

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Sea Robin Pipeline Company, LLC)
)
)

Docket No. RP07-____-000

PREPARED DIRECT TESTIMONY
OF
ROBERT B. HEVERT

I. INTRODUCTION AND QUALIFICATIONS

2 Q. Please state your name, affiliation, and business address.

3 A. My name is Robert B. Hevert, and I am President of Concentric Energy Advisors,
4 Inc. (“CEA”), located at 313 Boston Post Road West, Suite 210, Marlborough,
5 Massachusetts 01752.

6 Q. On whose behalf are you testifying?

7 A. I am testifying on behalf of Sea Robin Pipeline Company, LLC (“Sea Robin” or the
8 “Company”).

9 Q. Please describe your experience in the energy and utility industries.

A. I have previously served as an executive and manager with other consulting firms (i.e. REED Consulting Group and Navigant Consulting, Inc.), and as a financial officer of Bay State Gas Company. I have provided testimony regarding strategic and financial matters, including the cost of capital, before several state utility regulatory agencies and the Federal Energy Regulatory Commission (the “FERC” or the “Commission”), and have advised numerous energy and utility clients on a wide range of financial and economic issues including both asset and corporate-based transactions. Many of those assignments have included the determination of the

1 cost of capital for transaction and valuation purposes. A summary of my
2 professional and educational background is provided in Exhibit No. SR-45 to my
3 testimony.

4 **Q. Please describe CEA's activities in energy and utility engagements.**

5 A. CEA provides financial and economic advisory services to a large number of energy
6 and utility clients across North America. Our financial advisory activities include
7 buy and sell-side merger, acquisition and divestiture engagements; due diligence and
8 valuation engagements, including the provision of fairness opinions; project and
9 corporate finance services; and transaction support services. Our economic and
10 market analysis services include utility ratemaking and regulatory advisory services,
11 energy market assessments, market entry and exit analysis, and energy contract
12 negotiations.

13 **II. PURPOSE AND OVERVIEW OF TESTIMONY**

14 **Q. What is the purpose of your testimony?**

15 A. The purpose of my testimony is to present evidence and provide a recommendation
16 regarding the Company's return on equity ("ROE"). My analyses and
17 recommendations are supported by the data presented in Exhibit Nos. SR-46
18 through SR-58.

19

20 **Q. What are your conclusions regarding the appropriate ROE for Sea Robin?**

21 A. Based on my analyses, I have concluded that the Company should be provided the
22 opportunity to earn a ROE in the range of approximately 11.00 percent to
23 approximately 13.70 percent. Taking into consideration the relative level of

1 business risk faced by the Company, I recommend an equity cost rate of 13.50
2 percent. This equity return will adequately compensate investors for their
3 investment in the capital of the Company and will provide the Company with the
4 opportunity to attract new capital on reasonable terms.

5 **Q. Please provide a brief overview of the analyses that led to your conclusions.**

6 A. Consistent with Commission precedent, my analyses and recommendation are based
7 primarily on the two-stage Discounted Cash Flow ("DCF") model. My application
8 of the DCF model and analytical results are based on third-party analyst growth
9 projections, as well as market-based information including current annual dividends
10 (or distributions), and recent stock (or unit) prices. In applying and assessing the
11 results of my DCF analyses, I considered certain costs and trends, including the
12 fundamental business risks currently facing the natural gas pipeline industry in
13 general and the Company in particular. In addition, I have reviewed my DCF
14 results relative to other widely used ROE estimation methodologies and
15 benchmarks.

16 The Commission, Sea Robin and other interstate gas companies are at a crossroads
17 in re-evaluating the methodologies employed in their application of the DCF model
18 for purposes of determining ROE. As a result of industry consolidation, financial
19 instability, and diminished involvement in regulated interstate gas pipeline
20 operations, the historical proxy group no longer provides a reasonable comparison
21 for a financially stable interstate gas pipeline. As a practical matter, there is only one
22 corporate pipeline company (the Williams Companies) that possibly could be
23 considered a proxy for Sea Robin. Moreover (as discussed in more detail later in my

1 testimony), natural gas Local Distribution Companies (“LDCs”) in general, and the
2 three LDCs used as comparison companies in recent FERC proceedings in
3 particular, recently have been trading at unusually high valuation multiples with
4 correspondingly low dividend yields. Consequently, DCF results based on those
5 companies are inherently biased. In fact, based on current market data, DCF results
6 for the three LDC’s are substantially below returns that have recently been
7 authorized (on average for natural gas pipelines). Under these conditions, in which
8 there is no viable corporate pipeline proxy group and the potential LDC proxy
9 companies render unreasonable DCF results, it is necessary to consider alternative
10 approaches to estimating the Company’s ROE. As such, I have relied upon
11 multiple analytical approaches, and for the reasons discussed later in my testimony,
12 have incorporated certain Master Limited Partnerships (“MLPs”) in my analysis.

13 The need to consider MLPs as proxy entities also has been addressed in a recent
14 INGAA white paper, in which the process used by the Commission to establish
15 ROEs for natural gas pipelines was examined, particularly in the following three
16 areas: (1) the Commission’s past practice, (2) the implications of excluding MLPs
17 from a DCF analysis of interstate gas companies; and (3) the shortcomings of the
18 DCF analysis in itself. INGAA’s concluding statement with respect to the
19 treatment of MLPs is a fair summary of the industry’s position on this issue:

20 This report does not suggest that the DCF methodology is so flawed
21 that the Commission should cease using it to calculate pipeline
22 returns. But the Commission must recognize the increasingly
23 important role that MLPs play in the interstate pipeline industry by
24 including an appropriate mix of MLPs in the proxy group...¹

¹ INGAA, *Allowed Returns on Equity in the Interstate Gas Pipeline Industry Issues and Options Regarding the FERC DCF Approach*, dated August 24, 2006, at 6.

1
2 The Commission likewise has recognized that there are an insufficient number of
3 publicly traded pipeline corporations to form a reasonable proxy group and as such,
4 has allowed the use of LDCs as proxies for pipeline companies. The Commission
5 also found, however, that “LDCs face lower risks (relative to interstate pipelines)
6 due to the nature of their operations.”² Since the DCF results for the LDCs are well
7 below other observable, practical benchmarks, the use of natural gas LDCs as
8 proxies for a pipeline would create a significant downward bias in the determination
9 of the Company’s ROE. Consequently, it now is extremely important to consider
10 alternative methodologies and proxy entities when determining the appropriate
11 ROE for Sea Robin.

12 **Q. Does the Commission oppose the inclusion of MLPs in the proxy group that**
13 **is relied upon to establish the appropriate return on equity for a natural gas**
14 **pipeline?**

15 A. No. In its recent *Kern River* decision, the Commission noted that while MLPs were
16 not included in the proxy group in that proceeding they were “not making a generic
17 finding that MLPs cannot, in future cases, be considered for inclusion in the proxy
18 group if a proper evidentiary showing is made”.³ Rather, the Commission stated
19 that in order for MLPs to be included in the proxy group, it would be necessary to
20 demonstrate that “distributions used as the ‘dividend’ include(s) only a payment of
21 earnings and not a return of investment”.⁴ The Commission’s concern appears to

² See *Kern River Gas Transmission Company*, 117 FERC ¶ 61,077 (2006) at 72. Clarification added

³ *Kern River*, p. 63.

⁴ *HIOJ*, 110 FERC at p. 126.

1 be that, to the extent that MLP distributions include a return of capital, both the
2 yield and growth components of the DCF model may be biased:

3 If the growth forecasted for an MLP comes from external capital, it
4 is necessary either (1) to explain why the external sources of capital
5 do not distort the DCF result for that MLP, or (2) propose an
6 adjustment to the DCF analysis to eliminate any distortion.⁵
7

8 More recently, the Commission invited interested parties to provide comments
9 regarding the inclusion of MLPs in proxy groups, or an alternative calculation to the
10 DCF as a method of determining the return on equity.⁶

11 **Q. Have you performed any analyses to address the Commission's concern in**
12 **that regard?**

13 A. Yes. As discussed in more detail later in my testimony, I first analyzed whether
14 projected distributions are expected to be paid out of operating cash flows
15 (including distributions to the General Partner). In each case for which such
16 projections were available, I found that distributions were expected to be made
17 entirely from internally generated funds. Based on that analysis, I concluded that
18 the MLP distribution yields were not biased by the source of funds underlying the
19 projected distributions.

20 In order to address the Commission's concern that the comparatively high MLP
21 yields (relative to corporate entities) did not unduly "distort" the expected growth
22 rates, I compared the relative contributions of the yield and growth components to
23 the DCF results for a proxy group of MLPs, the Williams Companies (which, as
24 discussed later herein, is the sole corporate pipeline company that is eligible to be

⁵ *Kern River*, paragraph 152.

⁶ 118 FERC ¶ 61,252 (2007).

1 included as a proxy company) and the three LDCs referenced in *Kern River*. As
2 expected, the growth component represented a substantially smaller portion of the
3 DCF result for the MLPs relative to the corporate entities. I concluded, therefore,
4 that the MLP distribution yields appropriately result in lower expected growth rates.

5 To assess whether the MLPs' growth is more dependent on external financing than
6 the corporate companies, I examined the extent to which the analysts' consensus
7 growth estimates (as provided by I/B/E/S) exceeded the implied "sustainable
8 growth rate" (defined as the product of the earnings retained and the expected
9 return on equity) for the MLPs and corporate entities, respectively. That analysis
10 showed that analysts' growth expectations are considerably greater than the
11 "sustainable growth" estimate for both groups, indicating that external financing is a
12 significant element of expected long term growth for both MLPs and corporate
13 entities. I therefore concluded that there is no basis to assume that the consensus
14 MLP growth rates are "distorted" relative to corporate growth rates by virtue of
15 external financing.

16 Finally, in order to assess the reasonableness of the DCF results (which are based in
17 large part on a group of MLPs), I conducted a risk premium analysis based on the
18 historical relationship between Commission-authorized ROEs and concurrent long-
19 term interest rates. As discussed in more detail in Section VI, the results of that
20 analysis were highly consistent with my median DCF results, providing further
21 support for the position that the DCF results, based on a proxy group including
22 MLPs, are not biased vis-à-vis corporate entities.

1 **Q. How is the balance of your testimony organized?**

2 A. My remaining testimony is organized into five sections. Section III discusses the
3 regulatory guidelines and financial considerations pertinent to rate of return
4 estimates. Section IV discusses current economic conditions that have a bearing on
5 the determination of an appropriate rate of return. Section V discusses the criteria
6 and approach for the selection of my proxy group of comparable companies.
7 Section VI explains the data and methodologies in my analyses and my
8 recommendation of the appropriate ROE for Sea Robin. Section VII summarizes
9 my results and conclusions.

