UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

| Composition of Proxy Companies |) |
|--------------------------------|---|
| For Determining Gas and Oil |) |
| Pipeline Return on Equity |) |

Docket No. PL07-2-000

POST-TECHNICAL CONFERENCE SUPPLEMENTAL COMMENTS OF THE INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA

The Interstate Natural Gas Association of America ("INGAA") hereby seeks leave to file supplemental comments, including the attached affidavit of its witness Dr. Michael J. Vilbert, in response to the Reply Comments of the State of Alaska. As grounds therefore, INGAA states as follows.

At the January 23, 2008 technical conference, the Commission Staff stated its intent to seek Commission approval for a round of reply comments in addition to the round of initial comments scheduled by the Commission. On January 31, 2008, the Commission issued its Notice of Opportunity for Filing Reply Comments. On February 11, 2008, all parties represented at the technical conference, except the State of Alaska, filed initial comments supporting their position, and opposing other parties' positions. On February 20, 2008, the State of Alaska filed reply comments. In these comments, the State of Alaska critiqued the positions taken by INGAA, as well as the National Association of Publicly Traded Partnerships ("NAPTP"). The State of Alaska attached an affidavit from the same witness that appeared at the technical conference, Dr. Thomas Horst, who *inter alia*, purports to explain why the Benchmark Model submitted by INGAA's expert, Dr. Vilbert, does not reliably estimate a Master Limited Partnership's ("MLP") return on equity.

By failing to provide its comments in the initial round of testimony, and instead waiting to file its critique of INGAA's position in reply comments, the State of Alaska will have prevented INGAA from addressing its criticisms of Dr. Vilbert's Benchmark Model unless INGAA is permitted to respond herein. In the interest of allowing all parties a fair opportunity to respond to criticisms of their positions and supporting expert opinions, INGAA requests the Commission to allow the filing of this response and the attached affidavit of Dr. Vilbert.

COMMENTS

Beginning at paragraph 13 of his affidavit, Dr. Horst critiques Dr. Vilbert's Benchmark Model. For the next several pages, Dr. Horst explains his understanding of the calculations underlying the Benchmark Model and how the growth rate assumptions underlying that model "imply" that the annual average return on the general partner ("GP") interest for one of the MLPs included in the model is 20.68% per annum. Horst Affidavit at PP 13-19. Dr. Horst then substitutes his own two assumptions for two of Dr. Vilbert's assumptions in an attempt to demonstrate that the return on equity should be lower. *Id.* at PP 20-23.

Dr. Horst also raises two other arguments that apply to both INGAA's and NAPTP's positions. First, he argues that the terminal growth rate of distributions per share for the limited partner ("LP") units "might reasonably" reflect only the inflation rate component of the long-term growth rate of total distributions. Horst Affidavit at P 24. Second, Dr. Horst reiterates his concern that financial analysts report earnings per share as opposed to distributions per share.

In the attached affidavit, Dr. Vilbert demonstrates that Dr. Horst failed to appreciate the assumptions underlying the Benchmark Model and therefore reached inaccurate conclusions as to the market value and returns attributable to the GP interests. Dr. Vilbert explains that the values calculated by the Benchmark Model for the GP interests are conservatively overstated in comparison to the market values of a number of GP shares that are traded. The higher GP values result in *lower* required returns. In contrast, Dr. Horst's proposed methodology overstates the GP values to an even greater degree in an effort to produce lower returns. Vilbert Affidavit at PP 4-14.

Dr. Vilbert also addresses Dr. Horst's arbitrary substitution of a five-year transition period from the IBES growth rates to a terminal growth rate for the ten-year transition period utilized in the Benchmark Model. While Dr. Horst's reduction in the transition period reduces the expected return, he offers no reason why his assumed five-year period is theoretically more justifiable that the ten-year period used in the Benchmark Model. In contrast, Dr. Vilbert demonstrates that the use of a ten-year transition period is more consistent with the experience of MLPs, including both Kinder Morgan Energy Partners and oil pipeline MLPs. Vilbert Affidavit at P 15.

