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February 1, 2017

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

VIA ELECTRONIC FILING

RE: Application of Laurel Pipe Line Company, L.P. for All Necessary Authority, Approvals, and Certificates of Public Convenience To Change the Direction of Petroleum Products Transportation Service to Delivery Points West of Eldorado, Pennsylvania; Docket No. A-2016-2575829

Dear Secretary Chiavetta:

Enclosed for filing with the Pennsylvania Public Utility Commission is the Protest of Gulf Operating, LLC ("Gulf") in the above-referenced proceeding.

As shown by the attached Certificate of Service, all parties to this proceeding are being duly served. Thank you.

Respectfully submitted,

McNEES WALLACE & NURICK LLC

By Robert A. Weishaar, Jr.

Counsel to Gulf Operating, LLC

/lmc
Enclosure
c: Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that I am this day serving a true copy of the foregoing document upon the participants listed below in accordance with the requirements of Section 1.54 (relating to service by a participant).

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Dated this 1st day of February, 2017, in Harrisburg, Pennsylvania.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Laurel Pipe Line Company, L.P. for All Necessary Authority, Approvals, and Certificates of Public Convenience To Change the Direction of Petroleum Products Transportation Service to Delivery Points West of Eldorado, Pennsylvania	:	Docket No. A-2016-2575829

PROTEST OF GULF OPERATING, LLC

I. INTRODUCTION

Pursuant to Section 5.51 of the Pennsylvania Public Utility Commission's ("PUC" or "Commission") regulations, 52 Pa. Code § 5.51, Gulf Operating, LLC,[1] hereby files this Protest ("Protest") in the above-captioned proceeding. In support of this Protest, Gulf avers as follows:

II. BACKGROUND

1. On November 14, 2016, Laurel Pipe Line Company, L.P. ("Laurel" or "Applicant") filed its Application for All Necessary Authority, Approvals, and Certificates of Public Convenience to Change the Direction of Petroleum Products Transportation Service to Delivery Points West of Eldorado, Pennsylvania, with the Commission pursuant to various provisions of the Pennsylvania Public Utility Code ("Application"). *See* 66 Pa. C.S. § 101, *et seq.*

2. As set forth in the Application, Laurel currently transports petroleum products from points of origin near Philadelphia, Pennsylvania, to destination points across the Commonwealth, terminating west of Pittsburgh, Pennsylvania. *See* Application, p. 2. In

[1] Gulf Operating is the parent of Penn Products Terminals, LLC ("Penn Products") and Gulf Oil Limited Partnership ("Gulf Partnership") (collectively and for purposes of this pleading, "Gulf").

addition to the intrastate shipments, Laurel assigns a portion of its capacity to Buckeye Pipe Line Company, L.P. ("Buckeye") for interstate transportation service from origin points in New Jersey and Delaware to destination points in Pennsylvania. *See id.* at 2.

3. The Application proposes to dramatically modify the jurisdictional pipeline transportation service currently provided by Laurel by eliminating service to all points west of Eldorado (near Altoona) from the east. *See id.* at 9. Laurel proposes that Buckeye will use the pipeline facilities west of Eldorado, for future receipt of interstate deliveries originating from origin points in the Midwest and in the Pittsburgh area to Eldorado. *See id.* Importantly, the Application claims that these deliveries would be "on Laurel's pipeline at FERC-approved interstate rates." *Id.* at 9. The Application also claims that Laurel "will submit for approval a new capacity agreement whereby Buckeye will use a portion of Laurel's post-project capacity" for these interstate shipments. *See id.* To date, no such filing has been made.

4. On November 16, 2016, the Commission issued a Secretarial Letter directing Laurel to publish notice of the Application in a newspaper having general circulation in the area involved and file proof of publication with the Commission by December 19, 2016. The Secretarial Letter also confirmed that the Commission would publish notice of the Application in the *Pennsylvania Bulletin* on December 3, 2016, with formal protests and petitions to intervene due to the Commission by December 19, 2016.

5. On November 22, 2016, Gulf filed a Petition to Intervene and Motion to Extend Deadline for Protests.

6. Laurel filed an Answer requesting that the Commission: (1) grant expedited consideration of Gulf's Motion to Extend the Deadline for Protests and Laurel's Answer; and (2) deny Gulf's Petition to Intervene and Motion to Extend the Deadline for Protests beyond the

December 19, 2016, deadline established by the Commission's November 16, 2016, Secretarial Letter.

7. On December 5, 2016, Philadelphia Energy Solutions Refining and Marketing LLC ("PESRM"), filed a Petition to Intervene and Answer in Support of Gulf's Motion to Extend Deadline for Protests. Laurel requested that the Commission deny PESRM's Petition and Answer.

8. The Commission issued a second Secretarial Letter on December 6, 2016, granting Gulf's Petition to Intervene and extending the deadline for filing formal protests and petitions to intervene in this proceeding to February 1, 2017. The Secretarial Letter confirmed that the Commission would publish notice of the Application in the *Pennsylvania Bulletin* on December 17, 2016, with formal protests and petitions to intervene due to the Commission by February 1, 2017. The Secretarial Letter also directed Laurel to serve a copy of its Application on the following parties: current customers using the pipeline; former customers who used the pipeline during the period from January 1, 2015, through the date of filing (*i.e.*, November 14, 2016); and prospective and committed customers Laurel expects to use the pipeline if the flow direction of the line is changed. Finally, the Commission noted that pursuant to 52 Pa. Code § 5.44, parties may file a petition for reconsideration of the Secretarial Letter within 20 days of the date of the Secretarial Letter, or by December 26, 2016. No party filed a petition for reconsideration.

9. On December 15, 2016, Laurel filed its proof of publication of the Application in the following newspapers: The Patriot News; The Philadelphia Inquirer; The Altoona Mirror; The Pittsburgh Post-Gazette; and The Reading Eagle.

10. Notice of Laurel's Application was published in the *Pennsylvania Bulletin* on December 17, 2016, with formal protests and petitions to intervene due no later than February 1, 2017.

11. On December 19, 2016, Laurel provided notice to the Commission that it served a copy of its Application on the parties as directed by the Commission in its December 6, 2016, Secretarial Letter.

12. The Bureau of Investigation and Enforcement ("I&E") submitted a Notice of Intervention in this proceeding on December 20, 2016.

13. Monroe Energy LLC ("Monroe") filed a Petition to Intervene in this proceeding on January 3, 2017. On January 26, 2017, Monroe filed a Motion for Admission *Pro Hac Vice*.

14. Husky Marketing and Supply Co. filed a Petition to Intervene on January 30, 2017.

15. Sunoco, LLC ("Sunoco") filed a Petition to Intervene on January 31, 2017.

16. The full name, address and telephone number of the Protestant is:

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Wellesley Hills, MA 02481
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17. The names and addresses of Gulf's attorneys are:

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III. PROTEST

18. Laurel's Application must be denied as harmful to retail consumers, shippers, and the public interest. Despite Laurel's claim to the contrary, the proposed reversal is subject to Commission review as an abandonment of public utility service and/or, at minimum, a proposed tariff change. For numerous reasons, including negative economic consequences for the Pittsburgh petroleum products market, lack of service alternatives for Laurel's current shippers, and adverse environmental and safety impacts, the proposed reversal is detrimental to the public interest. Therefore, whether reviewed as a proposed abandonment or a proposed tariff change, Gulf respectfully requests that the Commission deny the Application and require Laurel to continue furnishing petroleum products transportation service consistent with its Certificate of Public Convenience and from those points of origination to those destinations set forth in its current tariff.

a. Laurel's Proposed Pipeline Reversal Constitutes an Abandonment of Service Requiring PUC Approval

19. In the Application, Laurel claims the proposed reversal does not constitute an abandonment of public utility service and therefore requires no Certificate of Public Convenience or other PUC approval. *See* Application, p. 12. Laurel claims to have filed the Application only out of recognition that the matter constitutes an issue of first impression and requests approval of the Application to the extent the Commission disagrees with Laurel's primary assessment. As set forth below, Laurel's analysis misconstrues the plain language of its current Certificate of Public Convenience authorizing Laurel to transport petroleum products from east-to-west. Consistent with its Certificate of Public Convenience and the Public Utility

Code, Laurel must obtain approval from the PUC prior to abandoning previously certificated public utility service. *See id.*

20. As conceded by Laurel, it owns and operates facilities in Pennsylvania for transporting petroleum products to the public for compensation. As such, Laurel does not dispute its status as a public utility pursuant to Sections 102 and 1101 of the Public Utility Code. 66 Pa. C.S. § 102 and 1102. Those sections authorize public utilities to commence service only upon receipt of a Certificate of Public Convenience from the Commission. However, despite proposing to change the direction of its current east-to-west petroleum products transportation service, Laurel argues it needs no approval from the PUC. This position is not supported by the Public Utility Code.

21. Under the Public Utility Code, regulated public utilities undertake an obligation to serve, and they may cease or "abandon" service only upon approval from the Commission. 66 Pa. C.S. § 1102(a)(2). Section 1102(a)(2) mandates receipt of a Certificate of Public Convenience in order "[f]or any public utility to abandon or surrender, in whole or in part, any service, except that this provision is not applicable to discontinuance of service to a patron for nonpayment of a bill, or upon request of a patron." 66 Pa. C.S § 1102(a)(2).

22. Despite the clear language in Section 1102(a)(2), Laurel claims its "reversal" of service on the pipeline would not require a Certificate of Public Convenience. First, Laurel avers it will change the direction of service on its pipeline, but will not abandon service on any origin or destination points on the pipeline. *See* Application, p. 11. Additionally, Laurel claims its PUC-approved Certificate of Public Convenience "neither specifies the direction in which Laurel may provide its certificated petroleum products transportation service, nor requires Laurel to provide service at or between specific origin and destination points." *See id.* at 6. Laurel then

concludes that it possesses sufficient authority to complete the proposed reversal of service from points west of Eldorado without review or approval from the Commission.

23. Laurel's representation that service will not be abandoned manifestly distorts the reality of the proposed reversal. Laurel argues the reversal cannot be characterized as an abandonment because "[s]hipments will continue to occur from all origin points and deliveries will continue to occur at all current destination points." *See* Application, pp. 11-12. Laurel's argument is inherently wrong and deceptive because the reality is that the relationship or connection between and among origin and delivery point is what defines the service that is subject to this Commission's jurisdiction. A simple analogy illustrates the fallacy of Laurel's argument. Like pipeline shipments, airline routes and services are necessarily determined by two connected points. For example, an airline could not serve a traveler interested in flying from Philadelphia to Washington D.C. by informing the traveler that flights land in Washington D.C. from other departure cities. Similarly, because Laurel will no longer offer service from eastern origination points to Pittsburgh-area delivery points, the proposed reversal would amount to an abandonment regardless of whether Pittsburgh remains a delivery point for service originating from other points.

24. Moreover, the fact that the proposed reversal would eliminate Pittsburgh-area locations as PUC-jurisdictional delivery points confirms that service will be abandoned. In the Application, Laurel concedes the proposed reversal would transfer jurisdiction over all deliveries to the Pittsburgh area from this Commission to the Federal Energy Regulatory Commission ("FERC"). *See* Application, p. 14. However, without citing statutory or precedential authority, Laurel claims "a change in the jurisdictional nature of service is not an abandonment of service." *See id.* This statement conflicts with the definition of "Service" in the Public Utility Code, which

includes only acts done in the performance of duties under the Public Utility Code. *See* 66 Pa. C.S. § 102. Accordingly, the removal of a service from the PUC's jurisdiction under the Public Utility Code is unquestionably an abandonment of jurisdictional service that requires PUC approval.

25. Laurel's additional claim that its Certificate of Public Convenience prescribes no specific direction for the service should carry no weight before the Commission. The Report and Order approving Laurel's Certificate of Public Convenience authorizes the provision of petroleum pipeline service through pipeline facilities, and specifically delineates the authorized direction of flow through the facilities:

> This matter being before the Pennsylvania Public Utility Commission upon application of Laurel Pipe Line Company, filed January 31, 1957, for approval of the beginning of the exercise of the right, power, or privilege of transporting, storing and distributing petroleum and petroleum products by means of pipelines and appurtenances, for the public, such facilities extending generally westwardly from a point near the City of Philadelphia to a point in the vicinity of the City of Pittsburgh, thence in a northwestwardly direction to the Pennsylvania boundary line…, the Commission finds and determines that the granting of said application is necessary for the service, accommodation, convenience or safety of the public…

See in re Application of Laurel Pipeline Company, Docket No. 84093, Folder 2 (Report and Order entered March 18, 1957). Laurel offers no basis for its allegation that the directional language pertains only to the facilities and not to the service itself. Plainly, if the Commission intended to describe only the location of the facilities, there would be no need to include directional references at all, as the facilities could have been described simply by referencing service points without direction.