10 **III. REGULATORY GUIDELINES AND FINANCIAL CONSIDERATIONS**

11 **Q. Please describe the guiding principles used in establishing the ROE for a**
12 **regulated utility.**

13 A. The United States Supreme Court's precedent-setting decisions in *Hope* and *Bluefield*
14 established the standards for determining the fairness or reasonableness of a utility's
15 allowed ROE. Among the standards established by the Court in those cases are: (i)
16 consistency with other businesses having similar or comparable risks; and (ii)
17 adequacy of the return to support credit quality and access to capital, while
18 maintaining financial integrity. The *Hope* and *Bluefield* cases read, in pertinent part:

19 A public utility is entitled to such rates as will permit it to earn a
20 return on the value of the property which it employs for the
21 convenience of the public equal to that generally being made at the
22 same time and in the same general part of the country on
23 investments in other business undertakings which are attended by
24 corresponding risks and uncertainties; but it has no constitutional
25 right to profits such as are realized or anticipated in highly profitable
26 enterprises or speculative ventures. The return should be adequate,
27 under efficient and economic management, to maintain and support

1 its credit and enable it to raise the money necessary for the proper
2 discharge of its public duties. A rate of return may be reasonable at
3 one time and become too high or too low by changes affecting
4 opportunities for investment, the money market and business
5 conditions generally.⁷

6
7 * * *

8 Rates which are not sufficient to yield a reasonable return on the
9 value of the property used at the time it is being used to render the
10 service are unjust, unreasonable and confiscatory.⁸

11
12 * * *

13 From the investor or company point of view, it is important that
14 there be enough revenue not only for operating expenses, but also
15 for the capital costs of the business. These include service on the
16 debt and dividends on the stock. By that standard the return to the
17 equity owner should be commensurate with returns on investments
18 in other enterprises having corresponding risks. That return,
19 moreover, should be sufficient to assure confidence in the financial
20 integrity of the enterprise, so as to maintain its credit and to attract
21 capital.⁹

22
23 **Q. Why is it important for a utility to be allowed the opportunity to earn a return**
24 **adequate to attract capital at reasonable terms?**

25 **A.** There is a long history regarding the allowed return on equity, the role of capital
26 structure, and the resulting cost of capital in the establishment of just and
27 reasonable rates for utility services. Among the themes common to many Federal,
28 State and Supreme Court cases is the principle that a utility's cost of capital
29 (including its capital structure and allowed return on common equity) must be
30 reflective of other enterprises having comparable risks acting independently in the
31 financial markets. A return that is adequate to attract capital at reasonable terms

⁷ *Bluefield Waterworks & Improvement Company v. Public Service Commission of West Virginia*, 262 U.S. 679, at 692-693 (1923).

⁸ *Id.*, at 690-692.

⁹ *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, at 603 (1944), ("Hope").

1 enables the utility to provide safe, reliable service while maintaining its financial
2 integrity. In keeping with the *Hope* and *Bluefield* standards, that return should be
3 commensurate with the returns expected elsewhere in the market for investments of
4 equivalent risk. The consequence of the Commission's order in this case, therefore,
5 should be to provide the Company with the opportunity to earn a return on equity
6 that is: (1) adequate to attract capital at reasonable terms, thereby enabling it to
7 provide safe, reliable natural gas storage service; (2) sufficient to ensure the financial
8 integrity of the Company's gas transmission operations; and (3) commensurate with
9 returns on investments in enterprises having corresponding risks. To the extent the
10 Company is provided the opportunity to earn its market-based cost of capital,
11 neither customers nor shareholders should be disadvantaged.

12 **Q. Please discuss the importance of the allowed rate of return from the**
13 **perspective of the capital markets.**

14 A. The financial community continues to put the pipeline industry under intense
15 scrutiny. There is little question, for example, that the rating agencies continue to
16 focus on financial profiles and business risks for all pipeline companies. To that
17 point, Standard & Poor's noted that:

18 When evaluating the creditworthiness of natural gas pipeline
19 companies, Standard & Poor's analysis begins with a qualitative
20 assessment of a company's business risk profile. The company's
21 financial metrics are then examined in light of its business risk
22 profile, since companies with higher business risk require stronger
23 financial metrics at the same rating category.¹⁰
24

¹⁰ Standard & Poors, "Key Rating Factors for U.S. Natural Gas Pipelines", *Commentary Report* (10 August 2005): at 1.

1 Thus, the allowed rate of return should take into consideration capital market
2 expectations relative to both earnings and risk.

3 **Q. Has the Commission recognized the importance of establishing a rate of**
4 **return that is commensurate with the risks incurred by equity investors?**

5 A. Yes, in *SoCal*, the Commission concluded that “investors generally cannot be
6 expected to purchase stock, if debt, which has less risk than stock, yields the same
7 return”.¹¹ As discussed later in my testimony, that conclusion is relevant to the
8 DCF results for certain corporate pipeline and LDC companies in this case.

9 **Q. What is the basis for your recommended ROE for Sea Robin?**

10 A. My recommended ROE is based on a proxy group of publicly-traded corporations
11 and Master Limited Partnerships with significant interstate natural gas pipeline
12 operations. My recommendation relies on a range of reasonableness, determined by
13 the high and low DCF results, and is supported by additional corroborating
14 analyses. By selecting a group of entities with risks and business characteristics
15 comparable to Sea Robin, I have ensured that my analysis in this proceeding
16 comports with the *Hope* and *Bluefield* standards upon which my recommendation is
17 based, as well as the FERC standard for natural gas pipelines, established in *Williston*
18 *Basin*.¹² As such, my analyses result in a recommended ROE that is both
19 commensurate with the Company’s total risk (i.e., business risk and financial risk)
20 and sufficient to attract capital at reasonable rates.

21 The Commission has stated its preference for the application of a Discounted Cash
22 Flow (“DCF”) model that incorporates both near-term earnings growth forecasts

¹¹ SoCal Edison, 92 FERC paragraph 61,070 at 61,266 (2002).

¹² *Williston Basin Interstate Pipeline Company*, 104 FERC ¶ 61,036 (2003).

1 and longer-term estimates of macroeconomic growth (referred to herein as the
2 “two-stage DCF” model). My testimony, therefore, relies heavily on the two-stage
3 DCF model. As discussed in more detail later in my testimony, however, to the
4 extent that LDCs are used as comparison companies, it will be very important to
5 consider alternative ROE estimation methodologies. As such, I have performed a
6 risk premium analysis based on FERC-authorized returns for corporate gas pipeline
7 companies. As noted earlier, the results of that analysis is consistent with my
8 median DCF results.

9 **IV. CURRENT ECONOMIC CONDITIONS**

10 **Q. Please describe the business environment and risks currently facing**
11 **interstate natural gas pipeline and storage companies.**

12 **A.** Natural gas pipeline companies are faced with a series of regulatory, business and
13 economic risks that, in aggregate, continue to exert competitive pressure, thereby
14 influencing both business and financial risks. In general, shorter contract durations,
15 counter-party credit risk, and pricing pressure resulting from the lower of cost or
16 market based rates has increased the competitive nature of the natural gas pipeline
17 business in general. Moreover, unbundling initiatives at the state jurisdictional level
18 have provided end-users and shippers with an enhanced range of competitive
19 alternatives that may enable shippers to shift risks to the pipelines by obtaining
20 shorter term contracts or releasing capacity to other shippers.

1 **Q. Is it your view that Sea Robin faces greater risk than other interstate pipeline**
2 **and storage companies?**

3 A. Yes. Based on my review of the Company's business and financial risks, Sea Robin
4 faces greater overall operating risk than other natural gas gathering and
5 transportation companies. As discussed in the testimony of Mr. Langston, Sea
6 Robin is exposed to a number of business risks that in aggregate, render the
7 Company considerably more risky than other natural gas gathering and pipeline
8 systems. As Mr. Langston notes, those risks fall in several categories, including: (i) a
9 lack of direct end-use markets; (ii) the offshore nature of the Sea Robin system; (iii)
10 a high degree of dependence on shallow Gulf of Mexico drillings; (iv) declining
11 production in the shallow water Gulf; (v) a high number of competitors and
12 available capacity; (vi) dependence of volumetric charges for cost recovery due to
13 the primarily interruptible customer base; (vii) limited ability to attract
14 interconnection with growing deepwater supplies; (viii) higher projected operating
15 costs due to hurricane-related risks, and; (ix) limited opportunities from offshore
16 LNG deliveries.

17 As Mr. Langston explains, these risks distinguish Sea Robin from other gathering
18 and transportation systems. The fact that there are no end-use markets connected
19 to the Sea Robin system, for example, results in multiple contracting and operating
20 requirements for its customers. These costs can be avoided by the Company's
21 customers by delivering from offshore platforms directly to transportation systems
22 with large, directly connected markets, resulting in a competitive disadvantage for
23 Sea Robin. As Mr. Langston further notes, Sea Robin's customers are producers

1 and marketers as opposed to local distribution companies or industrial end-users.

2 As such, Sea Robin competes for customers at the highly competitive and volatile
3 wellhead. That risk is exacerbated by the fact that deepwater drilling in the Gulf of
4 Mexico is expected to expand, putting further competitive pressure on shallow
5 water systems such as Sea Robin. As Mr. Langston explains, in response to these
6 competitive threats, the Company has often agreed to invest its own capital to
7 connect a prospective customer's platform to Sea Robin, or has offered discounts to
8 shippers that otherwise could connect to a competing offshore pipeline system.

9 In addition to the competitive pressures discussed above, the Company's return on
10 equity also is threatened by virtue of the fact that only a small portion of Sea
11 Robin's revenues are derived from firm transportation contracts. Absent a
12 substantial portion of long-term firm transportation revenues, Sea Robin has a
13 significant risk of under-recovery of its fixed costs. In light of the lack of firm
14 contracts, Sea Robin must rely on interruptible volume for its fixed cost recovery.
15 Here again, the Company faces considerable risk with respect to its ability to earn a
16 reasonable rate of return. Indeed, as Mr. Langston notes, overall operating costs
17 have increased since Hurricanes Katrina and Rita; a continuation of that trend
18 would further erode the Company's ability to earn its required equity return.

