UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Seaway Crude Pipeline Company LLC	)	**Docket No. IS12-226-000**

PREPARED DIRECT AND ANSWERING TESTIMONY OF
ELIZABETH H. CROWE

ON BEHALF OF

APACHE CORPORATION, CHEVRON PRODUCTS COMPANY
and NOBLE ENERGY, INC.

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October 19, 2012

SUMMARY OF THE PREPARED DIRECT AND ANSWERING TESTIMONY OF ELIZABETH H. CROWE ON BEHALF OF APACHE CORPORATION, CHEVRON PRODUCTS COMPANY and NOBLE ENERGY, INC. (CORRECTED)

Ms. Crowe is President of Foresite Energy Services, LLC, an independent firm providing economic consulting services to the regulated energy industry. Ms. Crowe's testimony demonstrates that Seaway's proposed cost of service is significantly in excess of a just and reasonable cost-based level, and that Seaway's proposed rates for uncommitted shippers are not based on the underlying costs of providing service, and should be rejected. Ms. Crowe recommends the following:

In light of the major expansion of the Seaway system anticipated to be in service well before the end of the test period in this proceeding, two sets of rates should be established at this time; one to be effective during the initial phase of service, and one to become effective on the in-service date of the expansion, currently expected to occur in January 2013.

Seaway's proposed asset write-up of almost $1.1 billion should be rejected by the Commission, and the actual NBV of the Seaway long-haul pipeline should be used to establish cost-based rates in this proceeding.

No AFUDC should be applied or accrued, as the pipeline was continuously operating and its owners were allocated its share of the resulting revenues.

Seaway should be required to allocate a full and equitable share of all operation and maintenance ("O&M") costs to its non-jurisdictional segments, based on gross carrier property in service ("CPIS"), revenue and direct labor ratios. Additionally, Seaway's proposed O&M costs should be reduced to levels reflected in its recent historical actual costs and contained in its own internal projections of costs for the reversed pipeline.

Actual capital structure (debt and equity) ratios, and actual costs of debt for the two owners, should be used to establish the approved rate of return and associated income taxes in this proceeding, and the return on equity ("ROE") should be premised on the Commission's approved discounted cash flow ("DCF") methodology, and set at the median of the resulting range. Additionally, Seaway should only be permitted to include in its cost of service 50% of the total income tax allowance calculated from its ROE.

Finally, rates established in this proceeding for transportation of crude oil tendered by uncommitted shippers, who did not qualify as "committed shippers" under either of the two open seasons held by Seaway, must be cost-based in order to preclude the exercise of market power by the two owners of the pipeline. Cost-based rates for uncommitted service, reflecting the positions summarized above and discussed herein, should be set at $0.5050/barrel for the initial period of operation and $0.1803/bbl for service subsequent to the January 2013 expansion.

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PREPARED DIRECT AND ANSWERING TESTIMONY
OF ELIZABETH H. CROWE
on behalf of
APACHE CORPORATION, CHEVRON PRODUCTS COMPANY
and NOBLE ENERGY, INC.

Introduction

Q. Please state your name and business address.

A. My name is Elizabeth H. Crowe. My address is 101 Topsfield Road, Wenham, Massachusetts 01984.

Q. By whom are you employed and in what capacity?

A. I am President of Foresite Energy Services, LLC, an independent firm providing economic consulting services to the regulated energy industry.

Q. Please briefly summarize your educational and professional background.

A. I received a Bachelor of Arts degree in Economics from Wellesley College in 1975. In 1981, I joined Swanson Energy Group, Inc., where I worked in various capacities ending with the position of Vice President. In 2001, I formed Foresite Energy Services, LLC. The majority of my consulting work has concerned rate proceedings, complaint cases, certificate filings and related regulatory policy issues for common carrier oil pipelines and interstate natural gas pipelines before the Federal Energy Regulatory Commission ("Commission"). I have evaluated and provided testimony on all ratemaking issues, including, but not limited to, cost of service, capital structure, cost of capital, cost classification, cost allocation, billing determinants and rate design. A list of the proceedings in which I have testified, filed testimony, or otherwise been involved is attached as Exhibit No. ACN-2.

Purpose of Testimony

Q. What is the purpose of this direct testimony?

A. I have been asked by Apache Corporation, Chevron Products Company and Noble Energy, Inc. ("Apache, Chevron and Noble") to examine the testimony, exhibits, discovery materials and other relevant public information related to the April 13, 2012 Tariff Filing and supporting testimony filed August 2, 2012 of Seaway Crude Pipeline Company LLC ("Seaway") in the above-captioned docket. I have evaluated the derivation of the cost of service and resulting initial cost-based rates proposed by Seaway for interstate transportation of crude oil by uncommitted shippers. In this testimony, I make recommendations concerning appropriate cost of service, cost allocation, throughput volumes and rate design methodologies that should be used to derive Seaway's cost-based rates in this proceeding.

Q. Please describe in general terms the background to this proceeding as it relates to the matters addressed in your testimony.

A. Seaway is currently jointly and equally owned by Enterprise Products Partners L.P. ("Enterprise") and Enbridge Inc. ("Enbridge"). This is the first rate filing that Seaway has made to implement cost-based rates on its pipeline under the Commission's regulations for oil pipelines governing cost of service ratemaking.[1] Prior to its filings in this docket, Seaway had been operating under indexed rates that had either been grandfathered under the Energy Policy Act of 1992 or were established by the agreement of one third-party shipper.[2] This initial cost of service filing by Seaway is the first opportunity for shippers and other parties to participate in the establishment of rates that are truly cost-based and not simply negotiated in the marketplace. Thus, this proceeding is extremely important to all concerned, in order to ensure that shippers on Seaway are protected from the exercise of market power by Seaway and its owners.