Finally, Dr. Vilbert addresses the two other criticisms Dr. Horst levels against INGAA and NAPTP. First, Dr. Vilbert explains that the question over whether analysts forecast earnings per share or distributions per share is a red herring because there is no evidence suggesting that one is systematically lower or higher than the other. Indeed, even if analysts are reporting earnings per share, that would suggest as a practical matter that reliance on EPS growth rates is necessary. Vilbert Affidavit at PP 16-20. As INGAA pointed out in its initial post-technical conference comments, Dr. Horst's proposal to apply a ratio of earnings to distributions per share to growth forecasts is inconsistent with Dr. Horst's acknowledgement that capping distributions at earnings would be ill-advised. Second, Dr. Vilbert explains that Dr. Horst's suggestion that LP units will grow only at the rate of inflation is based on an extreme and unrealistic assumption of no real growth in earnings or distributions.

In summary, Dr. Horst's challenges to the Benchmark Model are based on a lack of understanding of the model as well as arbitrary assumptions that are unsupported and contrary to the evidence. Dr. Vilbert's Benchmark Model remains the only valid and thorough model in the record for estimating the cost of capital of MLPs and supports the continuing use of GDP as the measure of long-term growth in the DCF formula.

Respectfully submitted,

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March 12, 2008

UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

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Composition of Proxy Companies For Determining Gas and Oil Pipeline Return on Equity

Docket No. PL07-2-000

AFFIDAVIT OF MICHAEL J. VILBERT ON BEHALF OF THE INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA

I, Michael J. Vilbert, declare as follows:

1. I am the same Michael J. Vilbert of the Brattle Group who submitted an analysis entitled "Report of the Terminal Growth Rate for MLPs for Use in the DCF Model" (the "Report") on December 21, 2007, on behalf of the Interstate Natural Gas Association of America ("INGAA"). My resume is attached to the Report.

2. In my Report, I set forth a Benchmark Model for estimating the cost of capital of Master Limited Partnerships ("MLPs"). To arrive at an estimated cost of equity for the MLP as a whole, it is necessary to compute the cost of equity of both the limited partner ("LP") and general partner ("GP") shares. In the Technical Appendix attached to my Report, I explained the pricing methodology I used to estimate the market value of GP shares by examining the relationship between LP and GP distributions over time.

3. In reply comments filed on behalf of the State of Alaska, Thomas Horst has submitted an affidavit challenging some of the assumptions made in my analysis and suggesting that the results from the Benchmark Model overstate the cost of equity for MLPs (the "Horst Affidavit"). Moreover, the Horst Affidavit asserts that his concern is more than a simple dispute about the merits of one assumption versus another because the assumptions in the Benchmark Model are "unproven and unprovable." As a result, the Horst Affidavit challenges the reliability of the Benchmark Model. The remainder of this affidavit responds to the comments of the Horst Affidavit with regard to the reliability and expected accuracy of the Benchmark Model.

The Market Price of the General Partner's Equity

4. The Horst Affidavit notes that the market price of the GP's share of equity is not generally observable and offers an alternative estimate of the market value of the GP's equity. The Horst Affidavit's alternative results in an estimate of the market value of the GP equity that is always higher than the estimate from the Benchmark Model. The Horst Affidavit asserts that the alternative estimate is an equally plausible method as the method used in the Benchmark Model. This section of the affidavit demonstrates why the Horst Affidavit's alternative market price is not equally plausible. Before beginning the explanation, it is useful to review the effect that the estimate of the market price of the GP's equity would have on the estimated cost of equity from the Benchmark Model. The higher the market value of the GP's equity, the lower is the estimated cost of equity. Although the Benchmark Model is a multistage model, the effect of the estimate of the price of the GP's equity can be understood easily by considering the effect on the dividend yield of an increase in the stock price. As the stock price increases, the dividend yield decreases (assuming a constant dividend) and the resulting cost of equity estimate is lower. The effect is similar in the Benchmark Model.