19 Importantly, the business risks noted above distinguish Sea Robin from other
20 natural gas gathering and transportation systems. Given the widely held view that
21 interstate pipelines are more risky than local distribution companies, it follows that
22 Sea Robin's ROE should be meaningfully above that which would be required for
23 LDCs. Even if one were to look to the high end of DCF results based on a group

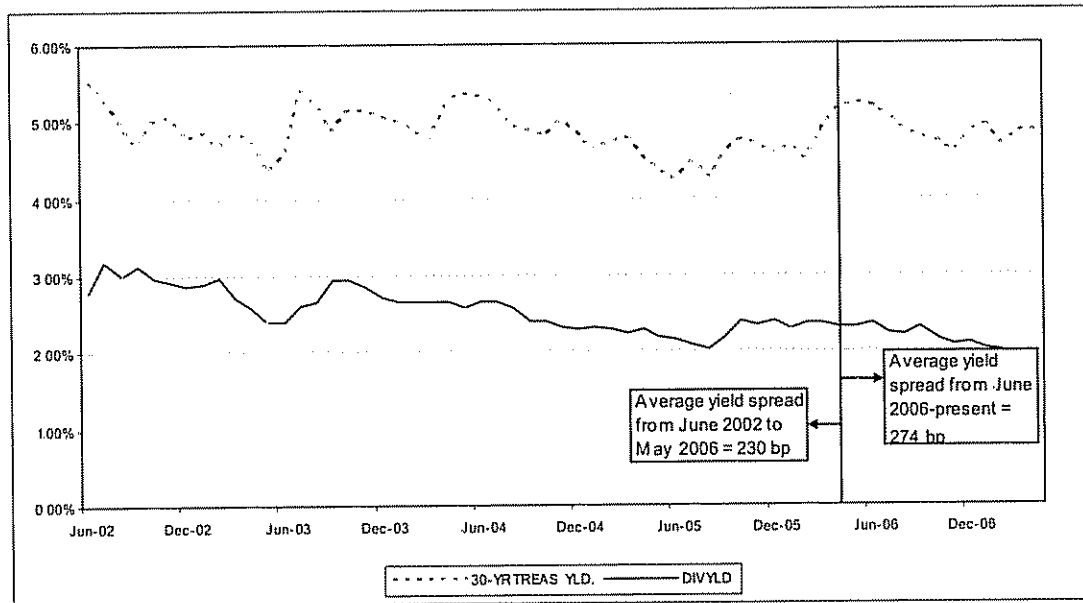
1 of companies that have significant LDC operations, however, any conclusion drawn
2 from such an analysis would be biased by the fact that LDC stocks have traded at
3 unusually high valuation levels over the past several months. As a result, LDC
4 dividend yields and, therefore, DCF results are unusually low.

5 **Q. Have you performed any analyses to assess the current level of natural gas**
6 **LDC stock valuations?**

7 A. Yes, I analyzed three widely-accepted measures of utility stock price valuation: (1)
8 the difference between the yield on long-term Treasury bonds and utility dividend
9 yields (often referred to as the “yield spread”), (2) recent utility Price/Earnings
10 ratios relative to the long-term average; and (3) recent utility Market/Book ratios
11 relative to the long-term average. I discuss each of these valuation measures in turn,
12 below.

13 (1) The Widening Yield Spread There is little question that utility stock prices and
14 dividend yields are strongly related to interest rates. From June 2002 through May
15 2006, the yield spread between the average dividend yield (for the three LDCs used
16 by the Commission in *Kern River*, i.e., National Fuel Gas, Questar, and Equitable
17 Resources) and the 30-year Treasury rate was approximately 230 basis points. As
18 shown on Chart 1 (below), however, for the period from June 2006 through May
19 2007, the average yield spread has increased to 274 basis points.

Chart 1: Historical Yield Spreads – LDCs



As Chart 1 also indicates, the widening yield spread has accelerated since the beginning of 2007. The data in Chart 1 therefore, indicate that over the past year, yield spreads were wider, and dividend yields were lower, than the long-term relationship would suggest. That divergence is consistent with the notion that utility stocks are currently “expensive” relative to interest rates.

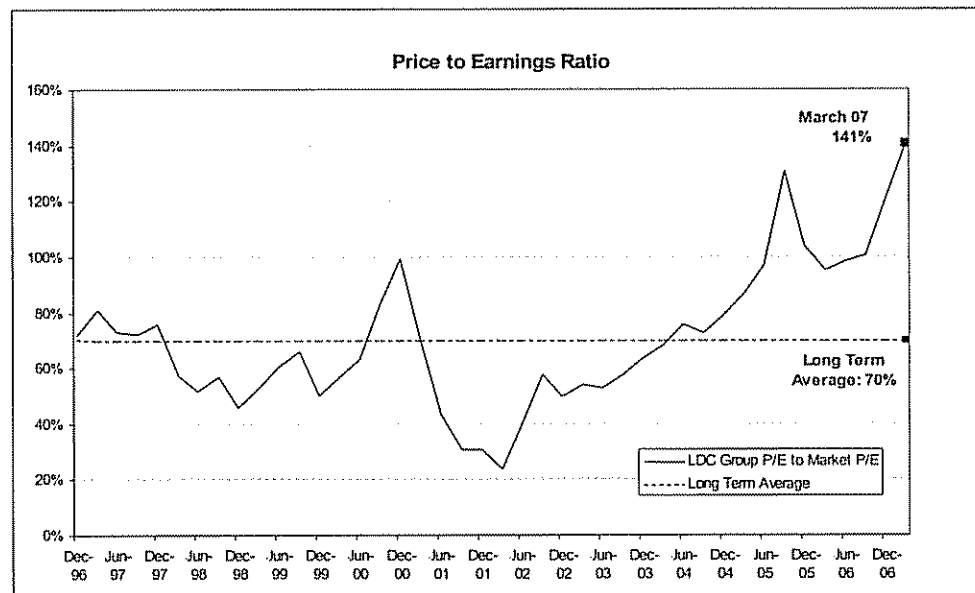
The widening yield spread also has been noted by other industry analysts in their assessment of current utility stock valuations. Calyon Securities, for example, pointed out that between March and May 2007, the yield spread between the Dow Jones Utility Index (the “DJUI”) and the ten-year Treasury Bonds increased by 50 basis points.¹³ While the DJUI is a relatively broad index of utility companies, Calyon’s conclusion that dividend yields are unusually low relative to historical

¹³ Calyon Securities, *Utility Valuation: Yields and Relative P/E’s Indicate It’s Time for a Pause*, May 29, 2007.

standards supports the position that the current average dividend yield for the three LDC's does not represent long-term market conditions.

(2) The Price/Earnings Ratio Consistent with the widening of the yield spread, the LDC group average Price/Earnings ("P/E") ratio has increased significantly as a percentage of the overall market (as measured by the S&P 500 Index). That is, over the last 10 years (since June 1997), the LDC group average P/E ratio has been approximately 70 percent of the S&P 500 P/E ratio. As of the end of the first quarter of 2007 (3/31/07), the proxy group average P/E was approximately 141 percent of the S&P 500 P/E, indicating that utility stock earnings multiples are very high relative to their historical norms. As shown on Chart 2 (below), the increase in relative valuation multiples has accelerated significantly over the past several months. In fact, since December 2006, the 180-day average LDC group P/E ratio has increased from 19.55 to 22.70 (an increase of approximately 11.6 percent) while the 180-day average S&P 500 P/E ratio actually decreased from 17.68 to 17.41 (a decrease of 1.5 percent).

Chart 2: LDC P/E Relative to Market P/E



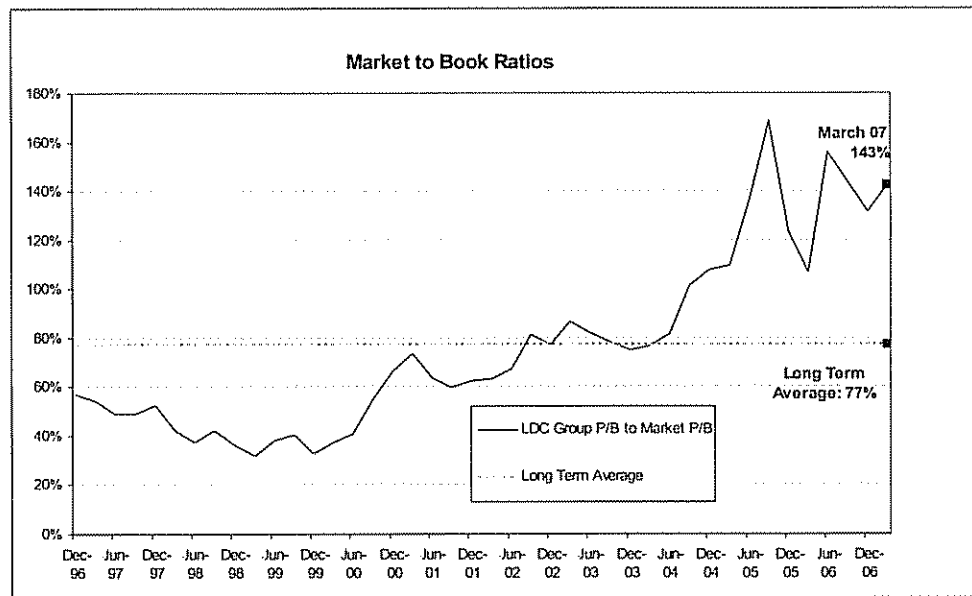
Here again, Calyon Securities arrived at a similar conclusion regarding relative P/E ratios, finding that the DJUI P/E as a percentage of the S&P 500 P/E ratio has increased from its long-term average of approximately 75 percent to 110 percent. In fact, Calyon noted that the current relative P/E (of 110 percent) is “the highest relative P/E in our study period and likely one of the highest in history.”¹⁴

(3) The Market/Book Ratio As with the widening of the yield spread and the increase in P/E relative to the market, market valuations for the proxy group companies, in terms of market/book ratios (“M/B”) recently have significantly deviated from long-term levels. As shown in Chart 3 (below), over the last 10 years (since June 1997), the LDC group average M/B ratio has been approximately 77 percent of the S&P 500 M/B ratio. As of the end of the first quarter of 2007 (3/31/07), the LDC

¹⁴ Id

group average M/B was approximately 143 percent of the S&P 500 M/B, indicating again that utility multiples are very high relative to their historical norms.

Chart 3: LDC Market/Book Relative to Market Market/Book



Q. Are these valuation levels being driven by factors other than company and market fundamentals?

A. Yes, I believe so. In my view, the recent increase in valuations cannot be explained entirely by recently low interest rates or improving company fundamentals; investors' speculation relative to merger prospects have had a significant effect on utility stock valuations. Since the effective repeal of the Public Utilities Holding Company Act ("PUHCA") in February 2006, there have been a number of mergers announced in the utility segment. Moreover, the recent entrance of private equity firms has introduced a substantial source of acquisition funds into the sector. Interestingly, private equity investors have participated across the spectrum of utility

1 M&A transactions from the relatively small proposed acquisition of SEMCO
2 Energy (market capitalization of \$275 million) by Cap Rock Holding Corporation to
3 the \$45 billion acquisition of TXU Corporation by a consortium led by Kohlberg,
4 Kravis, Roberts and Company, and the Texas Pacific Group. It is unclear, however,
5 whether the recent level of merger activity will continue. As AG Edwards recently
6 pointed out,

7 ...it has been 12 months since a new acquisition of gas utility assets
8 has been announced. High natural gas prices may be putting a
9 damper on new announcements. We continue to believe an
10 occasional announcement or two can be expected each year, but that
11 a wave of gas utility takeovers is unlikely.¹⁵
12

13 It appears, therefore, that the current level of utility valuations cannot be sustained
14 by market fundamentals and that the speculative effect of increased merger activity
15 by both utility operating companies and private equity firms likewise may not be
16 sustainable over the long term.