Summary of Findings and Recommendations

Q. Please summarize your findings and recommendations in this case.

A. I find that Seaway's proposed cost of service is significantly in excess of a just and reasonable cost-based level. In addition, I find that Seaway's proposed rates for uncommitted shippers are not based on the underlying costs of providing service, and should be rejected.

In light of these findings, I make the following recommendations with respect to the cost of service and design of rates that should be approved for Seaway in this proceeding:

1) *Establishment of two sets of rates in this proceeding:* In light of the major expansion of the Seaway system anticipated to be in service well before the end of the test period in this proceeding, two sets of rates should be established at this time; one to be effective

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[1] 18 C.F.R. §§ 342.2(a) and 342.4(a) (2012).
[2] 18 C.F.R. §§ 342.2(b) and 342.3 (2012).

during the initial phase of service, and one to become effective on the in-service date of the expansion, currently expected to occur in January 2013.

2) *Treatment of the proposed write-up of acquired assets:* Seaway's proposed asset write-up of almost $1.1 billion, representing almost 2000% of the underlying net book value ("NBV") of $59 million, should be rejected by the Commission, and the actual NBV of the Seaway long-haul pipeline should be used to establish cost-based rates in this proceeding. In the alternative, and at a minimum, the goodwill costs should be excluded from Seaway's depreciable rate base.

3) *Allowance For Funds Used During Construction* ("AFUDC"*):* No AFUDC should be applied or accrued for Enbridge's purchase of its 50% ownership prior to the reversal of the system, as the pipeline was continuously operating and Enbridge was allocated its share of the resulting revenues during the period for which it held its ownership interest in the system.

4) *Allocation of costs to non-jurisdictional portions of the Seaway system:* Seaway should be required to allocate a full and equitable share of all operation and maintenance ("O&M") costs to its non-jurisdictional segments, based on gross carrier property in service ("CPIS"), revenue and direct labor ratios. The same principle should apply if any purchase price adjustment is allowed relative to Enbridge's acquisition of its 50% interest in Seaway.

5) *Capital structure and rate of return:* Actual capital structure (debt and equity) ratios, and actual costs of debt for the two owners, should be used to establish the approved rate of return and associated income taxes in this proceeding. In addition, the return on equity ("ROE") should be premised on the Commission's approved discounted cash flow

("DCF") methodology, and should be set at the median of the resulting range, if the asset write-up is disapproved, or the low end of the range, if the write-up is allowed.

6) *O&M costs*: Seaway's proposed O&M costs should be reduced to levels reflected in its recent historical actual costs and contained in its own internal projections of costs for the reversed pipeline.

7) *Income tax allowance:* Seaway should only be permitted to include in its cost of service 50% of the total income tax allowance calculated from its ROE, given that one of its owners is a master limited partnership ("MLP") that is not subject to any income tax liability.

8) *Design of rates for uncommitted service:* Rates established in this proceeding for transportation of crude oil tendered by uncommitted shippers, who did not qualify as "committed shippers" under either of the two open seasons held by Seaway, must be cost-based in order to preclude the exercise of market power by the two owners of the pipeline, whose affiliates hold **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]** [redacted] **[END HIGHLY CONFIDENTIAL INFORMATION]** of the committed shipper contracted capacity. Cost-based rates for uncommitted service, reflecting the positions summarized above and discussed herein, should be set at \$0.5050/barrel for the initial period of operation and \$0.1803/bbl for service subsequent to the January 2013 expansion.

Establishment of Two Sets of Rates

Q. Please explain why you propose that two different sets of rates be established in this proceeding to be applicable to service on Seaway.

A. I recommend that two different sets of rates be established in this proceeding because a major expansion of the system is expected to be placed into service during the test period in this case. A twelve-month test period that reflects one full month of north-to-south operations would begin in June 2012, and end in May 2013. Even assuming that Seaway's total estimated capacity of 135,000 barrels per day ("bpd") is correct,[3] Seaway's initial capacity will almost triple, increasing to 400,000 bpd, early in 2013 through the addition of an origin pumping station at Cushing.[4] The cost of this expansion is anticipated to be relatively small,[5] which means that the impact of the expansion should be to reduce rates significantly. Thus, in order for rates established in this proceeding to be just and reasonable even through a full twelve-month period, the initial rates must be modified to take into account the costs and volumes of the expansion that is planned to go into service just a few months from now, and prior to the commencement of the hearing in this case.

Q. Have you estimated the impact on rates of the January 2013 capacity expansion?

A. Yes. My calculations, shown on Exhibit No. ACN-5, demonstrate that, even using Seaway's proposed cost of service and underlying assumptions filed in this case, the planned January 2013 capacity expansion should reduce the average fully allocated cost rate by 66%.

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[3] Seaway estimates that its initial operational capacity will be 135,000 bpd, assuming that 90% of its shipped volumes are light crude oil and 10% are heavy crude oil. Seaway has not provided any support for these assumptions. Moreover, Seaway's public statements and its own webpage establish that the pipeline's design capacity is 150,000 bpd. *See* www.seawaypipeline.com.