Finally, Laurel's stated intention to cease offering east-to-west service from Eldorado to the Pittsburgh area without PUC approval undermines the regulatory bargain between a regulated public utility and the customers dependent on its services. Laurel voluntarily sought and received a Certificate of Public Convenience from the Commission, which bestows significant power and rights upon the holder, including eminent domain authority. *See* 66 Pa. C.S. § 1104. In exchange for these rights, Laurel also undertook an obligation to continue furnishing service to its customers. *See Philadelphia Mobile Telephone Company v. Radio Broadcasting Company and D-N Corporation,* 48 Pa. PUC 274, 292 (Sept. 24, 1974). For approximately 60 years, both shippers on Laurel's line and other market participants have invested resources in developing complementary infrastructure to facilitate the east-to-west transportation of gasoline and diesel. Allowing Laurel to reverse flows for all points west of and including Eldorado would deprive the public of a valued and relied-upon service and allow Laurel to abdicate its duties and responsibilities as a public utility.

For the above reasons, the Commission should reject Laurel's contention that the proposed reversal requires no Commission approval and review the Application as a request to abandon public utility service under Section 1102(a)(2) of the Public Utility Code.

b. Laurel Has Not Met the Commission's Standards for an Abandonment of Service

26. In determining whether to grant an abandonment request, the Commission considers: (1) the extent of loss to the utility; (2) the prospect of the system being used in the future; (3) the loss to the utility balanced with the convenience and hardship to the public upon discontinuance of such service; and (4) the availability and adequacy of the service to be substituted. *Borough of Duncannon v. Pennsylvania PUC*, 713 A.2d 737, 740 (Pa. Commw. Ct. 1998). The Commission may also consider additional or miscellaneous factors where warranted. *See Commuter's Committee v. Pennsylvania Public Utility Commission*, 170 Pa. Super. 596, 88 A.2d 420 (Pa. Super. 1952). As set forth below, consideration of the enumerated factors compels rejection of Laurel's Application.

1. Laurel Has Not Demonstrated an Inability to Earn Adequate Revenue From Its Jurisdictional Pipeline Operations

27. In considering an abandonment request, the Commission weighs the extent of loss to the utility of its current service. *Warwick Water Works v. Pa. PUC*, 699 A.2d 770, 775 (Pa. Cmwlth. 1997); see also *Re Victor Gas Company*, 49 Pa. PUC 649, 652 (Jan. 27, 1976) (granting abandonment request upon finding a gas utility system "cannot produce adequate return on capital"). To the contrary, Laurel has not alleged any losses from its jurisdictional operations. Rather, based on Laurel's recent Annual Report filings with the Commission, Laurel appears to be earning returns on its current operations that far exceed a reasonable rate of return. In any event, Laurel has the burden to demonstrate that it meets the first factor to be considered when considering an abandonment, and Laurel has made no effort to satisfy that factor.

2. Laurel Has Not Provided any Evidence of Insufficient Demand for its Pipeline Service

28. Laurel additionally makes no claim that its jurisdictional pipelines are underutilized. In this case, Gulf is one of 24 customers currently shipping volumes on Laurel's pipeline. *See* Application, p. 5. For the 12 months ended October 31, 2016, Laurel reports total shipments of approximately 84.1 million barrels.[2] *See id.* While the reported total shipments include both interstate and intrastate volumes, the attached Affidavit from Darrel S. Arthur of the Brattle Group ("Affidavit") references testimony from Buckeye in a recent FERC proceeding confirming that Laurel operated its pipeline at capacity as of mid-2015. *See* Affidavit, ¶ 10. Therefore, all indications are that Laurel's service remains in sufficiently high demand. Because Laurel has made no claim to the contrary, its proposed abandonment should be denied.

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[2] The Application presented only aggregated volume for intrastate and interstate shipments. *See* Application, p. 5. Gulf expects to confirm Laurel's specific intrastate deliveries through discovery.

3. While Laurel Would Suffer No Losses Under the Present Configuration, Laurel's Customers and the General Public Would be Significantly Disadvantaged by Approval of the Application

29. The proposed pipeline reversal would adversely impact current shippers dependent on Laurel's certificated facilities for access to the Pittsburgh market, adversely impact consumers in the Pittsburgh area that presently receive service from East Coast suppliers of petroleum products, and adversely impact the general public. The proposed pipeline reversal would eliminate pipeline supply from East Coast markets to Pittsburgh, thereby removing beneficial supply alternatives, price discipline, and reliability redundancies for the Pittsburgh market. The loss of access to consumers in Pittsburgh and other areas west of Altoona will adversely impact the Philadelphia-area refinery and petroleum products distribution industries and potentially eliminate jobs from this region. The proposed reversal will also generate environmental waste and endanger public safety by unnecessarily expanding the volume of petroleum products being shipped across Pennsylvania via truck. Finally, eliminating east-to-west pipeline shipments would constrain access to low-Reid Vapor Pressure ("RVP") gasoline supplies for the Pittsburgh market, which are currently required during summer months.

30. While Laurel touts the proposed reversal as an economic benefit for the Pittsburgh market, the opposite effect would follow. Laurel claims that "increased availability of lower-priced Midwestern product has generated interest in additional eastbound movements of Midwestern-sourced petroleum products to points east of Pittsburgh." *See* Application, p 9. Notably, Laurel offers no quantifiable analysis supporting its assertion of favorable pricing for Midwest supply in comparison to East Coast sources. Moreover, Laurel offers no analysis of the price impact of eliminating dual east/west supply opportunities in the Pittsburgh area. Conversely, Mr. Arthur's analysis of historical price data shows Pittsburgh consumers benefit

from an ability to arbitrage between eastern and western supply sources to ensure the lowest cost supply at a given time. *See* Affidavit, ¶ 11-12. As described by Mr. Arthur, prices for east-to-west deliveries historically outperformed prices for west-to-east deliveries in all but winter months, and on average, East Coast markets offer the lowest prices for delivered gasoline and diesel. *See id.* at ¶ 13. If the Commission grants Laurel's request, Pittsburgh consumers will be subjected to higher overall prices because the reversal eliminates ratable pipeline supply of historically less expensive Pennsylvania and New York sourced barrels, making Pittsburgh effectively captive to Midwestern supply sources.

31. Specifically, Mr. Arthur's analysis recognizes limitations on the percentage of total consumption available for arbitrage, but conservatively and preliminarily projects that the Laurel reversal could increase annual costs for Pittsburgh consumers by up to $68 million. *See id.* at ¶ 20. Of note, this analysis does not account for Mr. Arthur's expectation that the additional demand for Midwest barrels will put upward pressure on Midwest sourced supply prices. *See id* at 21. The analysis also relies on historical prices, therefore intentionally not including anticipated increases to Buckeye's transportation tariff rates for Midwest-sourced deliveries. For these reasons, the detrimental cost projections set forth above remain conservative estimates and subject to further refinement as information is developed through discovery and hearings.

32. Aside from end-user pricing, Pittsburgh consumers also lose reliability benefits currently realized through access from both western and eastern pipeline supply sources. Ironically, Laurel points to recent failures on Colonial's pipeline system as an indication that additional supply sources are necessary to improve delivery reliability for Pittsburgh consumers. *See* Application, p. 15. With the current configuration, Pittsburgh consumers benefit from an

eastern pipeline supply source along with the multiple already existing western pipeline supply options, as the market participants may look to various western and eastern pipeline resources to address shortages resulting from events similar to the Colonial shutdowns. However, if Laurel is permitted to reverse flows on its pipeline, Pittsburgh consumers would have no pipeline access to East Coast supply. Pittsburgh greatly benefits from maximizing its supply diversity. *See* Affidavit, ¶ 9. From a reliability standpoint, the proposed reversal is clearly harmful to the Pittsburgh consumer.

33. Philadelphia would be negatively impacted by the reversal as well, as the proposed reversal would potentially disrupt the Philadelphia-area refining industry. Philadelphia-area refineries are dependent on Laurel for pipeline access to the Pittsburgh market. Notably, East Coast market participants are already in the midst of an oversupply of products for a variety of reasons.[3] Due to reduced production from shale gas wells and declining spreads between domestic products and foreign imports, the industry is currently experiencing storage stockpiles. Removing pipeline access to the Pittsburgh market would further deteriorate market conditions impacting the Philadelphia-area refineries, particularly where, as discussed below and in Section III.b.4, available delivery alternatives are uneconomic and inadequate.

34. Laurel also ignores harm to Pennsylvania's infrastructure and environment. If the Commission allows the proposed reversal, petroleum companies will, at times, seek to truck less expensive gasoline and petroleum products from Altoona to Pittsburgh and westward from Harrisburg to save costs and avoid supply shortages.[4] As discussed in the Mr. Arthur's Affidavit, the proposed reversal could result in 45,625 additional truck trips per year between Pittsburgh

[3] *See* John Kemp, *US Gasoline Oversupply Pushes Crude Oil Prices Lower,* Reuters, July 10, 2016 *available at* http://www.reuters.com/article/us-usa-gasoline-kemp-idUSKCN0ZM2A6.

[4] While Laurel will maintain east-to-west service to Altoona, limitations on the terminal capacity at Altoona may incent additional trucking shipments from Harrisburg to Pittsburgh.

and Altoona. *See* Affidavit, ¶ 15. The additional truck traffic will (1) increase road congestion; (2) increase wear and tear on Pennsylvania's roads; (3) increase trucking rates due to fleet maintenance costs; (4) increase consumer costs (passed on by increases to trucking rates); (5) increase environmental pollution and CO2 emissions; and (6) increase noise pollution.

35. The proposed reversal also raises safety concerns unaddressed in Laurel's Application. Additional trucks on the road endanger public safety by increasing the likelihood of accidents and safety incidents. According to the Bureau of Labor Statistics, there are 7.2 incidents per 10,000 full time workers for long-distance freight trucking in 2015. *See* *www.bls.gov/iif/oshwc/osh/os/ostb4743.pdf.* In Pennsylvania, 6,695 vehicular accidents involving heavy trucks occurred in 2014, of which 136 resulted in at least one fatality. Although freight trucks accounted for just 5.4% of total vehicular crashes for 2014, they accounted for 12.3% of fatal crashes for the year.[5] Any increase in freight trucking resulting from the proposed reversal will unnecessarily place lives at risk.

36. The concerns regarding pricing and safety may further be exacerbated by the possibility of more extensive reversals of Laurel's pipeline. Industry publications are reporting that Laurel's proposal to reverse flows between Pittsburgh and Altoona, and abandon PUC-jurisdictional services for that segment, may be just the first step in a series of steps to effectuate further reversals and further abandonment of PUC-jurisdictional services. A January 4, 2017, report from the Oil Price Information Service claims that the next step in Laurel's efforts to reverse flows and abandon PUC-jurisdictional service would be on the segment of the Laurel pipeline between Altoona/Eldorado and the Harrisburg area. *See Laurel Pipeline Gets More Gasoline Barrels on Chicago Price Spike*, Oil Price Information Service (January 4, 2017). The

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[5] *See* 2014 Pennsylvania Crash Facts & Statistics, Pennsylvania Department of Transportation, p. 50, *available at* *http://www.penndot.gov/TravelInPA/Safety/Documents/2014_CFB_linked.pdf.*

article also references long-term plans to reverse the Laurel line all the way to Philadelphia. *See id.* Laurel's intentions in this regard should be one of the many issues that are explored in an evidentiary hearing, if the Application is not summarily rejected.

37. Aside from the safety threat from any increase in freight trucking, the proposed reversal could expose Pennsylvania citizens to pipeline safety risks. Laurel has operated its pipelines exclusively for east-to-west flows since approximately the late 1950s. *See* Application, p. 6. Laurel has now confirmed its intent to reverse flows on the same pipeline, without specifying the capital improvements or upgrades necessary to address hydraulic concerns associated with reversing flows on a pipeline that was designed and constructed to telescope from larger diameters to smaller diameters from east to west. Such concerns should be investigated and considered in weighing the public interest impacts of Laurel's Application.

38. As a final consideration, the Commission should note that gasoline supplies to Pittsburgh are not fungible as Laurel suggests. Laurel claims the change in direction on its pipeline will preserve "access to the same product to the public..." *See* Application, p. 14. Again, Laurel fails to include critical factual details surrounding the effects of the proposed reversal. Currently, the east-to-west shipments of gasoline on Laurel's pipeline delivered to Pittsburgh include Reformulated Blendstock for Oxygenate Blending ("RBOB") gasoline or Conventional Gasoline Blending Components ("CBOB") with a RVP of 7.8 psi or less. These shipments are necessary to comply with a Pennsylvania Department of Environmental Protection ("DEP") Regulation establishing maximum RVP requirements for gasoline sold in the Pittsburgh area. Importantly, the DEP implemented the maximum RVP Regulations in response to a 1995 violation of the Ozone National Ambient Air Quality Standard ("NAAQS") for Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland Counties. The east-to-west

shipments on Laurel's pipeline are critical to compliance with the DEP maximum RVP Regulations because gasoline supply originating from the Midwest consists primarily of CBOB gasoline with an RVP in excess of 7.8 psi.