17 **Q. What are the implications of these findings for the determination of Sea**
18 **Robin's ROE?**

19 A. The analyses discussed above indicate that the LDC proxy group stock prices
20 currently are "expensive" relative to historical valuations and the market in general.
21 As a result, it is likely that the DCF results for the three LDCs cited in *Kern River*
22 significantly understate long-term expected returns. As discussed in greater detail
23 later in my testimony, the effect of these market conditions is to produce DCF
24 results for LDC companies that are significantly below the results of other ROE

¹⁵ AG Edwards, Weekly Utility Summary, June 1, 2007.

1 estimation methodologies. Under such market conditions it is appropriate to
2 question the relevance of the LDC companies as a proxy for Sea Robin. If,
3 however, the Commission were to continue to use the LDCs in its determination of
4 the Company's cost of equity, it would be appropriate to also consider the results of
5 alternative approaches.

6 **Q. What effect do these factors have on the determination of an appropriate**
7 **ROE for Sea Robin?**

8 A. As I have discussed previously, Sea Robin faces greater overall operating risk than
9 other interstate natural gas gathering and transportation companies. Therefore,
10 based on a proxy group of interstate pipeline entities, it would be inappropriate to
11 place the Company's ROE at the median result. Furthermore, as the Commission
12 pointed out in *Kern River*, there is no dispute that pipeline companies are more risky
13 than LDCs. As discussed above, however, current LDC valuations would produce
14 biased DCF results. As such, to the extent that a proxy group that includes LDCs is
15 used in this analysis, consistent with the Commission's decision in *Kern River*, the
16 ROE should be set well above the median DCF result.

17 **V. PROXY GROUP COMPANIES**

18 **Q. Why is it necessary to use a proxy group in the determination of an equity**
19 **return?**

20 A. The use of proxy groups is a widely employed analytical method to assist in
21 estimating the cost of equity for a particular company. As discussed in more detail
22 later in my testimony, the methods most commonly used by financial analysts to
23 estimate the cost of equity are based on company-specific market data and

1 projections. In the case of Sea Robin, which is a wholly owned subsidiary of
2 Southern Union Company ("Southern Union"), the Company has no publicly
3 traded common stock. As such, it is necessary to develop a group of publicly traded
4 entities that are comparable to the Company in certain fundamental respects. Since
5 it is possible that market data for a single company may reflect the effects of
6 unusual or transitory events, the primary benefit of using a group of comparable
7 companies is that it serves to attenuate the effects of anomalous events that may be
8 associated with any one company. Additionally, proxy groups include a range of
9 characteristics for companies deemed to be comparable to Sea Robin, and thus
10 provide a benchmark to gauge the reasonableness of ROE estimate results.

11 **Q. How did you select the companies included in your proxy group?**

12 A. I began with the six company group used by the Administrative Law Judge in her
13 initial decision in *Kern River*. These six companies are derived from the same group,
14 adjusted for divestitures and mergers, approved by the Commission in *Williston*
15 *Basin*, and today represent those corporate entities with the most significant natural
16 gas pipeline holdings. That group consists of El Paso Corporation; Equitable
17 Resources, Inc.; Kinder Morgan, Inc.; National Fuel Gas Company; Questar
18 Corporation; and Williams Companies.

19 **Q. Have you adopted the six company group in its entirety as your proxy group?**

20 A. No, I have not. While all of those companies meet certain screening criteria, there
21 are varying degrees to which their financial performance relies on regulated, as
22 opposed to non-regulated operations. Moreover, several of those companies derive
23 only a small portion of their financial results from FERC-regulated natural gas

1 transmission. As discussed in more detail below, the effect of that criterion is to
2 substantially limit the number of corporate natural gas pipeline companies that
3 reasonably can be considered comparable to Sea Robin.

4 **Q. On what basis do you claim that certain of the six companies previously**
5 **listed as successors to the Williston Basin proxy group, fail to meet your**
6 **screening criteria?**

7 A. Equitable Resources and Questar fail to meet my requirement that natural gas
8 transmission represents a significant portion of the combined business segments.
9 Further, Equitable Resources failed to meet the criterion that a substantial portion
10 of its economic value is derived from interstate pipeline or storage operations¹⁶.
11 These companies have been rejected by the Commission in the past due to the fact
12 that they are substantially local distribution companies with a significantly different
13 risk profiles than that of Sea Robin.¹⁷ El Paso's financial condition requires that it
14 be excluded from my proxy group due to the reduction of its dividend and its
15 continued low credit rating. Finally, in May 2006, Kinder Morgan announced its
16 intention to be taken private; on May 24, 2007 the transaction received approval
17 from the California Public Utilities Commission (which was the last regulatory
18 approval required to close the transaction) and on May 30, 2007 the transaction
19 closed.

¹⁶ Furthermore, Equitable is currently engaged in the acquisition of Dominion Peoples and Dominion Hope, a transaction that is under investigation by the Federal Trade Commission.

¹⁷ *Williston Basin Interstate Pipeline Co.*, 87 FERC ¶61,264 at 62,007 (1999)

1 Q. Please describe the basis on which you determined whether the candidate
2 companies were substantively engaged in natural gas transmission.

3 A. As summarized on Table 1 (below), as of December, 2006, the percentage that
4 pipeline operations contributed to revenues, operating income and utility assets
5 varied significantly among the six corporate natural gas pipeline companies:

6 **Table 1: Business Segment Information¹⁸**

Company	% Revenue from Pipeline Operations	% Operating Income from Pipeline Operations	% Assets from Pipeline Operations	Overall Weighting
El Paso Corporation	63%	3%	55%	59%
Equitable Resources	5%	7%	0%	6%
Kinder Morgan, Inc.	61%	53%	56%	64%
National Fuel Gas	10%	37%	21%	23%
Questar Corp.	6%	13%	0%	10%
Williams Companies	11%	37%	26%	25%

7
8 For the purposes of my ROE recommendation, I have considered those companies
9 with an overall weighting for interstate natural gas pipeline operations of greater
10 than 25% to be significantly engaged in interstate natural gas transportation. In my
11 view, this approach is somewhat more inclusive than the approach taken in *Williston*
12 wherein the Commission stated that it determined whether a company's pipeline
13 operations constituted a high proportion of its business based on whether on
14 average over the most recent three year period, approximately 50 percent or more
15 of "total dollars" was produced in at least one of two areas, including operating
16 income and total assets.¹⁹

¹⁸ Source: SEC Forms 10-K and 10-Q. The percentages in the table represent the average of 2006, 2005 and 2004. Refer to Exhibit No. SR-50.

¹⁹ Kern River Gas Transmission Company, 117 FERC ¶ 61,077, fn 225.

1 As indicated in Table 1 (above), my analysis of Equitable Resources indicates that
2 only 6 percent of its combined operations were derived from natural gas pipeline
3 operations, whereas 24 percent of its operations are related to its LDC activities and
4 52 percent relate to natural gas supply. Questar's natural gas pipeline operations
5 comprise only 10 percent of its business, while its gas distribution operations total
6 24 percent, and its exploration and production operations contribute 66 percent of
7 its total. National Fuel's natural gas pipeline operations represent approximately 23
8 percent of its operations, while its LDC operations make up 42 percent, and the
9 bulk of the remainder is attributable to exploration and production. In the case of
10 Questar and Equitable, there is little question that interstate pipeline and storage
11 services constitute too small a percentage of consolidated operations to be
12 considered comparable to Sea Robin.

13 **Q. Why have you excluded National Fuel from your proxy group?**

14 A. First, National Fuel derived approximately 23 percent of its consolidated operations
15 from interstate gas pipelines and storage services. Since that level of operations is
16 below my 25 percent threshold, in my view, National Fuel does not have sufficient
17 interstate pipeline and storage operations to be considered comparable to Sea
18 Robin.

19 It also is important to note that the DCF result for National Fuel Gas is
20 considerably below any reasonable estimate of required equity returns for natural
21 gas utilities, much less interstate pipeline and storage companies. As the
22 Commission pointed out, investors cannot be expected to invest in common equity

1 if debt “yields essentially the same return.”²⁰ At that time, the DCF model produced
2 ROE estimates for El Paso and Williams that were approximately 110 basis points
3 above the Moody’s utility index bond yield. As shown on Table 2 (below), the
4 current spread (*i.e.* the implied equity risk premium) between the DCF result for
5 National Fuel and the six-month average yield on the Moody’s Baa utility bond
6 index is approximately 186 basis points. Even that risk premium, however is
7 inadequate to attract new investment. The spread between Commission-authorized
8 natural gas pipeline returns and the Moody’s Baa utility bond yield demonstrates
9 that the required risk premium is far greater than 186 basis points. As shown in
10 Table 2 (below), the spread between the Moody’s Baa utility bond yield and the
11 allowed return in *Kern River* was 495 basis points. Furthermore, the average spread
12 between the Moody’s Baa utility bond yield index and the average Commission-
13 authorized pipeline returns from 2000 through the first quarter of 2007 is 425 basis
14 points. The 186 basis point risk premium implied by the National Fuel Gas DCF
15 result, therefore, is unrealistically low.

16 **Table 2: Equity Risk Premia**

	National Fuel Gas	Kern River	Authorized Pipeline Returns
DCF Result	8.01%	11.20%	11.68%
Moody’s Baa Utility Bond Yield	6.15%	6.25%	7.43%
Equity Risk Premium	1.86%	4.95%	4.25%

17

²⁰ *Southern California Edison Company*, 92 FERC ¶ 61,070 at 61,266 (2002). Referred to herein as “*SoCal*”.

1 **Q.** Why have you excluded El Paso from your proxy group when it has the
2 highest percentage of natural gas pipeline operations of all the companies?

3 A. El Paso, although it is owner of a large pipeline network, continues to suffer from a
4 weakened financial and credit profile. El Paso reduced its dividend in 2003 and, as a
5 result, has the second lowest dividend yield of any company being considered for
6 potential inclusion in the proxy group. In addition, while the rating agencies have
7 provided mixed signals on the outlook for El Paso, they have noted significant
8 concerns with the company's balance sheet and its exploration and production
9 business unit. FitchRatings ("Fitch") recently recognized an improvement in the
10 company's credit profile; however, Fitch remains concerned by the "significant
11 leverage that remains on the balance sheet and lingering issues with the upstream
12 operations."²¹ Fitch further noted that "[w]hile the balance sheet improvement at El
13 Paso is significant, including a material reduction in external debt at the parent
14 company level, consolidated and parent company debt will remain sizeable at year-
15 end 2007."²² Finally, Fitch stated that upstream operating results would have to
16 improve and credit measures would need to strengthen before it would consider
17 taking a positive rating action. Fitch currently assigns El Paso a BB+ rating with a
18 "stable" outlook.