[4] *See* Seaway's response to Data Request SNC 2-33, attached here as Exhibit No. ACN-3.

[5] *See* Seaway's response to Data Request SNC 2-36, attached here as Exhibit No. ACN-4.

Disallowance of Proposed Asset Write-Up

Q. Please begin by summarizing the relevant background to this issue as it pertains to the treatment of Enbridge's $1 billion proposed asset write-up for ratemaking purposes.

A. Prior to May 2012, Seaway transported crude oil northward from the Gulf Coast of Texas to Cushing, Oklahoma. Prior to November 2011, the pipeline was jointly and equally owned by Enterprise and ConocoPhillips Company ("ConocoPhillips"). In November 2011, Enbridge purchased ConocoPhillips' share of Seaway. The direction of flow on the pipeline was subsequently reversed to transport crude oil southward from Cushing to the Gulf Coast of Texas. Seaway began operating on a north-to-south basis, from Cushing to Texas, in May 2012.

Enbridge paid $1.15 billion to acquire ConocoPhillips' 50% ownership interest, or 1,755% more than the $59 million NBV of the underlying assets it purchased.[6] Seaway seeks to include the entire $1.1 billion purchase price write-up over and above book value, including more than $600 million specifically designated as goodwill by Enbridge in its financial reports and records, in the depreciable rate base of the pipeline.[7] The portion designated as goodwill is more than 50% of the total purchase price paid by Enbridge.

Q. What is your recommendation for how the Commission should treat the $1.1 billion write-up proposed by Seaway for inclusion in its cost-based rates in this proceeding?

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[6] *See* Exhibit SEA-24, Workpaper 4, column (b), Line 3 (showing an approximately $59 million CPIS for Enterprise's 50% share of Seaway); Seaway's response to Data Request SNC 2-23, attached here as Exhibit No. ACN-6.

[7] *See* Seaway's response to Data Request SNC 2-45, attached here as Exhibit No. ACN-7, and Enbridge's 2011 Annual Report, a publicly available document, at page 137.

A. The Commission should not allow the $1.1 billion write-up of NBV to be included in the calculation of cost-based rates in this proceeding. From an economic and ratemaking perspective, there are three main reasons this write-up should be disallowed. From a regulatory perspective, there are significant additional policy and precedential concerns I believe the Commission should carefully weigh and consider.

The three primary economic bases on which I recommend this proposal be rejected are: 1) the write-up is entirely unrelated and disproportionate to underlying costs, and thus, cannot be considered to produce just and reasonable cost-based rates when it is included in the depreciable rate base for Seaway's cost of service; 2) inclusion of the write-up conveys excessive market power and unwarranted potential for windfall profit to the two parent companies of the owners of the pipeline, who through their affiliates will hold **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]** [redacted] **[END HIGHLY CONFIDENTIAL INFORMATION]**;[8] and 3) the write-up does not satisfy the Commission's two-pronged test, because the change in direction of flow by the pipeline does not constitute sufficiently new use or service, nor does it convey quantifiable monetary benefits to customers ~~**[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**~~ (other than affiliates of the pipeline's owners) ~~**[END HIGHLY CONFIDENTIAL INFORMATION]**~~ sufficient to justify a cost write-up of this magnitude.

[8] *See* Seaway's response to Data Request SNC 2-36, attached here as Exhibit No. ACN-8. **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]** [redacted]. **[END HIGHLY CONFIDENTIAL INFORMATION]**

Q. Please explain how inclusion of the $1.1 billion write-up cannot produce just and reasonable cost-based rates.

A. As indicated above, the $1.1 billion write-up constitutes a 1,755% increase over the NBV of Enbridge's acquired 50% share in the Seaway pipeline. The sheer magnitude of the proposed write-up, **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]** [redacted] **[END HIGHLY CONFIDENTIAL INFORMATION]** should constitute cause for greater scrutiny of Seaway's request for the Commission's endorsement of this extreme proposed departure from cost-based ratemaking. While there have been other cases in which the Commission has approved inclusion of a write-up above NBV to be included in a jurisdictional pipeline's rates, there are none to my knowledge that even approach the magnitude of the one proposed here by Seaway **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]** [redacted] **[END HIGHLY CONFIDENTIAL**

INFORMATION]

The fact that Seaway was able to negotiate committed rates that are significantly higher than a cost-based rate does not make the inclusion of a 1,755% write-up of NBV just and reasonable. This is particularly true given that the committed rates were negotiated long before any shipper would have had access to the actual cost-based data now filed by Seaway in this docket. In the absence of a cost-based rate option, an economically rational shipper might be willing to pay up to the prevailing price differential between its supply and delivery markets. If that prevailing price differential is higher than a just and reasonable cost-based rate, that only means that the pipeline has succeeded in capturing a monopoly rent equal to the difference between the market price and a cost-based, just and reasonable rate. Thus, if the Commission were to approve tariff rates for uncommitted shippers that, by means of a 1,755% write-up of NBV, approach the level of the market price for transportation of crude oil between Cushing and the Texas Gulf Coast, this would effectively allow Seaway to charge market-based rates, which the Commission has already rejected.[9] The Commission should not endorse the exercise of market power on the part of the pipeline at the expense of protecting the public interest.

Q. Turning to your second point, please explain how this particular proposal and the circumstances existing on this particular pipeline provide the owners with unwarranted potential windfall profit if the Commission were to approve rates for crude oil transportation on Seaway that include the $1.1 billion proposed write-up of assets.