39. Although currently effective, the continued enforcement of the DEP's maximum RVP Regulations remains uncertain as the agency is reviewing new Regulations to eliminate the minimum RVP requirements for the Pittsburgh area. Whether or not the DEP proceeds with this change, the Commission should consider that approving Laurel's Application would limit the availability of low-RVP gasoline supply for the Pittsburgh market in the event DEP desires to revisit the matter in response to future NAAQS or other environmental concerns.

40. As described above, Laurel's Application poses numerous public interest concerns. Pittsburgh consumers stand to experience higher prices for vital petroleum products while losing reliability benefits accruing from access to both western and eastern pipeline supply sources. Various Philadelphia-based market participants would be left without adequate revenue streams to preserve the job gains achieved through the recent resurgence of the local petroleum products industry. Further, the general public would be exposed to greater environmental and safety risks. In recognition of these important public interest considerations, Gulf submits the Application must be denied.

4. Available Alternatives to Replace Shipped Volumes on Laurel's Pipeline are Insufficient

41. Laurel suggests its proposed reversal would not impact market participants benefitting from its current east-to-west pipeline service, including customers in the Pittsburgh market. Such claims dramatically understate the impact of Laurel's proposal. Contrary to Laurel's claims, alternatives for transporting refined petroleum products from eastern Pennsylvania to Pittsburgh and other points west of Altoona are woefully insufficient to replace

the significant volumes lost from the proposed reversal. These negative impacts favor rejection of Laurel's Application.

42. The proposal reversal will eliminate pipeline deliveries to the Pittsburgh market from a multitude of sources currently dependent on Laurel's pipeline for access to the Pittsburgh market, including: (1) Philadelphia Energy Solutions Refinery, (2) Monroe Delta Trainer Refinery, (3) PBF Delaware City Refinery, (4) PBF Paulsboro Refinery, (5) Gulf Coast supply via Colonial Pipeline, (6) P66 Bayway Refinery, (7) NY Harbor Imports, and (8) Philadelphia Imports. According to the Application, Laurel delivered 84.1 million bbls from East Coast resources to markets along its Pennsylvania pipeline, of which the primary two markets are Harrisburg and Pittsburgh. *See* Application, p. 5. While the specific volumes delivered to Pittsburgh will likely be determined through discovery and hearings in this proceeding, the total delivered volumes suggest Pittsburgh consumers receive significant volumes of petroleum products through Laurel's pipeline from supply sources in the east.

43. Laurel contends that alternatives exist to replace the east-to-west pipeline shipments eliminated by the reversal. Laurel claims that Pittsburgh consumers could receive petroleum products from western pipeline operators, trucking services, and barges. *See* Application, p 7. As discussed above, Mr. Arthur's analysis indicates that available alternatives, such as delivering product to terminals in Eldorado for trucking to Pittsburgh, may lack sufficient capacity in comparison to the volumes currently shipped by Laurel and stored in Pittsburgh-area terminals. *See* Affidavit, ¶ 20. Even assuming availability of alternative service, and using highly conservative cost projections, preliminary data shows the reversal could increase delivery costs to Pittsburgh consumers by $68 million annually. *See id.*

44. Laurel also claims Philadelphia-area refineries will continue to enjoy multiple alternatives to deliver products to consumers following implementation of the proposed reversal. Laurel's overly simplistic observation misrepresents the scope of viable alternative markets that would be available for Philadelphia-area shippers. Laurel references the availability of alternative markets in New York City, Upstate New York, and Central Pennsylvania. *See* Application, p. 17. However, these markets are already supplied by other market participants and would generally offer lower revenues for Philadelphia-area shippers and market participants, assuming the volumes displaced from Laurel could even find a market. Mr. Arthur, again relying on a preliminary analysis, conservatively projects that Laurel's reversal will reduce annual revenues for Philadelphia refiners by at least $10 million. *See* Affidavit, ¶ 32. As discussed above, safety concerns also cast doubt on the viability of Laurel's proposed alternatives, particularly with regard to trucking services.

45. Further, Laurel's claim that the Pittsburgh and Philadelphia petroleum products markets are "competitive" should be entirely disregarded because the underlying analyses all assumed the continued availability of Laurel's east-to-west pipeline services. *See* Application, p. 8. Therefore, Laurel has not established the availability of viable alternatives to replace its current east-to-west delivery of petroleum products to Pittsburgh.

5. Conclusion

46. For the reasons set forth above, Laurel has not met the standards for abandonment of its current east-to-west service. Laurel is not experiencing financial losses as a result of current operations and demand for its certificated service remains robust. Laurel has not claimed that it is no longer able to provide the service it seeks to abandon. Laurel has not demonstrated that the abandonment is in the public interest. To the contrary, elimination of the single pipeline providing East Coast supply to Pittsburgh and other points west of Altoona would adversely

impact consumers of petroleum products in the Pittsburgh market, shippers in the Philadelphia area, and the general public. If granted, the proposal reversal would impose the single largest and persistent disruption of East Coast supply to the Pittsburgh market, as Laurel's action would remove the sole viable source of petroleum products from the east. As conceded in the Application, there are already numerous west-to-east pipeline systems available to serve the Pittsburgh market, but only one pipeline connecting Pittsburgh to eastern supply sources. Abandonment of Laurel's existing pipeline service would not serve the public interest and must be denied.

c. Even Assuming a Certificate Of Public Convenience Is Not Required, Laurel Must Show the Proposed Reversal Furthers the Public Interest, and Laurel Has Not Made That Showing

47. In the event the Commission deems the above-referenced abandonment factors to be inapplicable, Laurel's Application must still be denied as contrary to the public interest. Laurel has argued that the proposed reversal does not constitute an abandonment. As discussed above, the facts show otherwise. However, even if the Commission accepts Laurel's primary argument, the Commission must still consider the proposed reversal as a change to Laurel's tariffed rules and regulations. Under this standard, the proposed tariff supplement should be approved only if Laurel demonstrates the proposed changes are not unjust, unreasonable, discriminatory, or contrary to the public interest. For the reasons detailed above, Laurel's Application fails to meet this standard and must be denied.

48. In its Application, Laurel primarily argued that its proposed Application requires no Commission approval and alternatively argued that the Commission should grant all necessary approvals, including a Certificate of Public Convenience for an abandonment of service. *See* Application, p. 12. The argument that Laurel's Application requires no Commission approval must be summarily dismissed because, at a minimum, the Application includes

proposed modifications to Laurel's tariff. The Commission has previously reviewed a tariff supplement from a petroleum products pipeline operator seeking to resume service after previously abandoning a prior route on the pipeline. *Sunoco Pipeline L.P. Request for Approval of Tariff Pipeline-Pa P.U.C. No. 16 and Waiver of 52 Pa. Code §53.52(b)(2) and (c)(1) through (5)*, Docket No. R-2014-2426158 (Pa. PUC August 12, 2014), p. 3 ("*Sunoco Tariff Order*"); *see also* 66 Pa. C.S. § 1308. The Commission approved the tariff supplement only after reviewing Sunoco Pipeline L.P.'s ("SPLP") responses to standard data requests, confirming that no customers filed complaints, and determining that the filing does not "appear to be unlawful, unjust, unreasonable, or contrary to the public interest." *See* Sunoco Tariff Order, p. 3.

49. Section 53.52 of the Commission's Regulations sets forth clear requirements for data to be furnished with proposed tariff supplements, including financial statements. *See* 52 Pa. Code § 53.52 Contrary to the circumstances in the SPLP proceeding, Laurel made no effort to comply with Commission regulations requiring public utilities to respond to standard data requests when filing a tariff supplement proposing changes to the terms and conditions of public utility service. *See id.*; *see also* Sunoco Tariff Order, p. 3 (noting the "company is submitting responses to each of the information requests under Subsections (a), (b) and (c) of Section 53.52."). Laurel's failure to comply with fundamental evidentiary requirements for approval of a tariff supplement necessitates rejection of the proposed tariff change.

50. On a more substantive basis, Laurel's Application differs significantly from SPLP's proposed tariff change in that no customers were impacted by the SPLP tariff supplement. Here, at least four customers have already indicated objections to Laurel's Application. In addition to Gulf, PESRM and Monroe filed Petitions to Intervene indicating an

intention to file Protests to the Application. Sunoco filed a Petition to Intervene expressing concerns regarding the Application, but did not clarify an intent to Protest.

51. Laurel also has not met its burden of showing the application to be in the public interest. Approval of the proposed tariff supplement would be contrary to the public interest for the many reasons justifying denial of the Application under the abandonment factors, which are detailed in Sections III.b.1-5 of this Protest and incorporated herein by reference.

52. Therefore, Laurel has not met the standard for approval of modifications to its tariff. Accordingly, the Application must be denied.

IV. CONCLUSION

WHEREFORE, Gulf Operating, LLC hereby respectfully requests that the Commission deny the Application filed by Laurel Pipe Line Company and grant any other relief that is deemed to be reasonable and appropriate.

Respectfully submitted,

McNEES WALLACE & NURICK LLC

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Counsel to Gulf Operating, LLC

Dated: February 1, 2017

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Laurel Pipe Line Company, L.P. for All Necessary Authority, Approvals, and Certificates of Public Convenience To Change the Direction of Petroleum Products Transportation Service to Delivery Points West of Eldorado, Pennsylvania	)	Docket No. A-2016-2575829

AFFIDAVIT

OF

DANIEL S. ARTHUR

ON BEHALF OF
GULF OPERATING , LLC

February 1, 2017

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BEFORE THE

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AFFIDAVIT OF DANIEL S. ARTHUR

I. INTRODUCTION AND SUMMARY

1. My name is Daniel S. Arthur. I am a Principal at *The Brattle Group*, an economic and management consulting firm located at 44 Brattle Street, Cambridge, Massachusetts. I have over fifteen years of experience consulting with firms in the regulated energy industries on ratemaking, pricing, market assessment, and antitrust issues. I have filed affidavits and testimony on matters in various proceedings in federal and state oil pipeline proceedings. For example, I submitted testimony in multiple SFPP, L.P. ("SFPP") proceedings before the Federal Energy Regulatory Commission ("FERC"), including its recent tariff proceedings in FERC Docket Nos. IS08-390-002 and IS09-437-000, and proceedings involving its interstate rates in FERC Docket Nos. OR03-5, *et al.* and OR96-2, *et al.* I also submitted testimony in Laurel Pipe Line Company's ("Laurel") affiliate Buckeye Pipe Line Company, L.P.'s ("Buckeye") FERC proceeding regarding whether Buckeye's existing cost-based rates to New York City destinations are reasonable,[1] and whether Buckeye's experimental rate changing program appears to produce reasonable results.[2] I have also presented testimony in prior proceedings before the FERC regarding pipeline applications to charge market-based rates, including testimony in two Buckeye

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1 *Delta Air Lines Inc. et al v. Buckeye Pipe Line Company, L.P.*, FERC Docket No. OR12-28-000.

2 *Buckeye Pipe Line Company, L.P.*, FERC Docket No. IS12-185-000.

proceedings.[3] Details of my professional and educational background and a list of my publications are provided in my curriculum vitae appended as Appendix A.

2. I have been asked by Gulf Operating LLC ("Gulf Operating") to evaluate the Application of Laurel Pipe Line Company, L.P. for All Necessary Authority, Approvals, and Certificates of Public Convenience To Change the Direction of Petroleum Products Transportation Service to Delivery Points West of Eldorado, Pennsylvania[4] ("Application") before the Pennsylvania Public Utility Commission ("Commission"), and specifically to evaluate Laurel's claims that a reversal of the portion of its pipeline between Eldorado and Pittsburgh, Pennsylvania will result in substantial public benefits without harming the public.[5]

3. Based on my review of Laurel's Application, Laurel appears to significantly understate the potential negative impact on consumers and/or wholesalers of refined petroleum products in the Pittsburgh area as well as the potential negative impact on refiners of petroleum products in the Philadelphia area resulting from a reversal of Laurel's pipeline between Eldorado and Pittsburgh, Pennsylvania. As discussed below, Laurel (and through its affiliate Buckeye) is the only existing pipeline providing transportation service to Pittsburgh from origins to the east of Pittsburgh. With Laurel's current configuration, arbitrage of the lowest cost supply source is permitted for consumers and/or wholesalers in the Pittsburgh area, lowering supply cost to the Pittsburgh area. A reversal of Laurel's pipeline between Eldorado, Pennsylvania and Pittsburgh, Pennsylvania will increase the refined product supply

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3 Affidavit of Daniel S. Arthur on behalf of Delta Airlines, Inc., Continental Airlines, Inc., JetBlue Airways Corp., United Airlines, Inc., and U.S. Airways, Inc., *Buckeye Pipe Line Co., L.P.*, Docket No. OR13-3-001 (filed Dec. 14, 2012); Prepared Answering Testimony of Daniel S. Arthur on behalf of Delta Airlines, Inc., Continental Airlines, Inc., JetBlue Airways Corp., United Airlines, Inc., and U.S. Airways, Inc., *Buckeye Pipe Line Co., L.P.*, Docket No. OR13-3-001 (filed Jan. 7, 2014); Affidavit of Daniel S. Arthur on behalf of Guttman Energy Inc. d/b/a/ Guttman Oil Company and PBF Holding Company LLC., *Buckeye Pipe Line Co., L.P.*, Docket No. OR14-4-000 (filed Oct. 15, 2013); Supplemental Affidavit of Daniel S. Arthur, *Buckeye Pipe Line Co., L.P.*, Docket No. OR14-4-000 (filed Nov 19, 2013); Prepared Direct Testimony of Daniel S. Arthur, *Buckeye Pipe Line Co., L.P.*, Docket No. OR14-4-000 (filed Sept. 9, 2014).