5. To understand why the Horst Affidavit's alternative method is not equally plausible it is necessary to consider the risk characteristics of the GP's equity compared to that of the LP units. Because of the Incentive Distribution Rights ("IDRs"), the risk of the GP's equity is greater than the risk of the LP units. This is because the effect of the

IDRs is to make the variations in earnings and distributions always greater for the GP equity than for the LP equity, although this difference falls as distributions to the GP move higher into the final tier (i.e., assuming the top tier is 50 percent, when the share of total distributions going to the GP approaches 50 percent).¹ One implication of the IDRs is that the relative risk between the GP and the LP units changes as the percentage of distributions accruing to the GP changes. In particular, the risk of the GP equity decreases as its percentage of the distributions increases.² As the distribution share approaches the top 50 percent tier, the risk of the GP equity approaches the risk of the LP units, and the aggregate total value of the GP equity approaches the aggregate total value of the LP equity.³ The value of the GP equity when it receives about 50 percent of the distributions is the "maximum value" referenced in the Horst Affidavit and my Report. When the GP has a lesser share of the total MLP distributions, the question is how much should the price of the GP equity be grossed up relative to the price of the LP units. If the price were grossed up in direct proportion to the share of distributions to the GP equity, it would be equivalent to believing that the risk and expected return of the GP equity were identical to that of the LP equity. A fundamental assumption in the Benchmark Model, which I call the "Rule of Thumb," is that the price of the GP equity will be greater than a proportional increase in the price of the LP equity relative to the

¹ This point was discussed in the Technical Appendix (p. 4).

 $^{^2}$ This also implies that the risk of the LP units increases as the share of distributions accruing to the GP increases because the overall risk of the MLP is not changing.

³ Otherwise, the sharing number should be 1 minus the top tier's marginal share to the LP, and the relative aggregate value approached by each equity type is adjusted similarly.

share of distributions to the GP. The effect of this assumption is to reduce the estimated cost of equity in the Benchmark Model.

6. The Horst Affidavit's alternative method for calculating the value of the GP equity takes the average of the maximum value and a low value which is the simple gross up of current distribution percentage to the LP units, i.e., the low value is the value equal to the current percentage of distributions accruing to the LP units divided into the current market price of the LP units.

7. As noted above, the risk of the GP equity decreases as the percentage of distributions accruing to the GP increases because the percentage variation in distributions to the GP equity decreases. However, the expected relative growth rate of GP distributions also decreases. To the extent that the expected return more than compensates for the risk, the price will be higher. In effect, the Horst Affidavit's alternative will probably not capture how the risk-return tradeoff faced by GP equity changes as the percentage of distributions to the GP changes. At lower sharing of distributions, the GP's risk is higher relative to its expected growth in distributions than it is when GP distributions are further into the tiers. I expect that the approach advocated in the Horst Affidavit will always overestimate the value of the GP equity.

8. I have argued that the Horst Affidavit's method will overestimate the value of the GP equity using theoretical observations on the likely risk of the GP equity. To test whether the theory conforms to reality, I review eight general partners for which market price information is available on the value of GP equity. The results are displayed in Table 1 below. For seven of the eight partnerships, the Benchmark Model's estimate exceeds the directly estimated market value of the MLP's equity and slightly underestimates it for only one of the MLPs. As noted above, the Horst Affidavit's alternative estimate of the market value always exceeds the Benchmark Model's estimate so for this sample the Horst Affidavit's approach would overestimate the market price of the GP equity by an even greater amount on average than does the Benchmark Model. Recall that a higher estimate of the market value of the GP equity results in a lower estimate of the cost of equity for the MLP. The Benchmark Model is conservative in that it generally overestimates the market value of the GP's equity, which results in an underestimation of the cost of equity. The Horst Affidavit's approach would make the underestimation worse because its estimation of the market value of the GP's equity is less accurate than the estimates from the Benchmark Model.