[9] *Enterprise Products Partners L.P.*, 139 FERC ¶ 61,099, *order granting reh'g,* 139 FERC ¶ 61,255 (2012).

A. Looking just at Seaway itself, **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]** [redacted] **[END HIGHLY CONFIDENTIAL INFORMATION]** there is substantial opportunity to earn windfall profits on the entire difference between a cost-based rate reflecting the actual underlying costs of the pipeline and the inflated rate reflecting the $1.1 billion write-up. Removing the $1.1 billion write-up from Seaway's proffered cost of service and keeping all other proposed costs and inputs unchanged reduces the annual cost of service from $188.5 million to $40 million. This means that Seaway's proposed cost of service is $148.5 million, or 370%, higher than a cost of service based on NBV.

[BEGIN HIGHLY CONFIDENTIAL INFORMATION] [redacted] **[END HIGHLY CONFIDENTIAL INFORMATION]**

To understand the full potential for windfall profit, however, it is important to understand the larger picture unfolding in the oil transportation market, particularly the market controlled by Enbridge. Exhibit No. ACN-9 is a map provided by Enbridge in a 2012 investor presentation. It shows the current and future planned expansions of Enbridge-owned oil transportation assets between Alberta, Canada and the U.S. Gulf Coast of Texas. This means that Enbridge will control a significant portion, if not all, of the entire crude oil transportation direct corridor between the rapidly growing oil sands of Alberta and the U.S. Gulf Coast of Texas. More importantly, the company is moving forward with joint capacity expansions of this transportation corridor in 2014. Enbridge plans to expand its existing Spearhead Pipeline, which runs from Chicago to Cushing, and also plans to expand Seaway from Cushing to the Gulf Coast. These expansions will double its existing capacity along this corridor. The Spearhead Pipeline loop is called Flanagan South, and will include a 20-year lease of capacity by an Enbridge affiliate on the expanded Seaway system.[10]

These planned expansions will increase Enbridge's market power position ~~[BEGIN HIGHLY CONFIDENTIAL INFORMATION]~~ and exacerbate the concerns discussed above with respect to affiliate control of Seaway's capacity. ~~[END HIGHLY CONFIDENTIAL INFORMATION]~~ In addition, they underscore the necessity for rates established in this proceeding to be properly cost-based, because with the planned 2014 investment of an additional $1 billion in pipeline infrastructure (see Exhibit ACN-9), rates on Seaway could increase dramatically in the future.

Q. Turning to your third point, please explain why the reversed Seaway pipeline does not meet the Commission's two-prong test for including a write-up in its depreciable rate

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[10] *See* Seaway's response to Data Request SNC 2-44, attached here as Exhibit No. ACN-10.

base for purchased assets.

A. According to Commission policy, a pipeline can only include the NBV of acquired assets in its depreciable rate base. The Commission will make an exception to this rule when the pipeline satisfies a two-prong test. Under the Commission's two-prong test for inclusion of a purchase price adjustment ("PPA") in rate base, the pipeline must show that 1) the assets are being devoted to a new public service, so that customers under the pipeline's previous ownership will not pay higher depreciation for the same assets under the new ownership; and 2) customers receive quantifiable monetary benefits as a result of the acquisition.[11]

With respect to the first prong of the test, the reversed Seaway pipeline cannot be considered to be providing a new or even materially changed service because it is providing the same service it always has – transportation of light and heavy crude oil – in the opposite direction. In this respect, it is similar to gas pipelines offering back-haul in place of forward-haul service, or flexible receipt and delivery points. The significant changes in North American oil and gas markets as a result of recent oil sand and gas shale production developments that have resulted in new flow patterns on existing pipelines should not precipitate or provide cause for new and exorbitant profits to be earned on the transportation network already in place.

In addition, there has not been any significant change in the portfolio of shippers using the Seaway line before and after its reversal. Seven uncommitted and committed rate shippers that shipped on Seaway prior to the reversal have already shipped on the reversed Seaway, based on only the first three months of operational data for the reversed

[11] *See, e.g., Enbridge Energy Company,* 110 FERC ¶ 61,211 at P 27 (2005) ("*Spearhead*").

pipeline.[12] **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]** [redacted] **[END HIGHLY CONFIDENTIAL INFORMATION]** Additionally, shippers have moved light and heavy crude oil on both the pre-reversal Seaway and the reversed Seaway pipeline.[14]

Finally, only 50% of the ownership interest changed, and Enterprise continues to operate the system post-reversal just as it had pre-reversal. The bottom line is that the change in direction of service does not constitute a fundamentally different service or new use into which the Seaway asset is being placed.

Q. With respect to the second prong of the Commission's test, has Seaway demonstrated that Enbridge's acquisition of its 50% ownership interest in Seaway provides a clearly demonstrable monetary benefit to customers?