4 Note that Eldorado, Pennsylvania is a delivery location on Laurel's pipeline and is near Altoona, Pennsylvania.

5 Application at PP 31-47.

cost to consumers and/or wholesalers in the Pittsburgh area, likely by millions of dollars per year depending on how much volume is forced to shift to alternative supply locations. As discussed below, I estimate that for every 1,000 BPD of volume currently delivered to Pittsburgh via Laurel, supply costs to Pittsburgh consumers and/or wholesalers would increase by $0.3 million to $1.7 million per year. As it is likely that Laurel is currently delivering significantly higher volumes to Pittsburgh than 1,000 BPD, these costs are likely on the order of twenty to forty times higher. This would increase my estimates of annual costs to Pittsburgh consumers and/or wholesalers to approximately $5.8 million to $68 million (or more) per year.

4. In addition, the elimination of Laurel capacity to Pittsburgh will require Philadelphia area refiners currently supplying the Pittsburgh area to shift volumes to lower netback locations, decreasing revenue and profits to Philadelphia refineries and other shippers originating product in the Philadelphia area. I estimate that the elimination of Laurel capacity to Pittsburgh will decrease revenues to Philadelphia area refiners by $500,000 to $875,000 per year per 1,000 BPD of gasoline that would either be (1) transported and sold in the Pittsburgh market at higher transportation costs or (2) shifted to supply an alternative, lower-netback market. Impacts for ultra-low sulfur diesel ("ULSD") produced by Philadelphia area refiners and currently shipped to the Pittsburgh market could also be of a similar magnitude. Depending on the total volumes currently shipped to Pittsburgh from Philadelphia area refiners, the total impact is likely to be twenty to forty times higher, which implies potential decreased revenue to Philadelphia refiners of $10 million or more per year due to Laurel's proposed reversal of service.

II. IMPACT ON CONSUMERS AND/OR WHOLESALERS IN PITTSBURGH AREA

5. Laurel's Application claims that the reversal of Laurel's pipeline between Eldorado, Pennsylvania and Pittsburgh, Pennsylvania will result in "the beneficial, and expected, access to generally reduced wholesale commodity prices for petroleum products delivered over Laurel's system."[6] Laurel also states that market participants

6 Application at P 35.

in the Pittsburgh area will have access to many alternatives that will remain in place after the proposed change in direction of service.[7] However, as discussed further below, Laurel (and through its affiliate Buckeye) is the only existing provider of pipeline transportation service to Pittsburgh from origins to the east of Pittsburgh. Contrary to Laurel's claims, a reversal of Laurel's pipeline between Eldorado, Pennsylvania and Pittsburgh, Pennsylvania is expected to increase the refined product supply cost to consumers and/or wholesalers in the Pittsburgh area by millions of dollars per year.

6. Laurel states that all of the destinations currently supplied by the Laurel pipeline in the Pittsburgh area will continue to be supplied and there will be multiple alternatives available to supply consumers in the Pittsburgh area.[8] However, as Laurel (and through its affiliate Buckeye) is the only existing provider of pipeline transportation service to the Pittsburgh area from origins to the east of Pittsburgh, all of the other transportation alternatives source product from origins to the west of the Pittsburgh area. Consequently, if Laurel eliminates transportation service to the Pittsburgh area, consumers and/or wholesalers in the Pittsburgh area will be forced to obtain supply only from origins to the west of Pittsburgh.[9] Figure 1 below summarizes the existing alternatives to supply the Pittsburgh area.

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7 *Id.* at P 41.

8 *Id.* at PP 38-41.

9 While consumers or wholesalers in the Pittsburgh area could obtain supply from terminals in the Eldorado, Pennsylvania area and truck the product to the Pittsburgh area, as discussed further below, that arrangement would come at significantly increased cost to the consumers and/or wholesalers in the Pittsburgh area due to the significantly higher trucking costs relative to Laurel's incremental transportation cost between Eldorado and Pittsburgh, Pennsylvania.

Figure 1
Existing Potential Alternatives to Supply Pittsburgh Area

Alternative	Origin	Capacity (MBPD)
Laurel pipeline	Philadelphia, PA	180.0[1]
Buckeye pipeline	Chicago, IL, Detroit, MI, Toledo, OH, & Lima, Ohio	158.2[2]
Sunoco pipeline	Detroit, MI, Toldeo, OH, & Lima, Ohio	85.0
Marathon pipeline	Ohio	36.0
Ergon refinery	Newell, WV	12.6
United refinery	Warren, PA	40.9
Barge - Port of Pittsburgh	Upstream of Pittsburgh on the Ohio River	15.5[3]

Sources/Notes:
Pipeline and refinery capacities are from Exhibit Nos. GP-15 and GP-98 in FERC Docket No. OR14-4-000.
1: Note that Laurel also leases capacity to its interstate affiliate Buckeye, who provides interstate transportation into Pittsburgh from origins in New Jersey.
2: Note this includes the 65,000 BPD of additional capacity indicated by Buckeye in FERC Docket No. OR16-5-000.
3: Barge volume is the 2013 deliveries into the Port of Pittsburgh from the Waterborne Commerce of the U.S. 2013 Report.

7. As shown in Figure 1, Laurel is the largest alternative providing capacity to the Pittsburgh area with a reported capacity of 180.0 MBPD, and is the only alternative providing transportation to the Pittsburgh area from origins to the east of Pittsburgh. Furthermore, I would note that not all of the capacity detailed in Figure 1 may be readily available to increase its delivery volumes to Pittsburgh should the Laurel reversal remove deliveries to the Pittsburgh area for origins to the east of Pittsburgh. The Buckeye pipeline from the Midwest also serves demand in Ohio, so the available capacity for deliveries to Pittsburgh is reduced by flows to Ohio destinations. Also note that 50.5 MBPD of the additional 65 MBPD of capacity offered during Buckeye's most recent expansion has been secured by 10-year shipper commitments, leaving less capacity available for any further flows from the Midwest to Pittsburgh.[10]

[10] Buckeye Partners L.P. Investor Presentation, "MLPA Conference", Jun. 1-3, 2016. Note that neither Laurel nor Buckeye identifies the amount of the 50.5 MBPD of committed capacity that is related to Ohio destinations versus Pittsburgh destinations.

Additionally, available capacity on the Sunoco pipeline for non-committed shippers will likely be limited to the amount that did not already receive binding commitments from shippers during the open season in 2012.[11]

8. Estimates of the consumption of refined products in the Pittsburgh area in the 2012 - 2013 period provided in Buckeye's recent FERC proceeding ranged from 102.5 MBPD to 144.5 MBPD.[12] While Laurel does not report the aggregate volume it and its affiliate, Buckeye (which provides interstate transportation through the Laurel pipeline), delivered to the Pittsburgh area, Laurel does state that it delivered 84.1 million bbls during the Nov. 2015 – Oct. 2016 period, equivalent to 230 MBPD.[13] Given that Laurel's reported delivered volumes of 230 MBPD exceeds the estimates of consumption in the Pittsburgh area, Laurel's reported deliveries are likely to be for all destinations along its system rather than just for the Pittsburgh area. However, given that the Pittsburgh area is a significant metropolitan area served by the Laurel system, it is reasonable to believe that a significant portion of Laurel's reported 230 MBPD of deliveries served the Pittsburgh area. Discovery would permit a determination of the magnitude of Laurel's existing deliveries to the Pittsburgh area that would be displaced by Laurel eliminating transportation service from eastern origins to the Pittsburgh area.

9. The impact on consumers and/or wholesalers in Pittsburgh from Laurel eliminating transportation service includes increasing the likelihood of a significant price impact if there is a supply disruption on one of the pipelines or refinery alternatives currently supplying Pittsburgh, as well as an increase in the supply cost to Pittsburgh by eliminating the ability to arbitrage between supply sources of eastern and western origins as the commodity price at those origins fluctuates.

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[11] Sunoco Logistics Press Release, "Sunoco Logistics Partners L.P. Announces Successful Open Season for Allegheny Access Pipeline Project," Sep. 5, 2012. Note that the Sunoco line also serves destinations in Ohio, and it is not known how much Sunoco capacity is committed to destinations upstream of the Pittsburgh area.

[12] Tr. 1401-1403, Oct. 9, 2015 in FERC Docket No. OR14-4-000.

[13] Application at P 6.

10. Laurel's affiliate, Buckeye, reported in its recent FERC proceeding that both Laurel's line from the east to Pittsburgh and Buckeye's line from Ohio to Pittsburgh have been operating at capacity since at least mid-2014 through mid-2015 (when discovery was ongoing in that proceeding).[14] Laurel does not address the recent existing capacity constraints on its pipeline or its affiliated Buckeye pipeline from western origins to Pittsburgh in its Application. However, the possibility certainly exists that the elimination of Laurel's capacity to Pittsburgh could create pipeline constraints, leading to shortages of supply from lower cost alternatives, and thus to higher supply costs and higher prices to consumers.

11. A second significant impact of Laurel eliminating transportation service to Pittsburgh is decreasing the ability of Pittsburgh consumers and/or wholesalers to arbitrage between eastern and western supply sources. Barring any capacity constraints on the pipelines, Pittsburgh consumers and/or wholesalers are currently able to arbitrage between eastern and western supply sources in order to obtain the lowest cost supply source at any given time. In addition, Laurel's system transports refined products to Pittsburgh from refineries in the Philadelphia, Pennsylvania area as well in the Newark, New Jersey area. Therefore, if there are periods in which gasoline or diesel prices are lower at the East Coast refinery locations than the Midwest refinery locations, product transported via Laurel would be the lower cost supply source because transportation rates on Laurel are generally lower than transportation rates on the Buckeye and Sunoco pipelines from the Midwest. Conversely, if gasoline and diesel prices are significantly less in the Chicago, Illinois area, or other Midwest refining location served by the Buckeye or Sunoco pipelines, the Midwest refineries can be a lower cost supply source for consumers and/or wholesalers in Pittsburgh, even after factoring in differences in transportation rates on the different transportation alternatives.

12. A review of historical price data, produced by an industry publication known as Argus, indicates a consistent pattern of this ability to arbitrage, especially for gasoline

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14 Exhibit No. GP-84 in FERC Docket No. OR14-4-000; *see also* Exhibit No. GP-80 at 135 in FERC Docket No. OR14-4-000.

products. As shown in Figure 2(a) and (b), the delivered price of gasoline to Pittsburgh is typically less expensive from the eastern markets during the summer months while it is less expensive from the Chicago markets in the winter months. Negative values represent periods when the delivered price supplied from the east coast markets is less expensive than the delivered price supplied from the Midwest markets. Figure 2(a) shows that East Coast markets can supply Pittsburgh with less expensive low RVP (Reid Vapor Pressure) gasoline[15] during those summer months. Then, in the non-summer months, Pittsburgh consumers also have access to the lower-cost gasoline from the Midwest markets. Figure 2(b) displays the pricing differential assuming that Pittsburgh consumers did not have to purchase low RVP gasoline in the summer months. Gasoline prices from the East Coast markets are typically less expensive than gasoline from the Midwest markets for approximately 7-8 months each year. Stated in another way, the ability to arbitrage and source gasoline from Midwest refineries is typically only a benefit for Pittsburgh consumers in 4-5 months of the year. Therefore, removing the ability for Pittsburgh consumers to access the East Coast refineries would typically increase gasoline prices for those consumers in most months.