| (\$ | millions) Ir | ergy | Hiland | Energy Transfer | Alliance | NuStar | Magellan | Penn Virginia | Buckeye |
|--|---------------|---------|----------|-----------------|------------|------------|------------|---------------|------------|
| [1] Direct Estimate of Market Value of MLP | Equity \$2,21 | 9.93 5 | \$710.70 | \$10,837.53 | \$2,216.89 | \$3,256.88 | \$4,501.03 | \$1,853.92 | \$3,025.12 |
| "Rule of Thumb" | | | | | | | | | |
| [2] "Rule of Thumb" Total MLP Equity Value | e \$2,28 | .82 \$ | 693.51 | \$11,653.95 | \$2,341.93 | \$3,263.72 | \$4,906.14 | \$2,069.12 | \$3,604.49 |
| [3] Rule of Thumb Over (under) estimate of M Equity Value | ALP \$6 | 0.90 (3 | \$17.19) | \$816.41 | \$125.03 | \$6.84 | \$405.11 | \$215.21 | \$579.37 |
| [4] "Rule of Thumb" over-estimate of Equity (% of Direct Estimate) | Value | 3% | -2% | 8% | 6% | 0% | 9% | 12% | 19% |
| Horst Alternative | | | | | | | | | |
| [5] Horst Total MLP Equity Value Estimate | \$2,37 | .90 \$ | 735.90 | \$11,830.84 | \$2,415.42 | \$3,286.30 | \$5,032.13 | \$2,198.80 | \$3,657.03 |
| [6] Horst over-estimate of Total MLP Equity | Value \$15 | .98 | \$25.20 | \$993.30 | \$198.53 | \$29.43 | \$531.10 | \$344.88 | \$631.91 |
| [7] Horst over-estimate of MLP Equity Value (% of Direct Estimate) | | 7% | 4% | 9% | 9% | 1% | 12% | 19% | 21% |

Table 1: Performance of the "Rule of Thumb" and the Horst Alternative.

Notes and Sources:

[1]: Workpaper Row [10] [2]: Workpaper Row [14].

[5]: Workpaper Row [17]. [6]: Workpaper Row [18].

[7]: Workpaper Row [19].

[3]: Workpaper Row [15]. [4]: Workpaper Row [16].

9. In summary, theory combined with empirical evidence support the method used in the Benchmark Model with regard to estimating the market price of the GP equity as compared to the alternative method suggested in the Horst Affidavit. Although the method used in the Benchmark Model is not perfect, it is conservative in that it tends to overestimate the market price of the GP equity which in turn results in a lower estimate of the cost of equity for the MLP. The Horst Affidavit's alternative would make the likely underestimation of the cost of equity worse, not better, and as an alternative should be rejected.

Required Return on the GP Equity

The Horst Affidavit also attempts to "reverse engineer" the Benchmark 10. Model to determine the estimated cost of equity for the GP shares. This attempt results in an estimate of 20.68 percent for the GP equity of the Boardwalk MLP which is compared to a DCF estimate for the cost of equity for the GP equity of Buckeve GP Holdings LP. Because of the (assumed) relatively high estimate of the cost of equity from the Benchmark Model compared to the Horst Affidavit's 14.86 percent estimate for Buckeye GP Holdings, the Benchmark Model is judged to be producing results which are excessive. First it should be noted that his methodology is not consistent with the Benchmark Model. The 20.68 percent cost of equity estimate is therefore in error. Second, even if it were not in error, it would not indicate that the Benchmark Model is unreliable as explained more fully below. Before beginning the explanation, it is useful to review why the Benchmark Model focuses on estimating the cost of equity for the MLP as whole as opposed to the cost of equity for the LP units alone. As noted in the Technical Appendix to my Report, the growth of distributions to the GP and LP units vary greatly as a result of the IDRs even if the growth of distributions for the MLP as a whole is constant.⁴ Moreover, the risk of the equity of the MLP is divided between the GP and the LP units. So, estimating the cost of equity accurately for the LP units alone

⁴ Technical Appendix, p. 6.

would not only be complicated because of the uneven growth of distributions to the LP units, it would also omit the portion of the equity risk borne by the GP.

11. The Horst Affidavit's comparison of Buckeye GP Holdings return on equity to the estimate for Boardwalk's GP equity from the Benchmark Model suffers from a basic problem. Namely that it relies on an assumption about the path of the growth of the distributions to the GP which conflicts with the assumed growth of distributions for the MLP as whole. In particular, the Horst Affidavit's assumed path of growth for the GP's distributions greatly overstates their path of growth relative to the Benchmark Model in the early years (see Figure 1 below).



Figure 1: Comparison of the Correct Benchmark Model GP Growth Path and the Horst GP Growth Path.