A. No. Most importantly, Seaway's proposed write-up is equal to, or possibly greater than, the cost of building a new pipeline. This is demonstrated by Enbridge's own projections that it will cost $1.0 billion to construct their 50% share of a brand new pipeline looping

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[12] Exhibit Nos. ACN-11, ACN-12, ACN-13.
[13] **[BEGIN HIGHLY CONFIDENTIAL INFORMATION]** [redacted] **[END HIGHLY CONFIDENTIAL INFORMATION]** *See* Exhibit No. ACN-12.
[14] Exhibit Nos. ACN-11 and ACN-12.

the existing Seaway system.[15] This proposed new pipeline will have a capacity of 400,000 bpd, which is six times greater than the capacity of Enbridge's share of the existing pipeline.[16] Yet Enbridge proposes a more than $1 billion write-up for just the existing 135,000 bpd of capacity. In addition, the $1 billion estimate for the new pipeline includes a lateral extending 85 miles beyond the terminus of the existing jurisdictional pipeline. All in all, Seaway has not shown that there are *any* cost savings resulting from Enbridge's acquisition of an existing pipeline, compared to construction of a new one. In fact, Enbridge's own new construction cost projections indicate that its proposed write-up for the existing system is actually greater than the cost of building a new line with far greater capacity than Enbridge's 67,500 bpd share of Seaway's existing capacity.

Moreover, Seaway's proposed write-up has removed or significantly reduced the opportunity to economically access new markets that might have otherwise been afforded to new customers. By proposing rates that are so high they capture much, if not all, of the price differential between the production basin and the delivery markets, Seaway is eviscerating one of the Commission's bases for accepting some amount of asset write-up in jurisdictional rates—that the acquisition confers an economic benefit on customers.[17]

Q. Do you see any alternative to full inclusion or full exclusion of the $1.1 billion asset write-up amount?

A. In my view, there is no sound justification for including any amount of write-up above NBV for the Enbridge 50% share of Seaway, for the reasons discussed above. However, should the Commission determine that there is cause to allow some amount of write-up, it

[15] *See* Exhibit No. ACN-9.
[16] 400/(135/2) = 5.92
[17] *Spearhead,* P 30.

is my opinion that the amount designated by Enbridge in its financial reports as goodwill should be disallowed for inclusion. Enbridge's own accounting for its purchase attributes more than $600 million - more than 50% - of the total acquisition price to goodwill, as discussed above.[18] Goodwill is an ascription of intangible value to an asset that is attributed subjectively by the purchaser. It is exempt from taxation and, according to GAAP, cannot even be amortized any longer. This means that in no case should Seaway be allowed to depreciate or recover an income tax allowance on the goodwill portion of its write-up.[19]

In addition, there have been clear and unqualified Commission statements that goodwill may not be included in rate base.[20] Thus, should the Commission determine that some portion of the $1.1 billion write-up should be allowed to be included in Seaway's rate base, the goodwill component of the purchase should by all means be excluded from rate base and in no case allowed to be depreciated or amortized in Seaway's cost of service.

Calculation of AFUDC

Q. Please summarize how Seaway's proposed cost of service treats AFUDC for the reversed pipeline.

A. Seaway's proposed cost of service includes two types of AFUDC. First, it calculates AFUDC related to the $20.3 million of new incremental plant costs expected to be

[18] *See* Seaway's response to Data Request SNC 2-45, attached here as Exhibit No. ACN-7, and Enbridge's 2011 Annual Report, a publicly available document, at page 137.
[19] *See* FAS No. 142.
[20] *SFPP, L.P.*, 134 FERC ¶ 61,121 at P 179 (2011).

incurred in connection with the flow reversal on the pipeline. The total AFUDC associated with this construction work in progress ("CWIP") is \$0.1 million. Second, Seaway proposes to include an AFUDC component for the existing pipeline itself, both the 50% owned continuously by Enterprise and the 50% purchased by Enbridge from ConocoPhillips. This latter component of proposed AFUDC amounts to \$36.3 million.

Q. What is your response to Seaway's proposal?

A. The first component of AFUDC, which is associated with actual investment in actual new incremental plant under construction, is appropriate and consistent with the purpose for which an AFUDC allowance is granted to pipelines for CWIP. The second component, however, is inappropriate and should be rejected. The original investment in the Seaway system accrued AFUDC during its original construction period, prior to being placed into service. Seaway now wants to recover additional AFUDC, not only on the NBV of this same investment of capital, but also on the entire \$1.1 billion proposed asset write-up. Seaway is proposing this even though the pipeline was in operation during almost the entire period in which the reversal was being implemented, and both owners received revenue for the services provided on that system.[21]

There are no reasonable grounds for proposing to collect AFUDC on a pipeline that is in service, for which AFUDC has already been included in the CPIS being recovered from shippers and for which revenue is being received for services rendered. Seaway's proposed recovery of any AFUDC associated with any CPIS already in service and in operation should be rejected by the Commission. It might be appropriate to allow

[21] *See* Seaway response to ACN Data Request 3-19, excerpts of which are attached as Exhibit No. ACN-14

AFUDC on the NBV of the system, to be accrued for the short time period when no oil was being transported through the system because the pipeline flow reversal was being implemented, if, in fact, the pipeline was continuing to be depreciated over that time, such that the owners would otherwise not be reimbursed for the associated return on investment for that brief period absent an AFUDC allowance.

In no case should any AFUDC be approved for any portion of the $1.1 billion write-up. As the terminology itself explicitly states, AFUDC is an allowance of carrying costs for funds used "*during construction*." It is applied to balances of CWIP, "*construction work*" in progress. Clearly, this allowance is intended to compensate a pipeline owner for debt and equity funds being used to *construct* a new pipeline prior to the point in time when it is placed into service, and the users of that system pay rates that include a return on the funds invested to build the pipeline. Seaway's proposed $1.1 billion write-up cannot be construed in any form or fashion to represent funds used to construct a new pipeline. Moreover, as discussed above, the actual pipeline was not even out of service except for a very short period of time while it was being reversed. Thus, there was only a very brief period during which shippers were not compensating the pipeline for its net unrecovered investment costs by means of the rates they were paying for transportation services. Any allowance for AFUDC must therefore be limited to a) the actual unrecovered cost of constructing the pipeline during b) only the period in which the pipeline was out of service completely.