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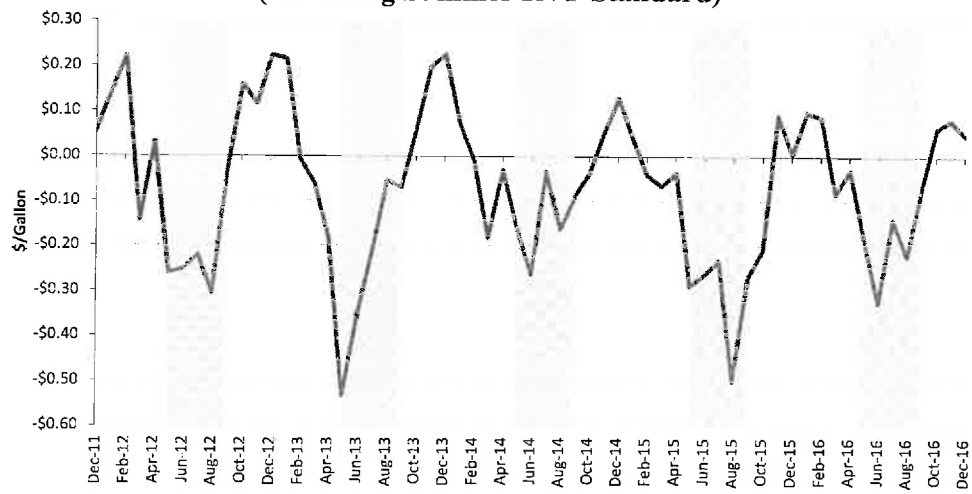
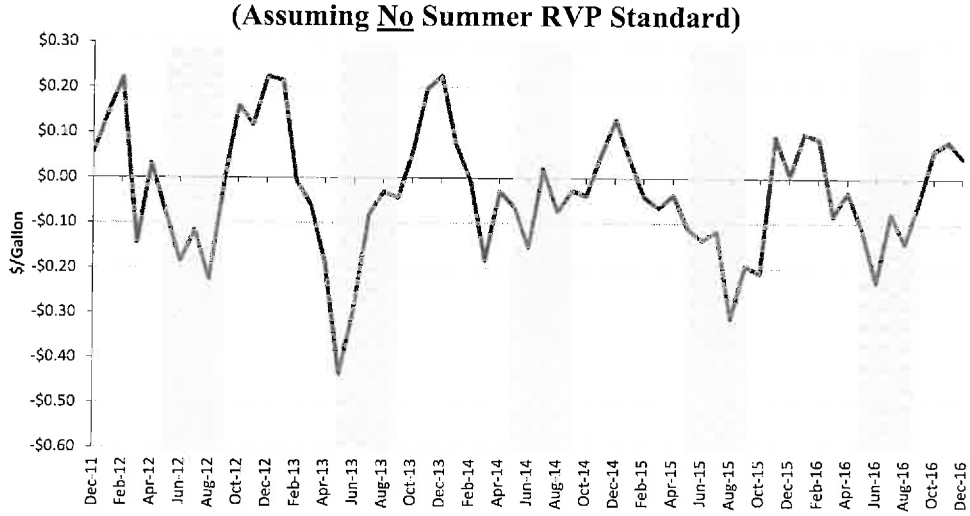
15 Reid Vapor Pressure is a measure of the evaporative volatility of gasoline, and Pittsburgh area counties currently require a low Reid Vapor Pressure gasoline to be sold during the summer months between May 1st and September 15th. 66 Fed. Reg. 19724 (April 17, 2001).

Figure 2(a)
Differential in Delivered Prices of Gasoline to Pittsburgh From East Coast Compared to Midwest Refineries (Assuming Summer RVP Standard)



Sources/Notes:
Delivered prices calculated using Argus gasoline prices.
Shaded areas represent months when the Summer RVP Standard is in effect (May 1st - Sept. 15).

Figure 2(b)
Differential in Delivered Prices of Gasoline to Pittsburgh From East Coast Compared to Midwest Refineries (Assuming No Summer RVP Standard)

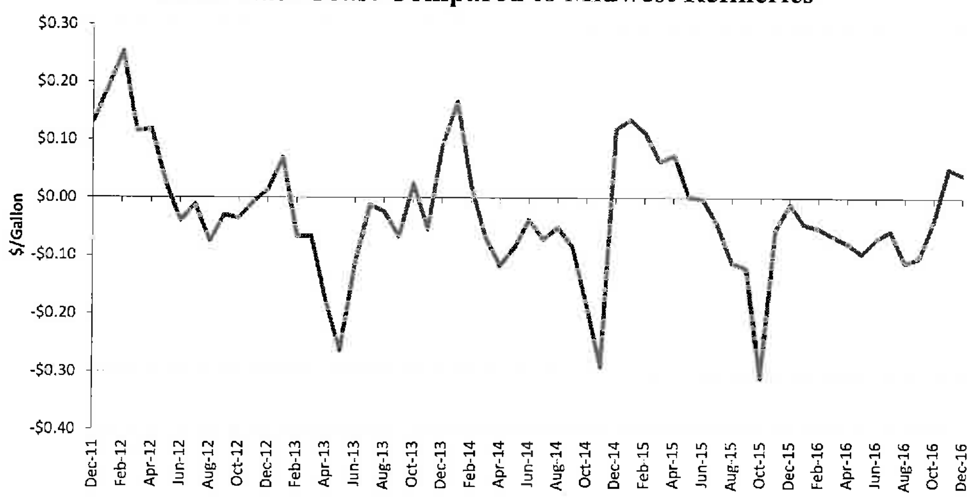


Sources/Notes:
Delivered prices calculated using Argus gasoline prices.
Shaded areas represent months when the Summer RVP Standard would have been in effect (May 1st - Sept. 15th).

13. Figure 3 presents an analysis of the price differential for ULSD between Midwest and East Coast markets. The ability of Pittsburgh consumers and/or wholesalers to

arbitrage between Midwest and Eastern refineries also is present for ULSD. While, as shown in Figure 3, Midwest markets provide access to lower delivered prices to Pittsburgh consumers and/or wholesalers in several months over the period 2012 through 2016, the east coast markets have on average provided the lowest delivered prices for ULSD delivered to Pittsburgh. Note that heating oil prices typically are correlated with ULSD prices, and these results for ULSD indicate that Pittsburgh consumers and/or wholesalers also have the ability to arbitrage between Midwest and Eastern refineries given Laurel's existing configuration.

Figure 3
Differential in Delivered Prices of Diesel to Pittsburgh From East Coast Compared to Midwest Refineries



Sources/Notes:
Delivered prices calculated using Argus ultra-low sulfur diesel prices.

14. A reversal of the Laurel pipeline would increase the transportation costs of delivering refined petroleum product from the eastern supply sources, assuming that this product could be shipped along the Laurel pipeline to Eldorado and then trucked to the Pittsburgh market. Pittsburgh consumers and/or wholesalers could either pay higher delivered prices for these refined petroleum products from the eastern markets or choose to switch supply sources to the higher cost western markets. Either option represents increased delivered prices for Pittsburgh consumers and/or wholesalers.

15. The minimum impact on consumers and/or wholesalers in the Pittsburgh area would be if the volumes currently delivered to Pittsburgh via Laurel were instead delivered to Eldorado, Pennsylvania, and then trucked to destinations in Pittsburgh, plus any incremental or offsetting cost from shifting volumes off of Laurel to being supplied from Midwest refineries. The impact on consumers and/or wholesalers in the Pittsburgh area would include the incremental cost of trucking product from Eldorado terminals to the Pittsburgh area compared to the existing incremental cost of moving product from Eldorado to Pittsburgh via Laurel. Trucking is significantly more costly than transporting by Laurel. For example, Laurel's incremental rate from Eldorado to Pittsburgh terminals is 0.30 cents/gallon,[16] while the incremental cost of trucking the same distance is 3.59 cents/gallon.[17] Therefore, for every 1,000 barrels/day (BPD) that shifted from being delivered to Pittsburgh to be delivered at Eldorado for further shipment to Pittsburgh would incur an additional $500,000 in incremental transportation costs over the course of a year.[18] Additionally, Laurel has not demonstrated that the terminals in and around Eldorado, which were configured to meet the demand for refined products surrounding the Eldorado area based on the existing configuration of the Laurel system, have the existing ability to handle additional volumes delivered into Eldorado, including additional grades of gasoline that are required to be sold in Pittsburgh during the summer months but are not required to be sold in the Eldorado area.[19] I estimate that, for every 1,000 BPD of volumes that are shifted from Pittsburgh to Eldorado, trucking product into Pittsburgh would require 4-5 trucks per day to incur longer hauls of approximately 97.5 miles each way. If 25,000 BPD of volumes shifted from being delivered in Pittsburgh to being delivered in Eldorado, that could cause 100-125 longer truck trips of 97.5 miles

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16 Pa. PUC No. 81, effective Jan. 1, 2012.

17 Note this trucking cost estimate is based on a movement of 97.5 miles from Eldorado, Pennsylvania to Neville Island, Pennsylvania, near downtown Pittsburgh. The trucking cost estimate is based on data provided by Laurel's affiliate, Buckeye, in the recent FERC Docket No. OR14-4-000 proceeding, and only includes the variable cost of trucking the 97.5 miles as any fixed costs associated with trucking would be expected to be incurred at any terminal location where a truck is loaded.

18 *See* Figure 7 below for more detail.

19 66 Fed. Reg. 19724 (April 17, 2001).

each way per day, or 36,000 to 45,625 longer truck trips per year incurring 3.5 million to 4.5 million miles of additional travel.

16. To quantify the magnitude of potential annual cost increases for Pittsburgh consumers and/or wholesalers due to the Laurel reversal, I first calculate the average monthly price for refined petroleum products in the Philadelphia, New York Harbor, and Chicago markets.[20] I add in the pipeline tariff costs to transport the product from its source market to Pittsburgh in order to find the delivered price. I then identify the market with the lowest delivered price for the appropriate refined petroleum product. Given the current EPA regulations for Pittsburgh on gasoline RVP in the summer months of May through September, I only consider prices for CBOB with a 7.8 RVP or RBOB during those months. In other months, I identify the minimum price source of any gasoline product.

17. Next, I perform the same delivered price analysis assuming that product deliveries from the eastern markets are transported to Eldorado via pipeline and then trucked to Pittsburgh. This generates a higher transportation cost and therefore a higher delivered price for refined petroleum products from those eastern markets. I again find the lowest delivered price for the appropriate product in each month and compare this lowest delivered price post-reversal to the historical lowest delivered price. For example, I find the lowest delivered price in May 2016 to be $1.547/gallon (which is based on CBOB 7.8 RVP sourced from New York Harbor), but post-reversal the lowest price would increase to $1.575/gallon (also based on CBOB 7.8 RVP sourced from New York Harbor, adjusting for the additional trucking costs less the difference in pipeline tariff from delivering at Eldorado rather than Pittsburgh); this is an increase in delivered prices of $0.028/gallon due to the reversal. Assuming these historical prices, if Pittsburgh consumers and/or wholesalers were to shift 1,000 BPD of gasoline from being delivered in Pittsburgh via Laurel to being delivered to Eldorado and trucked to Pittsburgh, their costs would increase by approximately $36,000 in that month due to the increase in delivered price. While Pittsburgh

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[20] Refined petroleum products, including CBOB, CBOB 7.8 RVP, RBOB, and ULSD prices, are based on historical daily Argus price data from December 2011 through December 2016.

consumers and/or wholesalers could purchase gasoline from the Chicago market instead, the price of gasoline from Chicago was $1.732/gallon in May 2016; this would have been a $0.185/gallon increase in costs.[21] In this example, the eastern markets were still cheaper even with the additional trucking costs. However, if trucking from Eldorado to Pittsburgh is not an option because of constraints at the terminal or otherwise, and instead consumers and/or wholesalers were forced to shift to Midwest supply alternatives instead of East Coast refinery supply, supply costs for every 1,000 BPD of volume that shifted would increase by over $235,000 for a month (the $0.185/gallon increase due to shifting from East Coast to Midwest supply). If 25,000 BPD of volume were to shift from being supplied from Philadelphia refineries via Laurel to being supplied by Midwest refineries, supply costs to consumers and/or wholesalers in the Pittsburgh area would increase by approximately $5.9 million for the one month based on this example.

18. As shown in Figure 4, over the period January 2012 through December 2016, at a minimum, annual gasoline costs for shipments to Pittsburgh would increase by over $280,000 per 1,000 BPD due to the Laurel reversal. For ULSD, the annual costs would increase even more, by over $300,000 per 1,000 BPD. As discussed above, the impact for heating oil is expected to be similar to the estimate for ULSD because of the correlation between heating oil and ULSD prices. These estimates are a minimum impact because the analysis assumes there are no constraints of delivering to Eldorado and trucking product from Eldorado to Pittsburgh. However, this assumption of no constraints does not appear reasonable as it is not clear there is terminal capacity at Eldorado to handle additional deliveries, and further, if Laurel were to reverse its segment east of Eldorado, the option of trucking East Coast supply from Eldorado would be eliminated.

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21 This price is based on RBOB in Chicago, which satisfies the summer standard in Pittsburgh. Argus does not report data for CBOB RVP 7.8 in Chicago. If the Laurel reversal caused Pittsburgh consumers and/or wholesalers to switch their supply source to Chicago for May 2016, the monthly cost impact per 1,000 BPD would be over $240,000.

Figure 4
Annual Cost to Pittsburgh Consumers and/or Wholesalers
Due to Laurel Pipeline Reversal per 1,000 BPD,
Assuming Trucking from Eldorado to Pittsburgh
($)

Year		Product	
		Gasoline	Diesel
		[1]	[2]
2012	[a]	$239,040	$187,354
2013	[b]	$272,776	$336,487
2014	[c]	$312,475	$380,038
2015	[d]	$349,454	$227,475
2016	[e]	$264,727	$421,497
Average	[f]	**$287,694**	**$310,570**

Sources/Notes:
Argus gasoline and ultra-low sulfur diesel prices.
Costs are calculated assuming a summer RVP standard in Pittsburgh, PA.
[f] = Average([a]:[e])

19. As shown in Figure 5, if trucking from Eldorado to Pittsburgh is not an option because of constraints at the terminal, constraints on truck deliveries, or otherwise, and instead consumers and/or wholesalers were forced to fully shift to Midwest supply alternatives instead of East Coast refinery supply, costs for every 1,000 BPD of volume that shifted would increase by over $1,700,000 per year for gasoline products and by approximately $900,000 per year for diesel products.