Alternatively, the implied total MLP growth path under the Horst assumption is much higher than is assumed in the Benchmark Model for the early years (see Figure 2 below).



Figure 2: Implied MLP Total Growth Rate Paths for the Horst Assumed GP Growth and the Benchmark Model.

Clearly, this is an unusual and exaggerated path at the MLP level, and demonstrates again that the Horst Affidavit approach is not tenable. The fact that distributions to the GP and LP units have an uneven growth rate even though the growth of distributions for the MLP as a whole is constant is one of the reasons that the Benchmark Model estimates the cost of equity for the MLP as a whole. Table 2 below provides corrected estimates of the cost of equity for the GP shares consistent with the projected growth rates for the MLPs as a whole in the Benchmark Model. As shown in the Table, the correct estimate of the cost of equity for Boardwalk's GP equity from the Benchmark Model is 13.14 percent, not the 20.68 percent estimated by the Horst Affidavit.

| | MLP | LP | GP |
|------------------------------|--------|--------|--------|
| Boardwalk Pipeline Partners | 12.16% | 11.62% | 13.14% |
| Oneok Energy Partners | 12.55% | 12.18% | 13.12% |
| TC Pipelines | 11.30% | 11.38% | 11.18% |
| Enbridge Energy Partners | 12.62% | 12.59% | 12.68% |
| Enterprise Products Partners | 13.93% | 13.84% | 14.23% |
| Kinder Morgan | 14.17% | 14.12% | 14.22% |

Table 2: Benchmark Model Estimates of GP, LP, and Total MLP Costs of Equity

12. Even if the Horst Affidavit's estimates of the GPs' costs of equity were correct, the fact that the cost of GP equity in Buckeye is less than the cost of GP equity for Boardwalk would still not imply a problem with the Benchmark Model. Recall that the risk of the GP equity decreases as the percentage of the MLP's distributions accruing to the GP equity increases. This means that the risk of GP equity is higher for MLPs whose distributions are in the lower tiers of the IDRs – and one might reasonably expect the cost of GP equity to be higher in the early stages of the MLP. The ROE estimate of 20.68 percent in the Horst Affidavit is for a MLP for which the share of distributions accruing to the GP is only about 3 percent compared to Buckeye for which the percentage is much higher at about 30 percent. As a result, the risk of the GP equity for Boardwalk MLP, whose estimate is 20.68 percent (13.14 percent when corrected), is higher than the risk of Buckeye's GP equity and, therefore, requires a higher ROE.⁵ But that is not the end of the story.

⁵ Note that the Horst Affidavit estimates the cost of equity for Buckeye's GP equity at 14.86% which is more than the 13.14% estimate for Boardwalk from the Benchmark Model. In addition to the possibility of estimation error for either of the two estimates, there are other possible explanations for the difference including the fact that Buckeye has more involvement in the petroleum industry which may have different risk characteristics that the regulated natural gas pipeline industry.

13. Recall equation (1) from the Technical Appendix which shows that the required return for the MLP as a whole (which is cost of equity that is estimated by the Benchmark Model) is the weighted average of the costs of equity for the GP equity and the LP equity where the weights are the percentages of the market value of the two equity components.⁶ When the distributions are in the lower tiers, the percentage of value of the MLP that is due to the value of GP equity is lower. This means that the relatively high estimated cost of equity for the GP share has a relatively smaller effect on the overall cost of equity for the MLP. This point is further reinforced by consideration of the results from the Benchmark model for the MLP as a whole. The Benchmark Model estimates a cost of equity for the Boardwalk MLP of 12.16 percent even though the GP equity was estimated to have a cost of equity of 20.68 percent in the Horst Affidavit so the effect of such a high estimate (if it were accurate) must be relatively small. Boardwalk's MLP cost of equity estimate is lower than the average for the six MLPs in the Benchmark Model even though it has the highest estimated cost of equity for the GP equity according the Horst Affidavit's Table 2.