19 Standard & Poor's ("S&P") assigns El Paso a BB rating with a "positive" outlook,
20 citing as weaknesses "aggressive debt leverage, weak cash flow credit protection
21 measures and underperforming exploration and production operations"²³. S&P

²¹ FitchRatings, Leveraged Finance Weekly, March 9, 2007.

²² Id.

²³ Standard & Poor's Ratings Direct, ElPaso Corp, June 6, 2007, p. 1.

1 clarifies that its positive outlook reflects “the potential for the E&P segment to
2 produce the cash flow necessary for improved credit metrics in the next 18 to 24
3 months.”²⁴ S&P noted, however, that the E&P business unit has repeatedly failed
4 to meet its targets in recent years. Furthermore, S&P noted that “[f]ailure to meet
5 upstream targets or a deterioration in liquidity could dampen upward ratings
6 prospects”.²⁵

7 Finally, while Moody’s assigns El Paso a positive outlook and a credit rating of Ba3,
8 Moody’s also states that the company’s credit rating hinges on the returns of the
9 E&P business segment. The E&P business segment, which represents
10 approximately one-third of the company’s EBIT is identified by Moody’s as the
11 company’s “predominant business risk”. Such a company cannot be expected to
12 share the same investment expectations as those for a financially stable company
13 such as Sea Robin.

14 Although the rating agencies describe El Paso’s financial condition as having
15 improved substantially, it also is evident that El Paso continues to face balance sheet
16 and other financial and operating risks. As discussed below, it is equally clear that
17 the company’s DCF results do not adequately reflect those risks relative to the other
18 comparison companies; in fact El Paso, which arguably is the highest risk of the
19 potential proxy companies, has the second lowest DCF result.²⁶ (See Exhibit No.
20 SR-46)

²⁴ Ibid, p. 3.

²⁵ Ibid.

²⁶ It also is interesting to note that El Paso itself is considering folding certain of its pipeline companies into an MLP. See Prepared Direct Testimony of Randolph A. Barlow, Exhibit 5-8.

1 **Q. Why did you not consider Sea Robin's parent company, Southern Union, for**
2 **inclusion in the proxy group?**

3 A. I have not considered Southern Union for inclusion in the proxy group due to the
4 limited history of its cash dividend payment, as the company has only been paying
5 dividends for one year. In my view, the company's limited dividend history
6 disqualifies Southern Union from consideration in the group. Moreover, it generally
7 is my practice not to consider the subject company or its parent for inclusion in the
8 proxy group.

9 **Q. What companies remain from the six that you considered for inclusion in the**
10 **proxy group?**

11 A. Only the Williams Companies remain and, therefore, there is no viable proxy group
12 using only publicly-traded pipeline corporations. Moreover, Williams' credit rating
13 remains below investment grade. Typically, to obtain a group of companies with
14 comparable business risks, I would apply a screen to my proxy group candidates to
15 verify that all companies were of investment grade or better. If such a credit rating
16 requirement for all proxy group companies' were applied in this case, however, even
17 Williams would have been excluded, leaving no corporate pipeline proxy companies.
18 As opposed to El Paso, whose DCF results are implausibly close to the Moody's
19 utility index bond yield and considerably below any recently authorized gas LDC
20 equity return, William's DCF result, while somewhat low relative to recent LDC
21 authorized returns and pipeline company equity risk premia, is demonstrably above
22 the Company's current debt cost rate (see Exhibit No. SR-47). Moreover, the rating
23 agencies tend to be more positive about the financial and operating improvements

1 made by Williams than El Paso. Fitch has assigned Williams a “positive” outlook
2 suggesting a stronger credit profile than El Paso. S&P assigns Williams a rating of
3 BB+ with a “stable” outlook, indicating that this outlook will be upgraded to
4 positive if Williams “continues to strengthen its credit metrics and exercises greater
5 capital discipline.”²⁷ Furthermore, S&P notes that:

6 Williams has significantly improved its financial metrics and
7 operating performance. Williams has employed capital discipline as
8 it has rebalanced its portfolio and reduced debt leverage, positioning
9 the firm to garner greater expected cash flow. In addition, the
10 company has taken steps to fortify its liquidity and decrease its
11 exposure to long-dated tolling contracts.²⁸
12

13 Finally, Moody’s has recently placed Williams under review for a possible upgrade.
14 The upgrade is being attributed to Williams’ announcement that it intends to sell
15 substantially all of its merchant power generation operations, which is expected to
16 improve leverage and lower the volatility of cash flow and earnings.²⁹ Consequently,
17 it would not be unreasonable to include Williams in the proxy group. Even if one
18 were to include Williams, given the lack of fundamental comparability issues
19 associated with LDCs (discussed earlier) and the fact that only one corporate
20 pipeline possibly could be considered (*i.e.*, Williams), it is necessary to expand the
21 universe of potential comparison companies to include publicly traded interstate gas
22 pipelines structured on MLPs.

²⁷ Standard & Poors, RatingsDirect, The Williams Cos. Inc, March 30, 2007, p. 4

²⁸ Ibid, p. 1.

²⁹ Moody’s Investors Service, Global Credit Research Rating Action, The Williams Companies, May 21, 2007.

1 **Q. Please discuss the process by which you selected the companies included in**
2 **your proxy group.**

3 A. To ensure that my proxy group meets the comparability standard set forth in *Hope*
4 and *Bluefield*, I began by considering all of the companies that Value Line classifies as
5 the Diversified Natural Gas industry group. This industry group includes the
6 majority of the publicly-traded corporations and MLPs that have significant interests
7 in interstate natural gas transportation. As I have discussed, the publicly traded
8 corporations did not meet the criteria for inclusion in the proxy group. I then
9 considered MLPs with significant natural gas pipeline operations that were not
10 covered by Value Line. From this population, I applied the following criteria (see
11 also Exhibit No. SR-48):

- 12 1) All of the companies have publicly-traded common stock or units;
- 13 2) All of the companies have significant involvement in natural gas transmission
14 and own 100 percent of at least one FERC-regulated natural gas pipeline;
- 15 3) All of the companies derive a substantial portion of their revenues and income
16 from natural gas transmission;
- 17 4) All of the companies are currently paying cash dividends or distributions;
- 18 5) All of the companies are in sound financial condition with no pending negative
19 ratings actions that would significantly impact investors' perception of risk; and
- 20 6) None of the companies are engaged in significant transactions involving
21 mergers or acquisitions.

22 The first two criteria are consistent with the Commission's Order in *EPGT Texas*
23 *Gas Pipeline L.P.*, 99 FERC ¶61,295 (2002), wherein the Commission commented on
24 screening criteria for proxy group companies in natural gas proceedings. To that
25 point, the Commission stated that "The companies should be publicly-traded,

1 engaged largely in natural gas transmission, and own natural gas pipelines regulated
2 by the Commission.”³⁰

3 In order to determine the extent to which the candidate companies are engaged in
4 pipeline operations, I developed a list of interstate pipelines owned by each of the
5 companies evaluated for potential inclusion in the proxy group (see Exhibit No. SR-
6 49). For each of those companies, I gathered revenue, operating income, and asset
7 data by business segment for the years ended 2006, 2005 and 2004. Based on that
8 data, I calculated the percentage of revenues, operating income and assets associated
9 with natural gas transmission; an analysis that is critical to the selection of a
10 reasonable proxy group in identifying peer companies with risks comparable to
11 those of Sea Robin. (See Exhibit No. SR-50).

12 **Q. Did you use the same proxy group screening criteria for the MLPs and the**
13 **corporate companies reviewed above?**

14 A. Yes, I have reviewed the publicly-traded corporations and the MLPs engaged in
15 natural gas pipeline operations according to the thresholds discussed earlier.

16 **Q. What is the final composition of your proxy group?**

17 A. My proxy group is comprised of the following seven companies:

- 18 • Williams Companies
- 19 • Boardwalk Pipeline Partners, L.P.
- 20 • Enbridge Energy Partners, L.P.
- 21 • Enterprise Products Partners, L.P.
- 22 • Kinder Morgan Energy Partners, L.P.

³⁰ 99 FERC at 62,250.

1 • MarkWest Partners, L.P.

2 • OneOK Partners, L.P.

3 Exhibit No. SR-49) provides a list of pipelines owned by each of the MLPs included
4 in my proxy group.

5 **Q. Please explain further why you consider it appropriate to include Master**
6 **Limited Partnerships in your proxy group.**

7 A. As a practical matter, since only one pipeline company can reasonably be considered
8 a candidate for the proxy group, it is necessary to consider other proxy entities,
9 including LDCs and MLPs. As noted earlier, however, the business segment profile
10 and DCF results for the LDCs disqualify those companies from inclusion in the
11 proxy group. Moreover, since the investment in pipeline assets is beginning to be
12 dominated by MLPs, it is important to recognize their legitimacy as proxy
13 companies in gas pipeline proceedings. To that point, a recent white paper prepared
14 for the Interstate Natural Gas Association of America ("INGAA") recognizes the
15 importance of MLPs in developing proxy groups:

16 Currently, the fundamental issue in selecting a proxy group in a
17 natural gas pipeline rate case is whether or not to include
18 representatives of the many pipeline companies that are organized as
19 MLPs. The basic premise for creating the proxy-group approach in
20 the first place was that, because gas pipeline companies were not
21 publicly-traded, a group of similar publicly traded companies was
22 needed in order to establish a proxy for investor expectations
23 regarding natural gas pipelines. Now as MLPs have grown in
24 number, scope and importance, they comprise a very representative
25 group of true, publicly-traded pipeline companies to which the
26 Commission can turn for market guidance.
27

1 The Commission has relied on MLPs as proxy companies in oil pipeline cases.
2 Also, the Commission considered a proxy group including MLPs to be “reasonable”
3 in *Natural Gas Pipeline Company of America, and Panther Interstate Pipeline Energy, LLC*,
4 105 FERC ¶61,383 (2003), for purposes of imputing a capital structure on Panther.
5 That proxy group included Equitable Resources, Kinder Morgan, KM Energy,
6 National Fuel, ONEOK, Inc., Questar, and TEPPCO. Moreover, as noted earlier
7 the Commission stated in *Kern River* and *HIOS*, that it was “not making a generic
8 finding that MLPs cannot, in future cases, be considered for inclusion in the proxy
9 group if a proper evidentiary showing is made”.³¹

10 **Q. What was the Commission’s concern with respect to the inclusion of MLPs**
11 **in the proxy group in *HIOS* and *Kern River*?**

12 A. The Commission’s concern centered on whether the distribution payment to the
13 unit holders included a return of a portion of the partner’s original investment, and
14 if so, whether it would effectively distort the dividend yield component of the DCF
15 model. In *Kern River*, the Commission noted that while it did not intend to
16 “foreclose” the issue of whether or not MLP could be included in a proxy group,
17 non-MLP companies must demonstrate that the payment of distribution is
18 consistent with the expected growth rates used in the DCF analysis. Thus, the
19 Commission stated that it would not consider including an MLP in the proxy group,
20 unless the record demonstrates that the distribution used as the “dividend” includes

³¹ *Kern River*, Docket No. RP04-274-000, Opinion No. 486, October 19, 2006, p. 63.

