of the Commission's oil pipeline regulations.

Among other things, the Liquids Shippers complain that oil pipeline indexing increases have exceeded interstate natural gas pipeline rate increases, that the indexing increases have exceeded the consumer price index (CPI), and that certain oil pipelines have been over-recovering. The Liquids Shippers state that the Commission should consider abolishing the indexing methodology, or, to the extent that indexing is retained, change the manner in which the Commission evaluates oil pipeline index filings. In its reply comments, CAPP endorses these proposals. AOPL opposes Liquids Shippers' proposals and disputes their various claims.

2. Discussion

48. The Commission declines to adopt the Liquids Shippers' proposal to temporarily set the index at PPI-FG as unsupported. The evidence in this proceeding demonstrates that oil pipeline cost changes between 2009 and 2014 have exceeded PPI-FG. Liquids Shippers provide no compelling reason to depart from the longstanding practice of

calculating the index based upon historic pipeline costs.⁸⁹ In particular, the Commission rejects Liquids Shippers' claim that recent audits revealed reporting errors rendering Form No. 6 data unusable; on the contrary, the errors discovered by these audits were relatively limited.⁹⁰ Furthermore, as discussed previously, the middle 50 percent data trimming removes the allegedly anomalous data that Liquids Shippers claim distorts the index calculation.⁹¹ Finally, Liquids Shippers' claim that oil pipeline index increases exceed the CPI does not support changes to the index because Liquids Shippers have not demonstrated that historic, industry-wide oil pipeline cost changes have corresponded to the CPI.⁹²

⁸⁹ *E.g. AOPL II*, 281 F.3d at 247 (quoting EPA Act 1992, at § 1801(a) and noting that the Commission satisfied the statutory objective by calculating the index based upon historic costs).

⁹⁰ Liquids Shippers have made no showing that the issues raised in these audits are such that they would materially alter the industry-wide index calculation.

⁹¹ In initial comments, Liquids Shippers identified four pipelines (Enbridge Lakehead; TransCanada Keystone Pipeline, LP; Seaway Crude Pipeline Company Co.; Enterprise TE Products Pipeline Company LLC) as reporting anomalous data. Yet, none of these pipelines are included in the middle 50 percent, and, in fact, TransCanada Keystone is not even in the data set because they did not file 2009 Form No. 6 information. Attachment A, Exhibit 6.

⁹² Similarly, Liquids Shippers' comparison to natural gas pipeline rate changes is misleading because Liquids Shippers' data only includes a portion of natural gas pipelines (not all natural gas pipelines) and does not include all rate changes proposed by those pipelines. Shehadeh October 2015 Affidavit at 31. The underlying economic premise of this analysis is also flawed. First, as Dr. Shehadeh explains, the analogy to natural gas pipelines depends upon a misunderstanding of prices – as price levels, not

(continued...)

49. Liquids Shippers' arguments that the Commission should change its regulations governing indexing are beyond the scope of this proceeding. The June 2015 NOI sought comment regarding two narrow issues, (a) the proposed index level and (b) possible changes to the Kahn Methodology used to calculate the index level.⁹³ Liquids Shippers' comments regarding the Commission's indexing policies, committed shipper contracts,⁹⁴ and other issues are beyond the scope of this limited inquiry.

50. Further, Liquids Shippers' comments have not persuaded us to reexamine the Commission-approved indexing methodology.⁹⁵ In general terms, Liquids Shippers have not substantiated their claims of unchecked oil pipeline over-recoveries. For example, of

price growth, are determined by the level of competition in an industry. *Id.* at 30. Second, Liquids Shippers do not establish that the same market forces determining natural gas pipeline prices apply to oil pipelines. *Id.*

⁹³ June 2015 NOI, 151 FERC ¶ 61,278 at P 1.

⁹⁴ This five-year review addresses the calculation of the industry-wide index-level. Negotiated committed shipper contracts only incorporate indexing when both the pipeline and the committed shippers accept such terms. Any objections to these negotiated provisions (including the application of indexing) may be raised during the applicable petition for declaratory order process.