14. In summary, even if the estimated cost of equity for the GP equity for Boardwalk MLP were 20.68 percent, which it is not, that would not constitute evidence that the Benchmark Model's results are too high because the risk and therefore the cost of equity for the GP equity is higher when its share of distributions of the MLP as a whole is lower. The higher cost of equity does not have a substantial effect on the overall cost of equity estimated by the Benchmark Model because the cost of equity for the MLP is the weighted average of the costs of equity of both the GP and the LP equity. Because the

⁶ Technical Appendix, p. 2.

equity value of the GP is lower when the percentage of distributions accruing to the GP is lower, the weight applied to the GP's cost of equity is lower. In short, the Benchmark Model is producing results exactly as it should for the situations considered by the Horst Affidavit.

Transition to GDP Growth Rate

15. It is useful to keep in mind that the results of all models are sensitive to the assumptions of the model, so it is not surprising that the results change if the assumptions change. However, it is also true that some assumptions are more reasonable than others. As an example of this point, the Horst Affidavit questions whether the transition from the 5-year earnings/distribution growth rate should be over a 5-year period instead of a 10year period as used in the Benchmark Model. As noted by the Horst Affidavit, a shorter transition period results in a lower estimated cost of equity from the model. Of course, a longer transition period, for example 15 years, would result in a higher estimated cost of equity. I chose a 10 year transition period because I believe that the GP has a powerful incentive to grow distributions for the LP unit holders because the GP receives a high portion of those increased distributions due to the effect of the IDRs. This incentive is likely to result in growth of distributions in excess of the growth of GDP for an extended period. Although no one knows for sure how long growth rates in excess of GDP growth can be maintained, the evidence from other MLPs such as Kinder Morgan suggests that a 10 year transition period may be conservative. Certainly, a five year period may be too short, and 15 years may be too long. Many of the MLPs concentrated in the natural gas pipeline industry have been in existence for a relatively short period of time and therefore correspondingly lack historical data, but there is evidence on the growth rates for other MLPs. Figure 1 in the Additional Comments of the National Association of Publicly Traded Partnerships displays information on the historical growth rate of distributions for a number of MLPs. As can be seen from Figure 1, MLPs have been able to achieve growth rates greater than GDP for an extended period, at least 10 years. Although the 10year transition period used in the Benchmark Model is an assumption, it is more consistent with the strong incentive effect of the IDRs for the GP and with the historical evidence from MLPs as displayed in Figure 1 than is a 5-year transition period.

EPS versus DPS Growth Rates

16. Another issue raised in the Horst Affidavit is the distinction between growth rate forecasts for distributions per share ("DPS") as opposed to earnings per share ("EPS"). In particular, the Horst Affidavit is concerned with estimates of EPS that exceed estimates of DPS because the 5-year (LT) growth rate forecast determines the path of growth rates over the first 15 years in the Benchmark Model. Higher (lower) five-year forecasts result in a higher (lower) path of distributions over time and therefore, a correspondingly higher or lower estimate of the cost of equity.

17. Inherent in the Horst Affidavit's concern seems to be a belief that EPS growth forecasts from IBES will consistently exceed DPS growth forecasts for the sample. If so, the cost of equity estimates would be lower if the (lower) DPS growth rate estimates were available to be used.

18. I do not, however, see any basis for the conclusion that to the extent analysts are forecasting EPS, that such forecasts will consistently exceed forecasts of DPS. As noted in Table 3 of the Horst Affidavit, there are very few 5-year DPS growth rate forecasts by analysts. For the 37 MLPs listed in Table 3, the average number of 5-year

EPS forecasts per MLP is 3.1 compared to only an average of 0.8 DPS forecasts. These data raise several possibilities. First, the lack of long-term DPS forecasts, as opposed to DPS forecasts for the coming fiscal year, means that as a practical matter reliance on reported LT EPS growth rate forecasts is necessary. Second, it is possible that the analysts providing only EPS forecasts do not believe that growth rates for DPS will be substantially different over the next five years so there is no need for a separate DPS growth rate forecast, or they may in fact be providing DPS growth rates which are being reported by IBES as EPS growth rates because IBES (mistakenly) assumes that is the information being received from the analysts. One analyst, Mr. Yves Siegel says that he reports DPS growth rates.⁷ Other analysts may do the same, but unfortunately we simply don't know for sure. Third, in my judgment, any difference between EPS and DPS forecast is not likely to be an issue because it is unlikely that EPS growth rate estimates will systematically exceed DPS growth rate estimates for the same reason that dividend growth rate estimates are unlikely to exceed (or lag) consistently earnings growth rate estimates. Dividends (or distributions) are the parameter in the model, but it is routine to use EPS growth rate estimates in the DCF model.