1 only a payment of earnings and not a return of investment.³² INGAA recently
2 addressed the Commission's concern, noting that:

3 This white paper concludes that the Commission's concern is
4 misplaced. An examination of a five-year history of actual returns to
5 equity investors from the gas-pipeline MLPs revealed that a short-
6 term DCF analysis for the same period would have been a very
7 accurate predictor of actual returns. Measuring investor
8 expectations by applying the DCF formula to a group that includes
9 MLPs would appear to be as valid as any application of the formula
10 to stock-owned companies.³³

11 **Q. Do you agree with INGAA regarding the inclusion of MLPs in the proxy**
12 **group?**

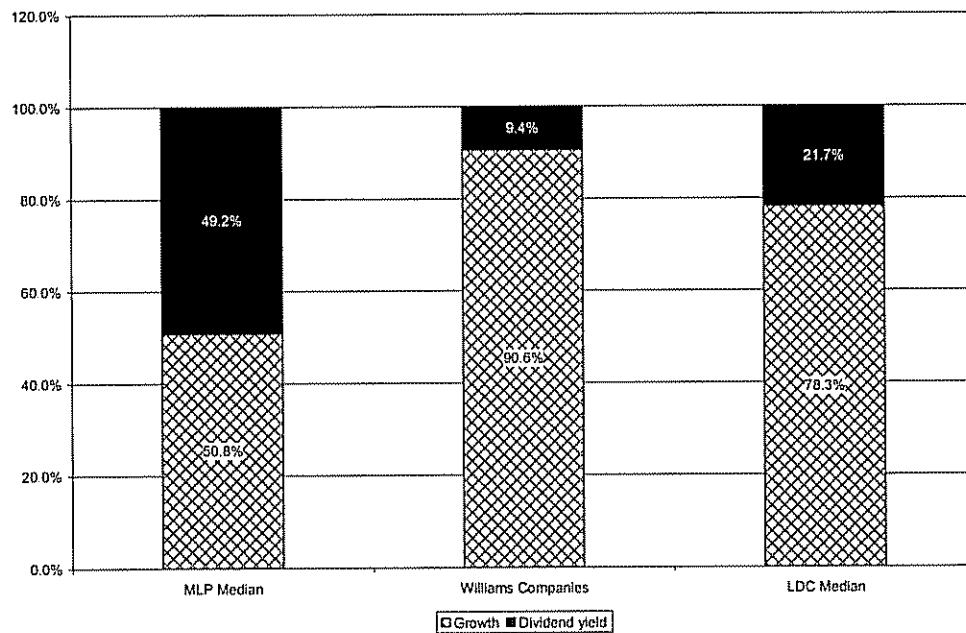
13 **A.** Yes. I do. Investors value assets based upon the expected future cash flows they
14 will generate and do not differentiate their valuations based upon whether the
15 source of that cash is a stock dividend or a partnership unit distribution. A 13.50
16 percent investment return on an MLP unit is no different than a 13.50 percent
17 investment return on a share of stock, of equivalent risk, regardless of whether it is
18 classified as a dividend or distribution. Generally, the primary difference between
19 the two investments is the timing of cash flows, i.e., MLPs will generate greater cash
20 flows during the holding period, with less potential for capital appreciation
21 (generally, recognized as the growth component of the DCF model). Stocks, on the
22 other hand, pay a lower dividend but have a greater potential for capital
23 appreciation. Chart 5 (below) demonstrates that in fact, the ROE estimates for
24 MLPs, corporate pipelines (i.e., Williams) and the LDCs have radically different

³² *HIOS, LLC*, 110 FERC ¶ 61,043.

³³ INGAA, "Allowed Returns on Equity in the Interstate Gas Pipeline Industry Issues and Options Regarding the FERC DCF Approach", dated August 24, 2006, at 5.

compositions; the portion of the ROE relating to growth is significantly lower for the MLPs, while the dividend component is significantly greater.

Chart 5: DCF Components

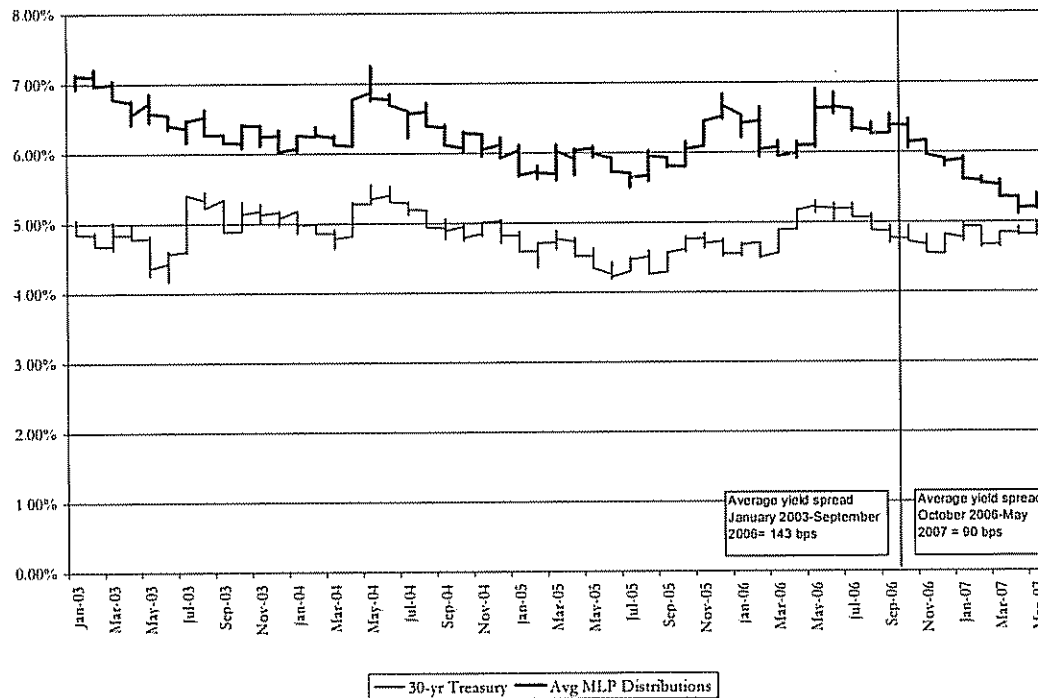


Q. Earlier you discussed the spread between yields on utility stocks and Treasury yields. Have you performed a similar analysis for the MLPs?

A. Yes. I analyzed the yield spread between MLPs and long-term Treasury Bonds. As shown in Chart 6 (below), the yield spread between the 30-year Treasury and MLP distributions remained fairly constant from the beginning of 2003 through the third quarter of 2006. Since that time the yield spread has declined steadily from 143 basis points to 90 basis points. As with utility stocks, it appears that MLP distribution yields are somewhat lower than otherwise would be expected based on long-term market relationships.

1

Chart 6: Historical Yield Spreads



2

3 **Q. Do the relatively high distribution yields characteristic of an MLP cause the**
4 **DCF analysis to overstate the ROE recommendation for a corporate pipeline**
5 **company?**

6 **A.** No. Investors understand that in general, there is a trade-off between distribution
7 and expected growth. It is true that MLPs generally pay out a greater share of cash
8 in distributions than a corporation would pay in dividends, as required by the tax
9 code. However, it follows as a consequence of the high payout that MLPs have less
10 cash available for reinvestment, and, as a result, their growth expectations are often
11 lower than the growth expectations for corporations.

1 **Q. Has the DCF model historically provided an accurate measure of investors'**
2 **expectations for MLPs?**

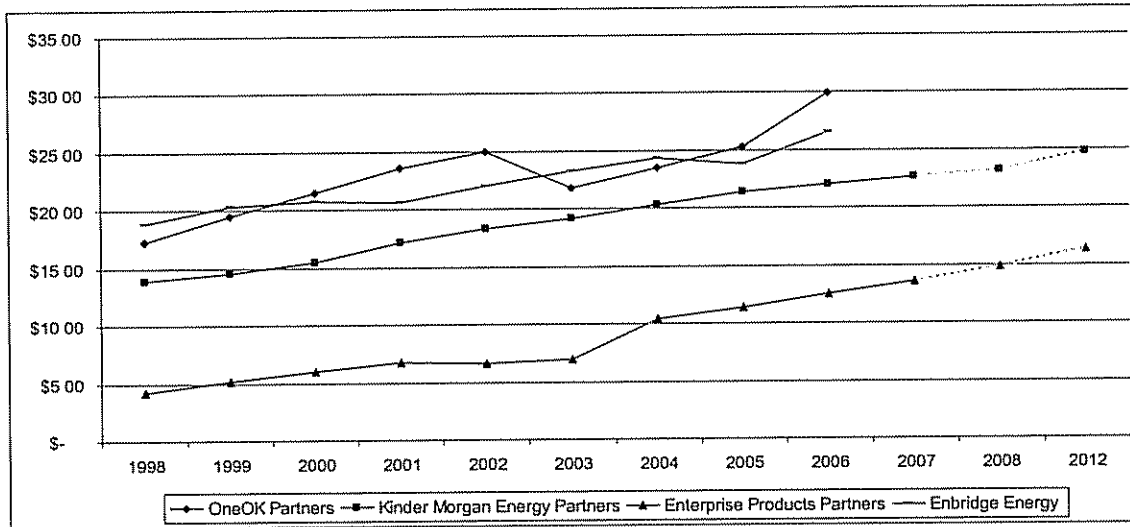
3 A. Yes, it appears that the two-stage DCF model adequately weighs the income
4 prospects of an investment with its growth prospects and in general does provide an
5 accurate reflection of future returns. The performance of the DCF model in
6 evaluating the returns of MLPs were examined in the INGAA paper by
7 “backcasting”, or comparing the actual return to investors for a recent past period
8 with the return that would have been predicted by a short-term DCF study for the
9 same period. That study indicated that a short-term DCF approach would have
10 predicted a return of 17.22 percent, compared to the 18.48 percent return that was
11 actually realized by the investors. This study provides reasonable evidence that, in
12 fact, the DCF formula, applied directly to the MLPs provides an accurate (if not
13 conservative) representation of investors' expectations.³⁴

14 **Q. Have you performed any analyses to determine whether or not the MLPs**
15 **actually reflect a diminution of capital from distributions?**

16 A. Yes, I have performed an analysis of the natural gas pipeline MLPs covered by
17 Value Line to determine whether there is any diminution of capital resulting from
18 equity distributions by reviewing the historical (and projected) book capital per unit.
19 My analysis is premised on the construct that if MLP distributions were in fact a
20 return of capital, the book capital per unit would steadily decline over time.
21 Additionally, forward projections of book value per unit growth would be zero or
22 negative.