Figure 5
Annual Cost to Pittsburgh Consumers and/or Wholesalers Due to Laurel Pipeline Reversal per 1,000 BPD, Assuming No Trucking from Eldorado to Pittsburgh
($)

		Product	
Year		Gasoline	Diesel
		[1]	[2]
2012	[a]	$1,571,928	$252,407
2013	[b]	$1,894,024	$1,073,340
2014	[c]	$1,241,110	$1,259,044
2015	[d]	$2,455,095	$843,423
2016	[e]	$1,361,010	$916,600
Average	[f]	**$1,704,633**	**$868,963**

Sources/Notes:
Argus gasoline and ultra-low sulfur diesel prices.
Costs are calculated assuming a summer RVP standard in Pittsburgh, PA.
[f] = Average([a]:[e])

20. As discussed above, Pittsburgh area consumption of refined petroleum product is estimated to be greater than 100,000 BPD and is currently supplied from both the Midwest and East Coast markets. Assuming that 20,000 to 40,000 BPD of the Pittsburgh area consumption currently can be arbitraged between eastern and western supply sources, then the Laurel reversal would increase costs for Pittsburgh consumers and/or wholesalers by at least $5.8 million per year and potentially in the range of $34 million to $68 million per year. A hearing and further discovery would allow for a more detailed evaluation of the cost impacts to Pittsburgh consumers and/or wholesalers based on the volumes currently transported on Laurel that are likely to be forced to move to other supply alternatives in the event of a reversal on Laurel.

21. I consider this analysis to be conservative for multiple reasons. First, shifting volumes from being supplied from the eastern refineries to being supplied from refineries west of Pittsburgh will create pressure on Midwest prices to rise, which could further increase the delivered prices to the Pittsburgh area. Additionally, any constraints in the ability to truck refined petroleum products sourced in the eastern markets from Eldorado to Pittsburgh may further increase the delivered prices due to

higher transportation costs (*i.e.*, trucking over longer distances) or buying more products from higher cost Midwest refinery sources.

III. IMPACT ON PHILADELPHIA AREA REFINERIES

22. Laurel claims that the reversal of its system between Eldorado and Pittsburgh will not harm Philadelphia area refineries because those refiners have multiple alternatives to distribute product other than Laurel pipeline.[22] However, the reversal of the Laurel pipeline west of Eldorado will cause the existing Philadelphia shippers of refined product to the Pittsburgh area to receive lower revenue and profits due to being forced to either incur higher transportation costs to supply the Pittsburgh area, or being forced to shift volumes currently being delivered to other locations where a lower netback price is received. A netback price is the price at a destination market less the transportation costs to reach the destination. For example, if the price of gasoline delivered to Pittsburgh is $1.50/gallon, and the pipeline transportation rate from Philadelphia to Pittsburgh is $0.02/gallon, then the netback price to a refinery in Philadelphia of transporting and selling in Pittsburgh is $1.48/gallon.

23. At a minimum, the Laurel reversal would increase transportation costs to the Pittsburgh market for the Philadelphia area refiners, as refined petroleum products would have to be trucked from Eldorado if that were an option. Based on estimated trucking costs in the Pittsburgh area presented in Laurel's affiliate, Buckeye's, recent FERC proceeding, the additional transportation costs of shipping refined petroleum products from Philadelphia to the destination terminals in Pittsburgh would be an average of 3.34 cents/gallon as shown in Figure 6.[23]

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22 Laurel Application at P 42.

23 Note that this incremental trucking cost is based only on the estimated variable cost of trucking the additional miles from Eldorado to Pittsburgh area destinations relative to transporting to Pittsburgh via Laurel and does not include any of the fixed costs associated with trucking, which would be incurred in both Eldorado and Pittsburgh as product is loaded on a truck for ultimate delivery from wholesale terminals to retail stations via truck.

Figure 6
Additional Transportation Costs due to Laurel Reversal

Destination Terminal	Original Tariff (cents/gal)	Tariff plus Trucking (cents/gal)	Difference (cents/gal)
	[1]	[2]	[3]
Coraopolis	1.48	5.29	3.81
Delmont	1.35	3.85	2.49
Greensburg	1.38	3.94	2.56
Midland	1.63	6.06	4.43
Neville Island	1.60	5.05	3.46
Pittsburgh	1.46	4.75	3.29
Average	1.48	4.82	3.34

Notes:
[1]: Pa. PUC No. 81, effective Jan. 1, 2012.
[2]=[1]+ Trucking Costs.
[3]: [2] - [1].

24. Additional transportation costs would directly decrease the netback price to Philadelphia area refiners who sell refined petroleum products to the Pittsburgh area. Based on the average incremental transportation costs shown in Figure 6 above, if Philadelphia area refineries are able to truck product from Eldorado to the Pittsburgh area, the incremental transportation costs would increase by an average of 3.34 cents per gallon, which would directly reduce the netback price received by the refinery. In this case, as shown in Figure 7, the Laurel reversal would decrease annual revenues for Philadelphia area refiners by over $500,000 for every 1,000 BPD of volumes shipped to Eldorado and trucked to the Pittsburgh area.

Figure 7
Annual Impact on Philadelphia Area Refineries
Per 1,000 BPD Shifted from Pittsburgh to Eldorado,
Assuming Trucking from Eldorado to Pittsburgh

	Difference in Netback (cents/gal)	Number of Days	Impact of Shipping 1,000 BPD ($)
	[1]	[2]	[3]
Summer	-3.34	153	-$214,634
Non-Summer	-3.34	212	-$297,402
Annual	-3.34	365	-$512,036

Sources/Notes:
[1]: See Figure 6.
[2]: Summer refers to the period May through September. Non Summer is the remainder of the year.
[3]: ([1] x [2] x 1000 barrels/day x 42 gal/barrel) / 100 cents/dollar.

25. However, Philadelphia area refiners have access to other delivery markets as well. As netback prices from transporting and selling in the Pittsburgh markets fall due to the Laurel reversal, these Philadelphia refiners may be able to ship more refined petroleum products to other markets. I consider the delivery markets identified in Buckeye's recent FERC proceeding as potential alternatives and perform this netback analysis for each destination market.[24]

26. Figure 8 shows the 32 delivery locations I considered for a Philadelphia area refinery, along with the netback price calculation and ranking by location before the Laurel reversal. Even with the additional trucking costs from product being delivered to Eldorado instead of the Pittsburgh area, the Pittsburgh delivery markets would still offer the highest gasoline netback prices to Philadelphia area refineries during the summer months. Without the ability to truck gasoline from Eldorado to Pittsburgh, Philadelphia refineries would no longer have access to the highest netback price markets and would have to shift to lower-ranked markets.

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[24] Exhibit No. GP-32 in FERC Docket No. OR14-4-000.

Figure 8
Summer Gasoline Netback Prices by Delivery Location
Assuming No Trucking from Eldorado
(cents/gallon)

Location	w/o Reversal Netback	w/o Reversal Rank	w/ Reversal Netback	w/ Reversal Rank	Netback Difference
Delmont	148.48	1	n/a	n/a	n/a
Greensburg	148.45	2	n/a	n/a	n/a
Pittsburgh	148.37	3	n/a	n/a	n/a
Coraopolis	148.35	4	n/a	n/a	n/a
Neville Island	148.23	5	n/a	n/a	n/a
Midland	148.20	6	n/a	n/a	n/a
Williamsport	144.07	7	144.07	1	0.00
Philadelphia	142.70	8	142.70	2	0.00
Binghamton	142.11	9	142.11	3	0.00
Montello	141.91	10	141.91	4	0.00
Malvern	141.67	11	141.67	5	0.00
Icedale	141.41	12	141.41	6	0.00
Exton	141.27	13	141.27	7	0.00
Buffalo	141.24	14	141.24	8	0.00
Booth	140.58	15	140.58	9	0.00
Linden-Sunoco	139.60	16	139.60	10	0.00
Piscataway	139.60	17	139.60	11	0.00
Baltimore	139.48	18	139.48	12	0.00
Rochester	139.41	19	139.41	13	0.00
Eldorado	139.21	20	139.21	14	0.00
Northumberland	139.10	21	139.10	15	0.00
Newark	139.01	22	139.01	16	0.00
Kingston	138.09	23	138.09	17	0.00
Syracuse	138.07	24	138.07	18	0.00
Sinking Spring	137.97	25	137.97	19	0.00
New York	137.81	26	137.81	20	0.00
Macungie	137.15	27	137.15	21	0.00
Fullerton	137.05	28	137.05	22	0.00
Highspire	136.84	29	136.84	23	0.00
Mechanicsburg	136.81	30	136.81	24	0.00
New Kingstown	136.79	31	136.79	25	0.00
Carlisle	136.72	32	136.72	26	0.00

Sources/Notes:
Pittsburgh area destinations are designated in bold

27. Figure 9 presents the range of impacts that would occur from shifting summer standard gasoline from the Pittsburgh area to the next-best market, which is Williamsport, Pennsylvania, or a higher volume, but lower netback price market, such as Linden, New Jersey via the Sunoco pipeline. As indicated therein, if the total volumes shifted from Pittsburgh to other locations were of the magnitude of 20,000 to 40,000 BPD during the summer months, the total decrease in revenues to Philadelphia area refineries would be in the range of $5 million to $22 million per year.

Figure 9
Summer Impact on Philadelphia Area Refineries per 1,000 BPD of Gasoline Shifted to Lower Netback Price Locations

Alternative Delivery Locations	Summer Netback (cents/gal)	Pittsburgh Area Average Netback (cents/gal)	Difference (cents/gal)	Number of Summer Standard Days	Impact of Shipping 1,000 BPD
	[1]	[2]	[3]	[4]	[5]
Williamsport	144.1	148.3	-4.3	153	-$275,228
Linden-Sunoco	139.6	148.3	-8.7	153	-$561,999

Notes:
[1],[2]: See Figure 8.
[3]: [1] - [2].
[4]: Summer refers to the period from May through September.
[5]: ([3] x [4] x 1000 barrels/day x 42 gal/barrel) / 100 cents/dollar.

28. In the non-summer months, Upstate New York markets (including Binghamton, Buffalo, and Rochester) as well as Williamsport and Northumberland, Pennsylvania are the highest gasoline netback markets, with average netback prices to Philadelphia area refineries of approximately $1.29 per gallon. During the non-summer months, the Pittsburgh delivery locations are the lowest gasoline netback prices, averaging $1.20 per gallon. Since Philadelphia refiners would already be expected to be selling as much gasoline during the non-summer months as they can to the higher netback price markets before selling to the Pittsburgh area, there does not appear to be any additional incentive for any gasoline volumes from Philadelphia area refineries to shift to other destinations from the Pittsburgh area if the Laurel reversal were to eliminate delivery access to west of Eldorado.

29. I have also developed a netback analysis for the ULSD produced and delivered by Philadelphia area refineries. As shown in Figure 10, I evaluate the potential to shift

ULSD from the Pittsburgh area to alternative delivery locations.[25] The average annual netback price to Philadelphia area refineries for ULSD delivered to Pittsburgh area markets is $1.32 per gallon and the Pittsburgh area locations are six of the top nine ULSD netback price locations. Assuming that Philadelphia refineries could still truck the ULSD from Eldorado to the Pittsburgh area, the Laurel reversal would decrease netback prices in the Pittsburgh markets to approximately $1.29 per gallon and push them to the bottom of the netback price rankings.

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[25] Note it is my understanding that the cost of trucking ULSD is higher per gallon than the cost of trucking gasoline because a tanker truck can hold less ULSD than gasoline due to weight restrictions. However, in the analysis for this affidavit, I haven't attempted to adjust for any trucking cost difference between ULSD and gasoline.