Allocation of Costs to Non-Jurisdictional Assets

Q. Please explain why cost allocation to non-jurisdictional assets is an issue in this case.

A. Seaway owns substantial assets in the state of Texas that are not subject to FERC regulation or jurisdiction. These are generally known as the Freeport System and the Texas City System, though the Texas City System includes assets that are sometimes separately designated as Galena Park assets. By every measure relevant to the allocation of costs for ratemaking purposes, these assets are substantial. As shown on Exhibit No. ACN-15, ~~[BEGIN PROTECTED MATERIAL]~~ together they constitute 40% of Seaway's CPIS, 74% of its revenues, 72% of its direct labor costs and 77% of its total O&M costs in 2011. ~~[END PROTECTED MATERIAL]~~

There are two significant issues that relate directly to this set of facts. First, it appears that Seaway has significantly under-allocated, or not allocated at all, its overhead general and administrative ("G&A") costs to its non-jurisdictional assets. Second, Seaway has grossly under-allocated its proposed PPA to its non-jurisdictional assets, by assigning only 5% of the proposed $1 billion write-up in total to all portions of its system other than the jurisdictional pipeline.

Q. What do you propose as a remedy for this under-allocation?

A. With respect to O&M, I propose that actual O&M assigned by Seaway to its long-haul pipeline in 2011 be used for purposes of setting rates in this proceeding, plus an allocated portion of G&A. This issue is discussed separately below.

With respect to allocation of the PPA write-up, if any is approved by the Commission, I propose that no more than ~~[BEGIN PROTECTED MATERIAL]~~ 38% ~~[END PROTECTED MATERIAL]~~ be allocated to the long-haul pipeline.

Q. Please explain how you calculated your recommended allocation to Seaway.

A. The ~~[BEGIN PROTECTED MATERIAL]~~ 38% ~~[END PROTECTED MATERIAL]~~ allocation percentage represents the average of the three measures typically used, at least for gas pipelines, to allocate overhead or other indirect costs: gross plant, revenue and direct labor ratios. Using 2011 data provided by Seaway, I calculated these ratios for the Texas City System (including Galena Park), the Freeport System and the Seaway long-haul system. These calculations are shown on Exhibit No. ACN-15. ~~[BEGIN PROTECTED MATERIAL]~~ The average of Seaway's ratios for plant, revenue and labor is 38% of the total, with the Texas City System representing 45% of the total, and the Freeport System representing the remaining 17% of the total. ~~[END PROTECTED MATERIAL]~~

Q. Did you analyze any other information to determine if this result was a reasonable ratio to use for allocation of overhead costs and for allocation of the PPA, if any is allowed by the Commission?

A.. Yes. I reviewed Seaway's own data showing its own internal allocation or assignment of O&M costs among its three systems. These data are also included on my Exhibit No. ACN-15. For 2011, Seaway allocated or assigned ~~[BEGIN PROTECTED MATERIAL]~~ only 23% of its total O&M ~~[END PROTECTED MATERIAL]~~ for the three systems, excluding overhead (G&A), to the Seaway long-haul system. For the first half of 2012, Seaway's O&M attributed to its long-haul system increased dramatically, most likely as a result of the one-time reversal expenses incurred during that time. Yet even for that period, the total percent attributed to the pipeline ~~[BEGIN PROTECTED MATERIAL]~~ was only 36%. ~~[END PROTECTED MATERIAL]~~ Thus, in my opinion, ~~[BEGIN PROTECTED MATERIAL]~~ 38% ~~[END PROTECTED~~

~~MATERIAL]~~ is the maximum amount of overhead costs that should be attributed to the Seaway long-haul system. Similarly, if the Commission allows Seaway to recover any of the PPA, only ~~[BEGIN PROTECTED MATERIAL]~~ 38% ~~[END PROTECTED MATERIAL]~~ of the allowed amount should be attributed to the long-haul system.

Capital Structure and Rate of Return

Q. Please summarize the proposed capital structure and rate of return reflected in Seaway's as-filed cost of service.

A. Seaway proposes to use a beginning capital structure of 52% debt and 48% equity, a debt cost of 5.46% and a nominal ROE of 12.36%. The inflation rate is 1.66% and the net real ROE proposed by the pipeline is 10.69%.

Q. What is your position on these issues?

A. I recommend use of the actual capital structures and cost of long-term debt of Seaway's two owners, Enbridge and Enterprise, averaged to derive the proper amounts to use in calculating Seaway's cost of service. This is appropriate given the equal percentage ownership interest held by each of the two companies. In addition, I recommend use of the Commission's approved DCF methodology to determine the ROE in this proceeding. Using actual average capital structure as of the end of the first quarter 2012 produces a debt to equity ratio of 61%/39%.[22] Actual average cost of long-term debt for the two owners is 5.01%, as shown on Exhibit No. ACN-17. Applying the Commission's approved DCF methodology to derivation of the ROE results in a median ROE of 11.28%, and a low-end ROE of 8.61%.

[22] *See* Seaway's response to Data Request ACN 1-9, attached here as Exhibit No. ACN-16.