³⁴ INGAA, *Allowed Returns on Equity in the Interstate Gas Pipeline Industry Issues and Options Regarding the FERC DCF Approach*, dated August 24, 2006, at 20.

Chart 7: Partnership Capital per Unit (Adjusted for Market to Book Effect on New Issuances)³⁵



As shown in Chart 7 (above) and in Exhibit No. SR-51, my results affirm that there is no diminution of capital resulting from equity distributions, in nominal or real terms, and that book value per unit, distributions per unit, and earnings per unit grow steadily over the analyzed period from 1998 to 2012.

To determine whether analysts other than Value Line expect distributions to be made out of operating cash flows, I examined the projected distributable cash flow and distributions for those MLPs in my proxy group that are covered by RBC Capital Markets ("RBC"). As part of its coverage, RBC provides detailed projections of distributable cash flows and distributions per unit. As shown in Exhibit No. SR-52, the "distribution coverage" (i.e., the ratio of distributable cash

³⁵ Source: Valueline growth estimates. Valueline did not report growth estimates for OneOk Partners and Enbridge Energy Partners.

1 flow to distributions) never falls below 1.0, indicating that distributions are expected
2 to be paid entirely out of distributable cash flows³⁶.

3 **Q. Do the RBC reports provide any other insights?**

4 A. Yes. As part of its cash flow projections, RBC projects the distributions expected to
5 be paid out to the General Partner. As noted by Wachovia Capital Markets, LLC,
6 the yield should take into consideration payments made to the General Partner.³⁷
7 Based on the RBC projections, that adjustment would increase the yield by
8 approximately 170 to 205 basis points.

9 **Q. Have you performed any analyses in response to the Commission's concern**
10 **that MLP growth rates may be "distorted" as a result of external financing?**

11 A. Yes. The Commission's concern appears to be premised on the proposition that
12 over the long term, corporate growth is largely financed by internally generated
13 funds. Internally generated funds, then, are a function of the return on equity and
14 the percentage of earnings retained (i.e., the percentage of earnings not paid out in
15 dividends). To the extent that MLPs distribute a large portion of their earnings or
16 cash flow, there is less cash available for reinvestment; their growth, therefore, must
17 be funded from external sources. At issue, then, is whether the corporate
18 companies' expected growth rates also are significantly dependent on external
19 financing. To the extent that is the case, it is unclear whether the MLP growth rates
20 are "distorted" by virtue of their dependence on external funds.

³⁶ Cash flows are based on maintenance capital expenditures, and include payments to the general partner. It should be noted that total capital expenditures are likely to include items in addition to maintenance capital expenditures.

³⁷ Wachovia Capital Markets, LLC, Master Limited Partnerships: Primer 2nd Edition, August 23, 3005, p 18.

1 To determine whether the corporate companies' growth rates are materially affected
2 by expected external financing, I calculated the internal growth rate (defined as the
3 product of the retention ratio and the expected return on equity) for each of
4 Questar, Equitable, National Fuel Gas and Williams. As shown on Exhibit No. SR-
5 53, the average internal growth rate for those four companies is 5.48 percent. As
6 also shown on that Exhibit, the average I/B/E/S growth rate is 8.75 percent. The
7 average difference of 3.27 percent, therefore, reflects the extent to which expected
8 growth is dependent on external financing. Thus for the four corporate entities,
9 external funding represents approximately 40 percent of expected growth. While
10 that is certainly lower than the extent to which MLPs are dependent on external
11 financing, it nonetheless is a significant portion³⁸. Consequently, it is my view that
12 external funding does not "distort" the MLP growth rates relative to the corporate
13 growth rates.

14 **Q. Please discuss the tax treatment of the MLPs for unit holders.**

15 A. MLPs combine the benefits of a partnership with the liquidity of a publicly traded
16 stock. According to the IRS, an MLP is a partnership whose interests are traded on
17 an established securities market or are readily tradable on a secondary market (or its
18 substantial equivalent). Distribution holders are taxed directly at their marginal
19 income tax rate for their share of partnership net income, regardless of the amount
20 of the distribution that they have received. Generally, MLPs distribute the majority
21 of their free cash leaving little cash retained in the business. Because there generally

³⁸ As shown on Exhibit SGS-52, Page 4, on a historical basis, total capital expenditures and dividends exceeded operating cash flows (on average) for the three LDCs, indicating that external financing has been required for growth

1 is a significant difference between free cash flow and net income, due to the large
2 depreciation charge on pipeline assets, unit holders are afforded a significant tax
3 incentive by minimizing taxable income recognition during the holding period and
4 deferring payment on the majority of taxes until the ultimate sale of the partnership
5 units. To the extent that the cash distribution exceeds the unit holder's share of
6 marginal income (which generally is the case), the unit holder's tax basis in the
7 partnership will be reduced, which has the effect of deferring taxation on that
8 portion of the distribution until such time as the partnership unit is sold.

9 **Q. How does this compare to the tax treatment of publicly-traded corporate**
10 **entities?**

11 A. Generally, in the case of both MLPs and corporations, every dollar received by way
12 of distribution to the unit or shareholders is taxed over the holding period, from
13 purchase to sale. In the case of the corporation, its shareholders are taxed on its
14 dividends, and the basis of the original investment is never reduced, regardless of
15 whether the dividend exceeded earnings per share. At the time of sale, any capital
16 gain (or loss) will be determined by subtracting the original basis from the proceeds
17 of the sale. As discussed above, the MLP unit holder generally pays taxes on a
18 portion of its distribution, but the non-taxable portion of the distribution reduces
19 the basis, and leads to earlier recognition of income.

20 In Exhibit No. SR-54, I have developed a simple example that illustrates that the
21 unit holder or shareholder is ultimately taxed on 100 percent of all distributions or
22 dividends and all capital gains, over the holding period, in both the corporate and
23 MLP scenarios. That example assumes that net income is \$5 per share, the payout

1 ratio is 100 percent, and distributions are \$20 per share. The example further
2 assumes that a \$100 investment in a share of stock or MLP unit was made at the
3 end of year 0, and the investment was sold at the end of year 4 for \$200. Capital
4 gain amounts are determined by subtracting the basis, at the end of year 4, from the
5 proceeds of the sale. Growth rates are assumed to be zero for purposes of
6 simplifying the example.

7 The example illustrates the tax deferral feature of the MLP, as the taxable gain in the
8 year of sale is greater than it would be upon the sale of a corporate stock, to the
9 extent that distributions exceeded partnership income. However, in the end, every
10 dollar received, whether in the form of distributions, dividends, or capital gains, is
11 taxable both to the MLP unitholder and corporate stockholder. It should be noted
12 that once the MLP basis is reduced to zero, 100 percent of all distributions are fully
13 taxable in the period they are received.

14 **Q. Are you aware that legislation recently has been introduced regarding the**
15 **taxation of publicly traded partnerships?**

16 **A.** Yes. On June 14, 2007, Senators Baucus and Grassley introduced legislation that
17 "...would tax as corporations all partnerships that directly or indirectly derive
18 income from investment advisor or asset management services."³⁹ On its face, the
19 bill appears expressly limited to partnerships that derive income or gains "...from
20 services provided by any person as an investment advisor, as defined in the
21 Investment Advisors Act of 1940, or as a person associated with an investment

³⁹ United States Senate Committee on Finance, News Release dated June 14, 2007, *Baucus-Grassley Bill Addresses Publicly Traded Partnerships*

1 advisor, as defined in that Act.”⁴⁰ The bill does not address the use of such
2 partnerships, as Congress envisioned, in fostering energy infrastructure investment.

3 **Q. How does the investment community regard MLPs in comparison to**
4 **corporations; in what ways do they differ in the eyes of the investor?**

5 A. Investors consider the two primary components of the return on their investments,
6 yield and growth. The decision to invest in MLPs, relative to other publicly traded
7 securities, is largely dependent on the investor’s preference with respect to
8 distributions, tax treatment, growth prospects, and risk. S&P discusses the features
9 of MLPs in the context of the greater market, acknowledging that there is a trade-
10 off between the receipt of large cash distributions and the resulting loss of financial
11 flexibility that is characteristic of MLPs:

12 The main attractive feature of MLPs for investors is that they avoid
13 double taxation by paying out nearly all free cash flow to
14 unitholders. In addition, general partners of MLPs can receive an
15 increasingly large interest in distributions as dividends are raised.
16 However, MLPs therefore also often have limited financial flexibility
17 and must rely on their ability to raise fresh debt or equity to fund
18 new investments.⁴¹
19

20 **Q. What are your conclusions with respect to the inclusion of MLPs in the proxy**
21 **group and whether MLP distributions constitute a return of capital for**
22 **purposes of developing an ROE estimate?**

23 A. It is appropriate to treat the distribution yield exactly the same as the dividend yield
24 for purposes of calculating the DCF ROE estimates. It is understood that MLPs
25 typically have higher distribution yields than corporations have dividend yields, but

⁴⁰ Congressional Record – Senate, S7744, June 14, 2007.

⁴¹ Standard and Poor’s, *Commentary Report, Key Rating Factors For U.S. Natural Gas Pipelines*, August 10, 2005, at 3.

1 this difference is offset in the growth rates of the two companies' structures. The
2 MLPs will assume a lower growth rate with less cash available to fund growth,
3 where as corporate pipeline companies would generally expect a higher growth rate
4 in conjunction with a lower dividend yield. As discussed earlier in my testimony,
5 however, for the MLPs included in my proxy group there is no indication that the
6 distribution yields are unduly biased by the source of distributable funds or that
7 external financing distorts the MLP growth rates relative to corporate growth rates
8 (See Exhibit No. SR-55). My results therefore indicate that there is no
9 distinguishable difference between the returns required by investors for a publicly-
10 traded corporation versus a publicly-traded MLP (all else being equal).