⁹⁵ The Commission's indexing methodology was affirmed on appeal following Order No. 561. *AOPL I*, 281 F.3d 239. The dissents and other materials from that proceeding cited by Liquids Shippers were part of the record at that time. In addition, Liquids Shippers cite a Congressional letter which was written before the indexing regulations were finalized, and does not accurately portray how those regulations have been implemented. For example, the letter implies that the index may only increase rates, when, in fact, under Commission regulations the index may require rates to go down. *See* 18 C.F.R. § 342.3(e) (2015).

the 20 pipelines (out of Liquids Shippers' sample of 42) that Liquids Shippers allege are over-recovering, evidence provided in this proceeding indicates that 15 actually under-recovered their cost-of-service in one (and in many cases more) of the years between 2009 and 2014.⁹⁶ Furthermore, to the extent issues arise on a particular pipeline, a shipper may file complaints or protests against indexed rate increases⁹⁷ or complaints against an oil pipeline's underlying base rates. In addition to being beyond the scope of the June 2015 NOI, Liquids Shippers have not substantiated their claims.⁹⁸

F. Suncor's Proposals

51. The Commission will not adopt the various proposals advanced by Suncor. The Commission's adoption of page 700 data addresses several of these proposals, which were advanced as alternatives should the Commission not adopt page 700 data. In addition, the Commission also will not adopt Suncor's proposed alternative methodology

⁹⁶ See Shehadeh September 2015 Affidavit at 32. Further, the industry as a whole continues to show an under-recovery of the aggregate page 700 cost-of-service. Moreover, as has been recognized from the inception of indexing, some pipelines costs will exceed the rate increases allowed by indexing whereas efficient pipelines may benefit from controlling their costs. Order No. 561, FERC Stats. & Regs. ¶ 30,985 at 30,948-49.

⁹⁷ Liquids Shippers argue that pipelines with page 700 revenues exceeding page 700 cost of service should not receive index increases. To the extent that index rate filings of particular pipelines substantially exacerbate pre-existing over-recoveries, current Commission policies allow shippers to file complaints against those index increases. *BP West Coast Products, LLC v. SFPP, L.P.*, 121 FERC ¶ 61,141 (2007).

⁹⁸ Remaining issues regarding the Commission's regulatory policies may be raised in an adjudicatory context or another, more appropriate forum.

to trim the data set based upon anomalous years (as opposed to trimming pipelines reporting anomalous data) because the justification for this proposal, including the use of broader data set, was based upon the previously used Form No. 6 accounting data, not the page 700 data. Moreover, AOPL has presented evidence that Suncor's proposal included significant computational errors.⁹⁹

IV. 2016-2021 Oil Pipeline Index

52. Based on the foregoing, the Commission calculates the five-year review of the index level used to determine annual changes to oil pipeline rate ceilings for the five-year period commencing July 1, 2016 as follows. First, as shown in Attachment A (Exhibit 13, Exhibit 14) we remove those pipelines that did not provide Form No. 6, page 700 data or provided incomplete data. Second, as shown in Attachment A (Exhibit 15) we look at the data on Form No. 6, page 700 to calculate each pipeline's cost change on a per barrel-mile basis over the prior five-year period (e.g. the years 2009-2014 in this proceeding). Third, in order to remove statistical outliers and spurious data, we trim the data set to those pipelines in the middle 50 percent of cost changes. Fourth, as shown in Attachment A (Exhibit 15) we calculate three measures of the middle 50 percent's central tendency: the median, the mean, and a weighted mean. Fifth, we calculate a composite by taking a simple average of those three measures of central tendency, as shown in

⁹⁹ Shehadeh September 2015 Affidavit at 38.

Attachment A (Exhibit 1). Finally, this composite is compared to the value of the PPI-FG index data over the same period. The index level is then set at PPI-FG plus (or minus) this differential. Using these calculations, the Commission establishes an index level of PPI-FG plus 1.23 percent (PPI-FG+1.23) for the five-year period commencing July 1, 2016.

The Commission orders:

Consistent with the discussion in this order, the Commission determines that the appropriate oil pricing index for the next five years, July 1, 2016 through June 30, 2021, is PPI-FG+1.23.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.