Q. Please explain the derivation of your proposed capital structure and cost of debt.

A. As explained above, I have used actual data for each of the two owners to determine both capital structure and cost of debt, and have calculated a simple average of the results to account for their equal ownership shares in the pipeline. For Enbridge's cost of debt, Seaway provided updated data through the end of the second quarter of 2012. However, Seaway inexplicably included debt issued by and attributable to Enbridge Energy Partners, L.P. ("EEP"), in which Enbridge owns a 23% ownership share.[23] This debt is not included in Enbridge's reporting of its own long-term debt in its annual report, and should not be included in the calculation of Enbridge's own cost of long-term debt. Excluding EEP's long-term debt reduces the weighted debt cost of Enbridge itself from ~~**[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**~~ 4.75% to 4.40%. ~~**[END HIGHLY CONFIDENTIAL INFORMATION]**~~

For Enterprise, the most recent cost of debt available was for the first quarter 2012, ~~**[BEGIN HIGHLY CONFIDENTIAL INFORMATION]**~~ which is 5.93%. Averaging 5.93% and 4.40% ~~**[END HIGHLY CONFIDENTIAL INFORMATION]**~~ yields a cost of debt for Seaway of 5.16%. These calculations are shown on Exhibit No. ACN-17.

Q. Please explain how you calculated your range of returns for equity using the Commission's approved DCF methodology.

A. I calculated distribution yields for the same oil pipeline MLPs as were used by Seaway, updated for the six-month period ending September 2012. I then also updated the short-term (five-year) growth rates using publicly available data posted by Yahoo! Finance on

[23] *See* Enbridge 2011 Annual Report, page 30.

its website. I accepted the long-term growth rate used by Seaway, as it reflects the average of the three sources endorsed by the Commission. I corrected Seaway's calculations, however, of the distribution growth factor by using the weighted growth rate (reflecting two-thirds of the short-term rate and one-third of the long-term rate) rather than using only the higher short-term growth rate that Seaway used. This correction is consistent with long-standing Commission policy and precedent. As shown on Exhibit No. ACN-18, the resulting range of reasonable DCF returns is 8.61% to 14.43%, with a median return of 11.28%.

Q. Why do you recommend the low end of the ROE range be applied to Seaway if any PPA is approved for inclusion in rates?

A. As discussed extensively above, approving any portion of Seaway's proposed PPA will afford Seaway's owners, through its affiliated shippers, substantial opportunity to exercise market power and earn significant profit margins above actual cost levels. This fact, coupled with the unprecedented size of the proposed write-up itself, warrant a substantial reduction in allowed ROE in this proceeding if any PPA is approved for ratemaking. Otherwise, the Commission will have endorsed excessive profits embedded within the write-up itself, and compounded the problem by approving a median ROE to be attributed to the write-up. Approval of the low end of the range of ROE if the write-up is allowed would at least be a small mitigation of the economic rents that will be extracted by Seaway from the marketplace under its proposed rates.

Level of O&M Costs

Q. What is the level of O&M costs proposed by Seaway in this case for its jurisdictional pipeline?

A. Seaway proposes an annual total O&M level of just over $20 million in this proceeding.

Q. How does this compare to Seaway's actual O&M for the long-haul system in recent periods?

A. ~~[BEGIN PROTECTED MATERIAL]~~ Seaway's proposed O&M for the pipeline, *excluding* depreciation, is double the actual O&M recorded by the company for 2011 *including* depreciation, as shown on Exhibit No. ACN-15. ~~[END PROTECTED MATERIAL]~~ ~~[BEGIN HIGHLY CONFIDENTIAL INFORMATION]~~ In addition, it is double the amount forecasted for the reversed pipeline in 2012 by Seaway's own internal projections, as shown on Exhibit No. ACN-19. ~~[END HIGHLY CONFIDENTIAL INFORMATION]~~

Q. What O&M do you propose be approved for Seaway in this proceeding?

A. I propose that the actual 2011 O&M levels recorded by Seaway for its long-haul pipeline be the basis for establishing O&M in this proceeding, plus an allocated share of the 2011 G&A expense incurred by Seaway. This total, derived as shown on Exhibit No. ACN-20, is just under $9 million.

Q. Please explain the derivation of your proposed O&M amount.

A. ~~[BEGIN PROTECTED MATERIAL]~~ Seaway's total assigned O&M cost for Seaway in 2011 is $10.0 million. This figure includes $2.0 million of depreciation expense, which is separately recovered in the cost of service and is thus removed from the $10.0 million. To the net O&M of $8.0 million I add a share of the actual 2011 G&A expenses recorded by Seaway. The pipeline's share of G&A is calculated by applying my proposed 38% ratio to the total G&A, and adding the resulting $0.9 million to the net

$8.0 million of assigned O&M, excluding depreciation. ~~[END PROTECTED MATERIAL]~~ The resulting total proposed O&M amount is $8.9 million.

Income Tax Allowance

Q. What income tax allowance has Seaway proposed?

A. Seaway proposes to include a full income tax allowance in its cost of service. The income tax allowance is calculated by applying the grossed-up weighted income tax rate to the equity component of the cost of service. Seaway applies this income tax rate to the equity return it calculates for its full rate base, including the $1.0 billion portion of the PPA it allocates to the long-haul system.