Figure 10
Annual ULSD Netback Prices by Delivery Location
Assuming Trucking from Eldorado to Pittsburgh
(cents/gallon)

	w/o Reversal		w/ Reversal		Netback
Location	Netback	Rank	Netback	Rank	Difference
Binghamton	132.87	1	132.87	1	0.00
Delmont	132.55	2	130.06	23	-2.49
Greensburg	132.53	3	129.97	24	-2.56
Sinking Spring	132.52	4	132.52	2	0.00
Pittsburgh	132.45	5	129.15	28	-3.29
Coraopolis	132.43	6	128.61	30	-3.81
Eldorado	132.37	7	132.37	3	0.00
Neville Island	132.31	8	128.85	29	-3.46
Midland	132.28	9	127.85	31	-4.43
Syracuse	132.18	10	132.18	4	0.00
Williamsport	132.01	11	132.01	5	0.00
Kingston	131.90	12	131.90	6	0.00
Rochester	131.90	13	131.90	7	0.00
Highspire	131.72	14	131.72	8	0.00
Macungie	131.70	15	131.70	9	0.00
Mechanicsburg	131.69	16	131.69	10	0.00
New Kingstown	131.67	17	131.67	11	0.00
Fullerton	131.60	18	131.60	12	0.00
Carlisle	131.60	19	131.60	13	0.00
Buffalo	131.39	20	131.39	14	0.00
Northumberland	131.38	21	131.38	15	0.00
Philadelphia	131.21	22	131.21	16	0.00
Montello	130.43	23	130.43	17	0.00
Linden-Sunoco	130.30	24	130.30	18	0.00
Piscataway	130.30	25	130.30	19	0.00
Exton	130.27	26	130.27	20	0.00
New York	130.24	27	130.24	21	0.00
Malvern	130.18	28	130.18	22	0.00
Icedale	129.93	29	129.93	25	0.00
Booth	129.75	30	129.75	26	0.00
Newark	129.70	31	129.70	27	0.00
Baltimore	126.23	32	126.23	32	0.00

Sources/Notes:
Pittsburgh area destinations are designated in bold

30. If the ULSD netback prices to the Pittsburgh area decreased due to the Laurel reversal, the next-best alternative would be for Philadelphia area refineries to shift ULSD to other locations in Pennsylvania and upstate New York market at an estimated netback price of approximately $1.32 per gallon. As this would be a similar price to the netback prices from Pittsburgh markets, the effect on annual revenues and profits to Philadelphia area refineries would be minimal. However, if significant volumes shifted from Pittsburgh to low volume destinations in Pennsylvania or upstate New York, there could be a negative impact on commodity prices at those locations that decrease netback prices.

Figure 11
Annual Impact on Philadelphia Area Refineries per 1,000 BPD of ULSD Shifted to Lower Netback Price Locations

Alternative Delivery Locations	Netback (cents/gal)	Pittsburgh Area Average Netback (cents/gal)	Difference (cents/gal)	Number of Days	Impact of Shipping 1,000 BPD
[1]	[2]	[3]	[4]	[5]	[6]
Syracuse	132.2	132.4	-0.2	365	-37,520
Linden-Sunoco	130.3	132.4	-2.1	365	-325,665

[2]: See Figure 10.
[3]: See Figure 10.
[4]: [2] - [3].
[5]: Days in year.
[6]: ([4] x [5] x 1000 barrels/day x 42 gal/barrel) / 100 cents/dollar.

31. In summary, as shown in Figure 12, the Laurel reversal would cause annual revenues and profits for Philadelphia area refineries to decrease by $500,000 to $860,000 per 1,000 BPD of gasoline that would either be (1) transported and sold in the Pittsburgh market at higher transportation costs or (2) shifted to supply an alternative, lower-netback market. For ULSD, the annual revenue and profit impacts would range from $37,000 to $500,000 per 1,000 BPD.

Figure 12
Annual Revenue and Profit Impacts to Philadelphia Area Refineries Due to Laurel Reversal per 1,000 BPD
($)

	Gasoline			Diesel		
	Assuming Trucking	Shifting Volumes to Next-Best Netback	Shifting Volumes to Lower Netback	Assuming Trucking	Shifting Volumes to Next-Best Netback	Shifting Volumes to Lower Netback
	[1]	[2]	[3]	[4]	[5]	[6]
Summer	-$214,634	-$275,228	-$561,999			
Non-Summer	-$297,402	-$297,402	-$297,402			
Annual	-$512,036	-$572,630	-$859,401	-$512,036	-$37,520	-$325,665

Notes:
Non-Summer gasoline assumed to be transported to Pittsburgh at higher transportation costs.
[1] & [4]: See Figure 7.
[2] & [3]: See Figure 9.
[5] & [6]: See Figure 11.

32. As discussed above, these negative impacts to revenues and profits are likely understated. If volumes shift from Pittsburgh area deliveries to other destinations, additional volumes at other destinations will create pressure for prices at those destinations to fall, further lowering revenue and profits to Philadelphia refineries and other shippers originating product in the Philadelphia area. In addition, the trucking costs for ULSD may be higher than for gasoline as trucks are able to transport fewer barrels of ULSD per truck than they can transport of gasoline, yet I have not yet adjusted for this difference in trucking costs. Therefore, the negative impact on revenues for every 1,000 BPD shipped to Pittsburgh presented in Figure 12 is conservative. Further, as the volumes currently shipped on Laurel from Philadelphia area refineries to Pittsburgh area destinations is likely significantly higher than 1,000 BPD, the total impact is likely to be twenty to forty times higher, which imply potential decreased revenue to Philadelphia refiners of $10 million or more per year due to Laurel's proposed reversal of service. This issue would need to be further explored in an evidentiary hearing if Laurel's application is not summarily denied.

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Application of Laurel Pipe Line Company, L.P. for All Necessary Authority, Approvals and Certificates of Public Convenience To Change the Direction of Petroleum Products Transportation Service to Delivery Points West of Eldorado, Pennsylvania)	**Docket No. A-2016-2575829**

AFFIDAVIT

DISTRICT OF COLUMBIA) ss.

Daniel S. Arthur, being first duly sworn, deposes and says he is the same Daniel S. Arthur, whose testimony accompanies this Affidavit, that such testimony was prepared by him; that he is familiar with the contents thereof; and the facts set forth herein are true and correct to the best of his knowledge, information, and belief; and that he does adopt the same as his sworn testimony in this proceeding.

Daniel S. Arthur

On this 31st day of January, 2017, before me, the undersigned notary public, personally appeared Daniel S. Arthur, proved to me through satisfactory evidence of identification, which were Massachusetts Driver License S31297940 to be the person whose name is signed above, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his knowledge and belief.

Notary Public
My Commission Expires
May 31, 2019

My commission expires ______________

MA. LINDA P. RUMINOAN
NOTARY PUBLIC
DISTRICT OF COLUMBIA
MY COMMISSION EXPIRES 05-31-2019

DANIEL S. ARTHUR
Principal

Cambridge, MA | +1.617.864.7900 | Daniel.Arthur@brattle.com

Dr. Daniel Arthur is an economist consulting and providing litigation support primarily in the natural gas and oil industries. His economic areas of specialty include antitrust, pricing and ratemaking, and regulatory economics. Dr. Arthur holds both an M.A. and a Ph.D. in Economics from Northwestern University. He also has a B.S. in Business (Finance and Economics) and a B.S. in Mathematics and Statistics from Miami University. Prior to joining *The Brattle Group*, Dr. Arthur worked at Indiana University, where he worked on a team performing research in health economics. Dr. Arthur joined *The Brattle Group* in 1997.

AREAS OF EXPERTISE

- Antitrust
- Pricing and Ratemaking
- Regulatory Economics

EXPERIENCE

Antitrust

For numerous clients, Dr. Arthur has been involved in antitrust and market power cases before the Federal Energy Regulatory Commission, the Federal Trade Commission, and civil antitrust cases. Dr. Arthur's antitrust work includes the analysis of horizontal and vertical market power that would result from a proposed merger as well as the historical review of pricing behavior to determine whether market power was in fact exercised by an entity (or entities). Some of Dr. Arthur's consulting experience includes:

- On behalf of an oil refiner, Dr. Arthur presented testimony before the Federal Energy Regulatory Commission analyzing the market power held by a refined petroleum products pipeline seeking market based rates. Dr. Arthur's analysis focused on the competitiveness of alternatives to the pipeline from the refiner's perspective and the ability of the pipeline to increase prices in its destination markets. This analysis focused on the competitiveness of several geographic markets as well as how contracting between entities affects the substitutability of alternatives in the market.

- For a hearing before the Federal Energy Regulatory Commission and subsequent civil litigation, Dr. Arthur analyzed the market power resulting from control of natural gas pipeline capacity. The analysis involved defining the relevant markets, examining the anti-competitive behavior of holders of capacity to the destination market, and examining affiliate operations in the upstream market. One area of focus in this case was the impact of capacity constraints on the definition of the relevant market as well as the substitutability of alternatives to purchasing delivered natural gas. Analysis included examining the pricing behavior of market participants as well as examining the physical withholding of transportation capacity from the market.

- As the result of a settlement in a civil antitrust case, Dr. Arthur assessed the damages to entities consuming natural gas and electricity due to anti-competitive behavior in the natural gas transportation market. These damage estimates were performed at the class and individual entity level for numerous types of consumers and were used as the basis for the division of over $1 billion in settlement funds.

- On behalf of a natural gas pipeline involved in an antitrust suit, Dr. Arthur analyzed whether the pipeline was (or is) a monopolist within a specific market. His analysis focused on defining the relevant product and geographic markets and assessing which firms competing within the relevant markets possessed market power. Analysis for this case focused on three factors in defining what the alternatives available in the relevant market are: (1) the impact of capacity constraints; (2) natural gas pipelines' ability to expand; and (3) the substitutability of purchasing the right to pipeline capacity on the secondary release market to contracting directly with the pipeline for primary capacity rights.

- Dr. Arthur assisted in the development of expert testimony regarding the evaluation of market power and allegations of a conspiracy to monopolize by a gas gathering, processing and natural gas liquids transportation company in Texas. Analysis in this case involved: (1) a detailed comparison of the cost of entry into the natural gas processing market to the prices charged for the service; (2) the contracting behavior of purchasers of natural gas gathering and processing services; and (3) the relationship between the regulated natural gas liquids pipeline's rate and its underlying cost structure.

- Dr. Arthur assisted in the evaluation of whether a crude oil pipeline possessed market power in the context of a market based rates application before the Federal Energy Regulatory Commission. The primary issue in this case was how the substitutability of different grades of crude oil from a refiner's perspective affects the ability to use alternative pipeline transportation.

- On behalf of an electric utility, Dr. Arthur was part of a team which assessed the state of intrastate transmission, storage, and distribution services of the natural gas utilities in California, focusing on the aspects of the market that were functioning well under current regulations, where there existed or the potential existed for market power abuse, and made recommendations for restructuring or changing regulatory policy.

- On behalf of an owner of a natural gas pipeline, Dr. Arthur analyzed the antitrust implications of the owner's acquisition of another natural gas pipeline in the geographic area. This analysis was performed prior to making the decision on whether to acquire the pipeline and assisted the client in determining how the Federal Trade Commission would view the proposed transaction.

- Dr. Arthur assisted in the development of expert testimony on vertical market power relating to a proposed merger of a gas distribution company and an electric utility, examining the relationship between the natural gas and electric markets. Analysis focused on determining what the relevant product and geographic markets are and the incentives that would result from the proposed merged entity, as well as an assessment of whether behavioral or structural remedies would be necessary to alleviate potential market power concerns.

- Dr. Arthur analyzed the anti-competitive incentives that would result from the combination of two general partners of partnerships involved in natural gas liquids processing, fractionation, transportation, and trading. This analysis included examining the incentives to manipulate the availability of infrastructure to influence the commodity price, as well as the extent of the information regarding competitors' and customers' market positions that would be obtained as a result of the proposed combination.

Pricing and Ratemaking

Dr. Arthur's experience includes participation in several ratemaking proceedings for crude oil pipelines, refined petroleum products pipelines, natural gas pipelines, and natural gas liquids pipelines. Some of Dr. Arthur's areas of analysis in these proceedings include:

- Rate Base Determination: Dr. Arthur's analysis in several proceedings includes the issue of what is a reasonable rate base level when there are historical contracts that provided for the recovery of capital associated with the initial investment in the facilities.

- Income Tax Allowance: A contested issue in numerous proceedings, Dr. Arthur has been involved in the determination of the level of income tax allowance that should be provided to the unit holders of the master limited partnership that owns the regulated pipeline.

- Allocation of Unallocated Overhead Expenses to the Regulated Pipeline: Dr. Arthur has analyzed what a reasonable allocation is of unallocated overhead expenses from the parent organization to the regulated pipeline subsidiary using methodologies employed at the Federal Energy Regulatory Commission.

- Rate Design: Dr. Arthur's work regarding costs associated with pipeline expansions includes analyzing the question of whether to allocate the expansion costs to a subset of the pipeline system's customers, or to roll-in the costs with the rest of the system's costs and allocate the costs across all customers based on volumes and distances.

- Volume Level for Going-Forward Rates: Dr. Arthur's analysis for determining just and reasonable rates to be established on a going-forward basis includes examining what a representative level of volumes to be used to derive rates is. Proceedings where this issue has been particularly relevant is when there has been a recent capacity expansion or pro-rationing has been occurring due to operational restrictions that are expected to be lifted in the future.

- Analysis of Changed Circumstances: Dr. Arthur assisted in the development of expert testimony in an oil pipeline ratemaking proceeding before the Federal Energy Regulatory Commission, addressing the establishment of substantially changed circumstances in the economic basis of the rates in order for a shipper to successfully challenge an existing pipeline rate.

Other Economic Analysis

- On behalf of electric utilities owning nuclear generation plants and for testimony filed in Federal court, Dr. Arthur developed an empirical model of a trading market for rights to remove spent nuclear fuel. The model determined when individual utilities could expect their spent nuclear fuel to be removed if a trading market for rights existed.