19. To the extent that EPS estimates are not systematically higher or lower than DPS growth rate estimates, it is unlikely to have a major effect on the results of the model. In general, I would expect the DPS and EPS growth rate estimates to be very close.

20. Finally, The Brattle Group ("Brattle") used the growth rate estimates from Bloomberg in the Benchmark Model. Although Brattle has requested clarification, we

⁷ See Tr. 33, 56. See also Tr. 19 (Williamson).

have not been able to confirm definitively whether Bloomberg provides EPS or DPS estimates for MLPs. We have been able to compare a few estimates which appeared to be DPS growth rate estimates when we compare the estimates but given the lack of longterm DPS growth rate evidence documented by the Horst Affidavit, it is likely that the Bloomberg estimates are similar to the IBES estimates.

Terminal Growth Rate in the Model

21. The Horst Affidavit also claims that the terminal growth rate per share for MLPs in the model should be equal to the forecast rate of inflation because MLPs typically grow by issuing new LP shares. Therefore, even though the MLP as a whole is forecast to grow at the rate of GDP, the distributions per share would be expected to grow only at the rate of inflation because the "real" rate of growth would be captured by the newly issued shares.

22. The fact that the growth of distributions for the LP units will be less than the growth of the MLP as a whole because of the need to issue new LP units in order to finance growth is a point acknowledged in the my original Report. This point is not in dispute here. The real question is what value should be used in the FERC DCF model in order to produce the best estimate of the cost of equity for the sample companies that are organized as MLPs.

23. It is well to keep in mind that a terminal growth rate equal to GDP is an "unproved and unprovable" assumption. Although it seems reasonable in the long run, it may not be reasonable for year 16 in the Benchmark Model. The Horst Affidavit recommendation of a reduction of the terminal growth rate to the rate of inflation

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assumes that there will be no "real" growth in distributions as early as 10 years from now. While it is impossible to prove one way or the other, an assumption that LP units will have no real growth component seems extremely severe.

Summary

24. The Horst Affidavit raised a number concerns regarding the accuracy and reliability of the Benchmark Model. This affidavit has shown why those concerns are misplaced. In particular, the Horst Affidavit's alternative method of estimating the market value of GP equity is not as accurate as the estimates from the Benchmark Model when compared to the actual market prices of the GP equity that is available. The Horst Affidavit's estimates of the cost of equity for the GP equity are in error and, as a result, do not provide evidence that the Benchmark Model overestimates the cost of equity for the MLP sample. Although the 10-year transition period from the 5-year growth forecast to the terminal growth forecast of GDP is an assumption in the Benchmark Model, it is an assumption more in accord with the historical evidence on growth rates for MLPs and with the incentives to grow provided by the IDRs than is the 5-year transition period assumption suggested in the Horst Affidavit. If the transition period were assumed to be shorter (longer), it would lower (increase) the estimated cost of equity. The assumption of a 10-year transition seems to provide a better estimate of the likely growth path than either a longer or shorter period. The issue of EPS versus DPS growth forecasts is one for which there is no better alternative than to use the information from IBES. Although it is desirable to have DPS growth rate forecasts, such forecasts are not generally Moreover, it is not likely that EPS and DPS growth rates would be available. systematically different, i.e., it is not likely that either EPS or DPS growth rates will always exceed or be less than the other. Finally, an assumption that the terminal growth rate for the LP shares equal to the forecast rate of inflation instead of forecast GDP growth assumes that there will be no real growth in earnings or distributions for the LP equity as early as year 10 for the Benchmark Model. Although there is no evidence one way or the other on this point, the assumption seems extreme and not likely to reflect reality.

I declare under penalty of perjury that the foregoing statements are true and correct to the best of my knowledge.

Michael J. Villeert Michael J. Vilbert