Q. What is your recommendation with respect to the inclusion of an income tax allowance in Seaway's cost of service?

A. I recommend that only 50% of the otherwise applicable income tax allowance be included in Seaway's cost of service. This amount would accurately reflect the fact that only one of Seaway's owners – Enbridge – is a corporation. Thus, only Enbridge incurs any income tax liability that would properly be recoverable from ratepayers.

In addition, I propose that if the Commission permits inclusion of the goodwill portion of the PPA in rate base, no income tax be allowed to be included in the cost of service for that goodwill amount.

Q. Please explain why you recommend that the Commission only approve an income tax allowance attributable to Enbridge's 50% ownership share in Seaway.

A. This proposal is based on the fact that Enterprise is an MLP that does not pay income taxes, while Enbridge is a corporation that does pay income taxes. As discussed further below, rates approved under the Commission's cost-based rate regulations should only reflect costs actually incurred by the pipeline. Where the pipeline incurs income tax liability by virtue of being owned by a corporation, income taxes are properly included in cost-based rates. Where the entity owning the pipeline does not pay income taxes, they should not be included in the pipeline's cost of service.

Q. Please explain why, if the Commission approves inclusion of the PPA in Seaway's rate base, no income taxes should be calculated for the goodwill portion of that PPA.

A. No income taxes should be calculated or included for the goodwill portion of the PPA because Enbridge has indicated in its public financial reports that the entire amount of goodwill is expected to be tax deductible for U.S. income tax purposes.[24]

Design of Rates for Uncommitted Service

Q. Please summarize the rate design methodology used by Seaway to calculate rates for uncommitted service.

A. Seaway does not actually provide any support, either in cost of service or rate design, for its proposed transportation rates for uncommitted service of $3.82/bbl for light crude and $4.32/bbl for heavy crude. Instead, it backs into a rate of $6.91/bbl for uncommitted service by subtracting its projected committed service revenues from its proposed cost of service and dividing the remaining cost of service by its projected barrels of uncommitted service.

Q. What conclusions do you draw from Seaway's approach as presented in its filing?

A. I conclude that Seaway's proposed rates for uncommitted service are not cost-based and

[24] Enbridge 2011 Annual Report, page 137.

are unsupported. Presenting a cost of service and deriving a rate that is higher than the rates actually proposed does not constitute a cost basis for the proposed rates. It only shows that the pipeline is able to manufacture a cost of service and resulting rates that are higher than the rates proposed. It is my opinion that cost-based rates are those derived directly from the underlying costs of providing service, and that this should be a requirement for any rate to qualify for Commission approval under its cost-based rate regulation. From an economic standpoint, this is necessary in order to mitigate the pipeline's market power and prevent arbitrary rates from being established on a basis other than that of underlying costs.

Q. What is your proposal for how the initial rates for uncommitted service should be designed in this proceeding?

A. I recommend that a cost-based rate for uncommitted service be designed by incorporating the cost of service recommendations discussed herein into Seaway's proposed cost of service and dividing that cost of service by the full capacity of the reversed pipeline, which Seaway estimates to be 135,000 bpd. Given that publicly available information suggests that the design capacity of the pipeline is 150,000 bpd,[25] this approach is conservative. Moreover, this volume level is the same as the total volume used by Seaway in its filed case, but is not separated between committed and uncommitted volumes. The resulting rate is thus a cost-based average unit rate for transportation on the reversed Seaway pipeline system prior to the planned expansion in January 2013.

Q. Have you calculated rates that result from your proposed methodology?

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[25] Seaway's public statements and its own webpage establish that the pipeline's design capacity is 150,000 bpd. *See* www.seawaypipeline.com.

A. Yes. The resulting cost-based rate for uncommitted service for the reversed pipeline's initial months of operation is \$0.5050/bbl, as shown on Exhibit No. ACN-21.

Q. Do you have any reference point against which to measure the reasonableness of your proposed cost-based rate?

A. Yes. I note that Seaway's tariff rates for volume incentive shippers on its system prior to the reversal were \$0.56/bbl for volumes greater than 40,000 bpd and \$0.40/bbl for volumes greater than 65,500 bpd.[26] Since the reversal, Seaway's volumes have increased by 20% relative to 2010, the highest throughput in the past three pre-reversal years. Yet the cost of the reversal was only \$20 million, which translates to only about a 9% increase in the cost of service recommended here.[27] Thus, on balance, the unit cost of transportation post-reversal should be less than the unit cost of transportation prior to reversal, which my comparison to the rates in effect prior to reversal confirms.

Q. Have you calculated rates for the period subsequent to the January 2013 expansion?

A. Yes. These rates are shown on Exhibit No. ACN-22. ~~[BEGIN HIGHLY CONFIDENTIAL INFORMATION]~~ I incorporated Seaway's projected cost of accomplishing this expansion, as shown on Exhibit No. ACN-4, and increased the volume determinants to 400,000 bpd. All other assumptions were unchanged. ~~[END HIGHLY CONFIDENTIAL INFORMATION]~~ The resulting estimated post-expansion average unit rate is \$0.1803/bbl. This rate is 64% lower than the \$0.5050/bbl rate for initial service discussed above. As this comparison shows, it is very important that the Commission establish two separate sets of rates in this proceeding in order to

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26 *See* FERC No. 77.0.0.

27 \$20 / \$130.2 (total rate base) * 59% (percent of rate base-related items in cost of service) = 9.1%

preclude Seaway from earning even greater levels of excessive profit at the expense of its ratepayers.

Q. Does this complete your prepared direct and answering testimony?

A. Yes.