- For a proposed gas pipeline expansion, Dr. Arthur analyzed whether there existed sufficient market demand to justify the expansion, and the impact of the proposed expansion on existing pipelines and producers.

- For an arbitration, Dr. Arthur assisted in the determination of the underlying events that caused a refined products pipeline to enter into bankruptcy protection. Dr. Arthur's analysis included an examination of the pipeline's changing financial position through time, sources of financing, requests for regulated rate changes, and the required pipeline integrity management program.

PUBLICATIONS

Comments (along with Dr. Romkaew P. Broehm and Mr. Gary Taylor) before the Commodities Futures Trading Association regarding the notice of Proposed Rulemaking Prohibition of Market Manipulation, 17 CFR Part 180, RIN Number 3038-AD27, January 2011.

"Improving the Performance of Natural Gas Markets in Electricity System Reliability" (with Matthew O'Loughlin and Elizabeth Lacey), *Electric and Natural Gas Business: Using New Strategies, Understanding the Issues*, Robert E. Willet, Editor, 2004: 75-89.

"Oil Pipeline Complaint Procedures Are Being Clarified," (with Matthew P. O'Loughlin and Steven H. Levine), *Natural Gas*, Vol. 20, No. 2, (September 2003).

"Gas Use in Electricity Generation: Increases Uncertain in Northeast, Midwest" (with Matthew P. O'Loughlin and Steven H. Levine), *Natural Gas Industry Analysis for Gas Year 2000-2001*, Robert E. Willett, Editor, 2000.

"Revision Rates Following Knee Replacement in the United States" (with D. Heck, C. Melfi, L. Mamlin, B. Katz, R. Dittus, and D. Freund), *Medical Care* 36(5) (May 1998): 661-669.

"Outcome Implications for the Timing of Bilateral Total Knee Arthroplasties" (with M. Ritter, L.A. Mamlin, C.A. Melfi, B.P. Katz, and D.A. Freund), *Clinical Orthopaedics and Related Research* No. 345 (1997): 99-105.

"Selecting a Patient Characteristics Index for the Prediction of Medical Outcomes Using Administrative Claims Data" (with C. Melfi, E. Holleman and B. Katz), *Journal of Clinical Epidemiology* 48(7) (1995): 917-26.

TESTIMONY

Testimony before the Federal Energy Regulatory Commission on behalf of Aircraft Service International Group, Inc. American Airlines, Inc., Delta Air Lines, Inc. Hookers Point Fuel Facilities LLC, Southwest Airlines Co., United Aviation Fuels Corporation and United Parcel Services, Inc. vs. Central Florida Pipeline LLC and Kinder Morgan Liquid Terminals LLC, Central Florida Pipeline Proceeding, Docket No. OR16-26-000, September 2016.

Testimony before the Federal Energy Regulatory Commission on behalf of Delta Air Lines, Inc., Atlas Air, Inc., and Polar Air Cargo Worldwide, Inc. v. Enterprise TE Products Pipeline Company LLC, Docket No. OR16-23-000, August 2016.

Testimony before the Federal Energy Regulatory Commission on behalf of Chevron Products Company, HollyFrontier Refining & Marketing LLC, American Airlines, Inc., Valero Marketing and Supply Company, and Western Refining Company, L.P. evaluating the reasonableness of SFPP's East Line rates, Docket No. OR16-6-000, June 2016.

Before the Federal Energy Regulatory Commission on behalf of Chevron Products Company, HollyFrontier Refining & Marketing LLC, US Airways, Inc., Valero Marketing and Supply Company and Western Refining Company L.P., *Chevron Products Company et al. v. SFPP, L.P.,* Docket No. OR 16-6-000, November 2015, June 2016.

Before the Federal Energy Regulatory Commission on behalf of Airlines for America, the National Propane Gas Association, and Valero Marketing & Supply Company, *Petition for a Rulemaking*, Docket No. RM15-19-000, September 2015.

Before the Federal Energy Regulatory Commission on behalf of Suncor Energy Marketing Inc. and Phillips 66 Company, *Seaway Crude Pipeline Company LLC*, Docket No. OR15-6-000, February 2015, February 2016, April 2016.

Before the Federal Energy Regulatory Commission on behalf of HollyFrontier Refining & Marketing LLC, *Osage Pipe Line Company, LLC*, Docket No. OR15-8-000, February 2015.

Before the Federal Energy Regulatory Commission on behalf of *American Airlines, Inc. v. Buckeye Pipe Line Company, L.P.*, Docket No. OR14-41-000, September 2014.

Before the Railroad Commission of Texas, *Westlake Ethylene Pipeline Corporation*, on behalf of Westlake Ethylene Pipeline Corporation, Docket No. 10358, June 2014, July 2014.

Before the Federal Energy Regulatory Commission, *North Dakota Pipeline Co. LLC*, on behalf of St. Paul Park Refining Corporation LLC, Docket No. OR14-21-000, March, 2014, April 2014.

Before the United States District Court Southern District of New York, on behalf of *Go Green Realty Corp. et al v. Liberty Petroleum Realty, LLC et al*, Docket No. 11CV5360 (DCF), December 2013

Before the Federal Energy Regulatory Commission, on behalf of *US Airways, Inc. v. Colonial Pipeline Company*, Docket OR14-17-000, December 2013.

Before the Federal Energy Regulatory Commission, on behalf of *Guttman Energy Inc. and PBF Holding Company LLC v. Buckeye Pipe Line Company and Laurel Pipe Line Company, L.P.*, Docket OR14-4-000, October 2013, November 2013, September 2014, February 2015.

Before the Federal Energy Regulatory Commission, on behalf of *United Airlines, Inc. and Southwest Airlines Company v. Colonial Pipeline Company*, Docket OR14-18-000, December 2013.

Before the Federal Energy Regulatory Commission, *Buckeye Pipe Line Company*, on behalf of Delta Air Lines, Inc., Continental Airlines, Inc., JetBlue Airways Corporation, United Air Lines, Inc. and US Airways, Inc., Docket Nos. OR13-3-000, December 2012, January 2015.

Before the California Public Utilities Commission, *Application of SFPP, L.P.* on behalf of Chevron Products Company, Phillips 66 Company, Southwest Airlines Company, Ultramar Inc., and Valero Marketing & Supply Company, Application No. 12-01-015, November 2012, February 2013, April 2013.

Before the Federal Energy Regulatory Commission, *Delta Air Lines, Inc., et al. v. Buckeye Pipeline Company, L.P.* on behalf of Delta Airlines, Continental Airlines, Inc., JetBlue Airways Corporation, United Air Lines, Inc., and US Airways, Inc., Docket No. OR12-28-000, September 2012, September 2014, January 2015.

Before the Federal Energy Regulatory Commission, *Mobil Pipe Line Company*, on behalf of Suncor Energy Marketing, Inc., Canadian Natural Resources Limited, and Husky Marketing and Supply Company, Docket No. IS12-553-000, September 2012.

Before the Federal Energy Regulatory Commission, *Enterprise Products Partners L.P. and Enbridge Inc.* on behalf of Continental Resources, Inc., Husky Marketing and Supply Company, Suncor Energy Marketing, Inc., and Canadian Natural Resources Limited, Docket No. OR12-4-000, August 2012

Before the Federal Energy Regulatory Commission, *NuStar Logistics, L.P.*, on behalf of Valero Marketing and Supply Company, Docket Nos. IS12-502-000 and IS12-503-000 (not consolidated), July 2012.

Before the Federal Energy Regulatory Commission, *Buckeye Pipe Line Company*, on behalf of Delta Air Lines, Inc., Docket Nos. OR12-185-000, June 2012.

Before the Federal Energy Regulatory Commission, *Osage Pipeline Company, LL*, on behalf of HollyFrontier Refining and Marketing, LLC, Docket No. OR12-21-000, June 2012.
Before the Federal Energy Regulatory Commission, *Mobil Pipe Line Company*, on behalf of Suncor Energy Marketing, Inc. and Canadian Natural Resources Limited, Docket No. OR07-21-000, June 2012.

Before the Federal Energy Regulatory Commission, *Plantation Pipe Line Company*, on behalf of United Airlines Fuel Corporation, Docket No. IS12-382-000, June 2012.

Before the Federal Energy Regulatory Commission, *Plains Pipeline, L.P.,* on behalf of Valero Marketing and Supply Company, Docket No. IS12-362-000, June 2012.

Before the Federal Energy Regulatory Commission, *Nustar Logistics, L.P.*, on behalf of Valero Marketing and Supply Company, Docket No. IS12-314-000, June 2012.

Before the Federal Energy Regulatory Commission, *Seaway Crude Pipeline Company LLC*, on behalf of Suncor Energy Marketing, Inc., Canadian Natural Resources Limited, and Denbury Onshore LLC, Docket No. IS12-226-000, April 2012, October 2012.

Before the Federal Energy Regulatory Commission, *Enterprise TE Products Pipeline Company LLC*, on behalf of National Propane Gas Association *et al.*, Chevron Products Company, CHS, Inc., HWRT Oil Company LLC, and Truman Arnold Companies, Docket No. IS12-203-000, April 2012, October 2012.

Before the Federal Energy Regulatory Commission, *Enterprise TE Products Pipeline Company LLC*, on behalf of National Propane Gas Association *et al.*, Chevron Products Company and HWRT Oil Company LLC, Docket Nos. IS12-160-000 and IS12-165-000 (not consolidated), February 2012.

In arbitration, *Natural Gas Pipeline Company of America LLC v. Kinder Morgan Kansas, Inc.,* on behalf of Natural Gas Pipeline Company of America LLC, June 2011.

Before the Federal Energy Regulatory Commission, *Enterprise TE Products Pipeline Company LLC*, on behalf of Chevron Products Company and Lion Oil Company, Docket No. OR 11-6-000, April 2011, February 2012.

Before the Federal Energy Regulatory Commission, *SFPP, L.P.,* on behalf of Chevron Products Company, ConocoPhillips Company, Southwest Airlines Co., and Valero Marketing and Supply Company, Docket No. IS09-437-000, March 2010.

Before the Federal Energy Regulatory Commission, *Magellan Pipeline Company, L.P.*, on behalf of Frontier Oil and Refining Company, Docket No. OR10-6-000, March 2010, January 2011.

Before the California Public Utilities Commission, *Application of SFPP, L.P.*, on behalf of Chevron Products Company and ConocoPhillips Company, Application Nos. 09-05-014 *et al.*, December 2009.

Before the Federal Energy Regulatory Commission, *SFPP, L.P.*, on behalf of Continental Airlines, Inc., Northwest Airlines, Inc., Southwest Airlines Co., US Airways, Inc., Chevron Products Company, ConocoPhillips Company, and Valero Marketing and Supply Company, Docket No. IS08-390-002, January 2009, June 2011, February 2012.
Before the Federal Energy Regulatory Commission, *SFPP, L.P.*, on behalf of America West Airlines, Inc., Continental Airlines, Inc., Northwest Airlines, Inc., Southwest Airlines Co., US Airways, Inc., Chevron Products Company, and ConocoPhillips Company, and Valero Marketing and Supply Co., Docket No. OR03-5-000, June 2008, October 2008.

Before the Federal Energy Regulatory Commission, *SFPP, L.P.*, on behalf of Chevron Products Company and ConocoPhillips Company, Docket No. OR03-5-001, April 2008.

Before the Federal Energy Regulatory Commission, *Mobil Pipe Line Company*, on behalf of Suncor Energy Marketing Inc. and Canadian Natural Resources Limited, Docket No. OR07-21-000, October 2007, November 2007, April 2008, July 2008.

Before the Federal Energy Regulatory Commission, *SFPP, L.P.*, on behalf of Chevron Products Company, ConocoPhillips Company, and Valero Marketing and Supply Company, Docket Nos. OR96-2-012, *et al.*, April 2007.

Before the Federal Energy Regulatory Commission, *Mid-America Pipeline Company, LLC*, on behalf of National Propane Gas Association, AmeriGas Propane, L.P., CHS, Inc., ConocoPhillips Company, Ferrellgas, L.P., and Targa Liquids Marketing and Trade, Docket Nos. IS05-216-003, *et al.*, March 2007.

Before the Federal Energy Regulatory Commission, *SFPP, L.P.* on behalf of ConocoPhillips Company, Docket Nos. OR96-2-000 *et al.*, April 2006.

Declarations before the Superior Court of the State of California in support of Ex Parte Applications for Entry of Third and Fourth Distribution Orders in Natural Gas Antitrust Cases I, II, III, and IV [J.C.C.P. Nos. 4221, 4224, 4226 and 4228], April 2005, May 2005, December 2005.

Before the Federal Energy Regulatory Commission, *Sunoco Pipeline L.P.* on behalf of ConocoPhillips Company, Docket No. OR05-7-000, June 2005, August 2005.

Before the Federal Energy Regulatory Commission, *Shell Pipeline Company L.P.* on behalf of ConocoPhillips Company, Docket No. OR02-10-000, January 2004, March 2004.