11 **VI. DETERMINATION OF THE APPROPRIATE ROE**

12 **Q. Please describe the DCF approach.**

13 **A.** The DCF approach is based on the theory that an equity share's price represents the
14 present value of all future expected cash flows. In its simplest form, the DCF
15 model expresses the ROE as the sum of the expected dividend (or distribution)
16 yield and long-term growth rate. The DCF approach estimates a firm's ROE as the
17 rate that equates the discounted value of all future cash flows expected by investors
18 with the value of its common stock (or limited partnership units). In its most
19 common form, the DCF model is expressed as follows:

20
$$k = \frac{D(1+g)}{P} + g \quad [1]$$

21 where "k" equals the required return, "D" is the current dividend (or distribution),
22 "g" is the expected growth rate, and "P" represents the subject company's stock (or

1 unit) price⁴². As noted later in my testimony, consistent with Commission
2 precedent, the two-stage form of the DCF model used in my analysis is essentially
3 similar to Equation [1], but for the fact that the growth rate, g , is calculated as the
4 weighted average of a near-term and a long-term growth rate.

5 **Q. What assumptions are required for the DCF model?**

6 A. The DCF model requires the following assumptions: (i) a constant average growth
7 rate for earnings and dividends; (ii) a stable dividend payout ratio; (iii) a constant
8 price-to-earnings multiple; and (iv) a discount rate greater than the expected growth
9 rate. In light of those assumptions, it is not uncommon for analysts to apply
10 considered judgment or to make specific adjustments to model inputs or results in
11 arriving at an ROE recommendation.

12 **A. Dividend (or Distribution) Yield**

13 **Q. How did you determine the dividend yield?**

14 A. In keeping with Commission precedent, I have used the current annualized dividend
15 (or distribution) together with the average of the high and low stock prices for each
16 of the most recent six-months for each of the proxy group companies as of May 31,
17 2007.⁴³ My calculation of the average stock or unit prices for each proxy group
18 company is shown on Exhibit No. SR-56. As shown in that Exhibit, I also
19 calculated the average stock price using the simple 180-day average price as of May
20 31, 2007.

⁴² Strictly speaking, MLPs make "distributions" to unit holders and corporations pay "dividends" to stockholders, but the DCF model makes no distinction between dividends and distributions. I have attempted to provide the alternate term, where appropriate, throughout the testimony.

⁴³ See *Williston Basis Interstate Pipeline Company*, 84 FERC ¶ 61,081, at 61,382 (1998).

1 **Q. Did you adjust the dividend (or distribution) yield to account for periodic**
2 **growth in dividends (or distributions)?**

3 A. Yes. Since companies tend to increase their quarterly dividends (or distributions) at
4 different times throughout the year, it is reasonable to assume that such increases
5 will be evenly distributed over calendar quarters. Given that assumption, it is
6 reasonable to apply one-half of the expected annual dividend (or distribution)
7 growth rate for the purposes of calculating the expected dividend (or distribution)
8 yield component of the DCF model. This adjustment ensures that the expected
9 yield is representative of the coming 12-month period. Accordingly, the DCF
10 estimates provided in Exhibit No. SR-57 reflect one-half of the expected near-term
11 growth in the dividend (or distribution) yield component of the model.

12 **B. DCF Growth Estimates**

13 **Q. Is it important to select appropriate measures of growth in applying the DCF**
14 **model?**

15 A. Yes. The general form of the DCF model assumes a single growth estimate in
16 perpetuity. Accordingly, in order to reduce the future growth rate to a single
17 measure, one must assume a constant payout ratio, and that earnings, dividends (or
18 distributions) and book value will all grow at the same constant rate. Over the long
19 run, however, dividend (or distribution) growth can only be sustained by earnings
20 growth. As noted by Brigham and Houston:

21 Growth in dividends occurs primarily as a result of growth in *earnings*
22 *per share* (EPS). Earnings growth, in turn, results from a number of
23 factors, including (1) inflation, (2) the amount of earnings the

1 company retains and invests, and (3) the rate of return the company
2 earns on its equity (ROE).⁴⁴
3

4 Consequently, it is important to focus on measures of earnings growth from
5 multiple, credible sources as an appropriate measure of future growth.

6 **Q. Why do you rely on forecasted, as opposed to historical, growth rates as the**
7 **basis for your growth rate projections?**

8 **A.** The ROE is a forward-looking concept that focuses on investor expectations
9 regarding future returns. The estimation of such returns, therefore, should be based
10 on forward-looking or projected data. Indeed, substantial academic research has
11 demonstrated the relationship between analysts' forecasts and investor
12 expectations.⁴⁵ In my view, I/B/E/S earnings growth rates, a source which
13 provides a consensus estimate of earnings growth by collecting five-year earnings
14 growth forecasts from a large pool of analysts on approximately 5,000 companies,
15 and also a source commonly used by the Commission in ROE proceedings, provide
16 a reasonable measure of growth estimates for use in the DCF model.

⁴⁴ Eugene F. Brigham and Joel F. Houston, *Fundamentals of Financial Management*, at 317 (Concise Fourth Edition, Thomson South-Western) [emphasis added].

⁴⁵ See, Robert S. Harris, *Using Analysts' Growth Forecasts to Estimate Shareholder Required Rates of Return*, FINANCIAL MANAGEMENT (Spring 1986) at 59. In a review of literature regarding the extent to which analyst forecasts are reflected in stock prices, Harris noted: "...Vander Weide and Carleton recently compare consensus financial analyst forecasts of earnings growth to 41 different historical growth measures. They conclude that "there is overwhelming evidence that the consensus analysts' forecast of future growth is superior to historically-oriented growth measures in predicting the firm's stock price... consistent with the hypothesis that investors use analysts' forecasts, rather than historically-oriented growth calculations, in making stock buy and sell decisions."

1 **Q. What sources of near-term growth have you used in your DCF analysis?**

2 A. In keeping with the Commission's preference, I have used the five-year growth
3 estimates in earnings per share published by I/B/E/S.⁴⁶

4 **Q. How did you incorporate your near-term growth forecasts into the two-stage**
5 **DCF analysis?**

6 A. In *Williston Basin* (84 FERC ¶ 61,081), the Commission affirmed the use of a simple
7 average of the near and long-term growth rate forecasts. Subsequently, in Opinion
8 No. 414-A, the Commission modified the two-stage DCF analysis to "give greater
9 weight to the short-term growth rate than to the long-term growth rate."⁴⁷ That
10 approach, which applied weights of two-thirds and one-third to a short-term and
11 long-term forecast, respectively, was affirmed in Opinion 414-B.⁴⁸ Consistent with
12 the Commission's practice, therefore, I have given my near-term growth estimates,
13 based on I/B/E/S estimates, a weighting factor of two-thirds (as discussed below,
14 my long-term growth estimate is given a weighting factor of one-third).

15 **Q. How did you develop your long-term growth rate estimate?**

16 A. In Opinion No. 414-A⁴⁹ the Commission indicated a clear preference for the use of
17 measures of long-term Gross Domestic Product ("GDP") growth as the long-term
18 component of the growth estimate. That Opinion affirmed the Commission's
19 findings in *Williston Basin* that GDP is an appropriate estimate of long-term growth
20 because:

⁴⁶ Opinion No. 414-A, 84 FERC ¶ 61,084, (1998).

⁴⁷ Ibid.

⁴⁸ Opinion No. 414-B, 85 FERC ¶ 61,323 at 62,269-70.

⁴⁹ Id.

1 as companies reach maturity over the long-term, their growth
2 slows, and their growth rate will approach that of the economy as a
3 whole; second, the Commission concluded that, over the long-run,
4 an expectation that a regulated firm will grow at the rate of the
5 average firm in the economy is reasonable; third, the purpose of
6 using the DCF analysis in this proceeding is to approximate the rate
7 of return an investor would reasonably expect from a pipeline
8 company, and record in those proceedings showed that the long-
9 term growth of the economy is used by two large investment houses
10 as their long-term growth figure in conducting DCF analyses for
11 investment purposes; and fourth, witnesses in those proceedings
12 used the long-term growth of the economy as a whole as
13 confirmation or support for their analyses.⁵⁰
14

15 It is important to note, however, that while GDP growth may well provide a
16 reasonable estimate of long-term earnings growth, it is not necessarily the case that
17 earnings growth will equal revenue growth over the long term. It is worthy of note
18 that the Blue Chip Economic Indicators consensus forecast indicates that over the
19 latter portion of Blue Chip's forecast period, pre-tax income is expected to grow at
20 an annual rate of approximately 5.7 percent. While I have not included a separate
21 pre-tax income growth rate in my two-stage DCF model, I have considered that
22 data in forming my estimate of long-term growth.

23 **Q. What sources did you consider for your long-term growth rate estimate?**

24 A. My long-term growth estimate is derived from (1) the *Annual Energy Outlook*,
25 published by the Energy Information Administration; and (2) Blue Chip Economic
26 Indicators Consensus Forecast; and (3) a market-based inflation estimate based on
27 the difference between 10-year Treasuries and 10-year Treasury Inflation Protected

⁵⁰ 84 FERC ¶ 61,081, at 61,385.

1 Securities ("TIPS").⁵¹ The simple average of those three inflation adjusted sources
2 produces a long-term nominal GDP growth rate of 5.35 percent. This is
3 approximately a 35 basis point difference from the pretax income growth rate
4 discussed above.

5 **Q. Please explain how you applied the DCF model to the MLPs.**

6 A. An MLP is a limited partnership, whose partnership interests are represented by
7 units that are publicly traded, much the same as a stock price represents a
8 shareholder's interests in a corporation. As discussed earlier, MLPs do not pay
9 dividends, but rather make distributions to its limited partnership unit holders. I
10 have applied the distribution per unit in the DCF model in the same way that I have
11 applied the dividend yield per share of common stock. In addition, I have
12 addressed the quarterly payment of distributions and dividends in the same way, by
13 multiplying the dividend or distribution yield by $1 + \frac{1}{2}$ of the growth rate to obtain
14 the expected distribution yield. The cash distributions that are received by the unit
15 holders are analogous to dividends received by common shareholders. In both
16 situations the return to the investor is the cash flow received in quarterly
17 distributions plus the cash that would be received if the units or shares were sold
18 upon a given valuation date.

19 **Q. Please summarize your application of the two-stage DCF model.**

20 A. I calculated the DCF result for each of the proxy group companies using the
21 following inputs:

⁵¹ The difference in 10-year Treasury yield and the year on 10-year TIPS is often considered to be as estimate of long-term inflation expectations. Nominal GDP growth is calculated as the product of $(1+i) \times (1+g)$ where i is the expected inflation rate and g is the long-term real GDP growth rate.

- 1 1) Based on Commission precedent,⁵² I have averaged the nearest six monthly
2 low and high stock (or unit) prices for the period ended May 31, 2007. This
3 is the most current data available to obtain a perspective on market
4 conditions as I prepare my testimony for the term *P*;
5 2) The current annualized dividend (or distribution) per share as of May 31,
6 2007;
7 3) I have used the I/B/E/S forecast for each of the proxy group companies as
8 the short-term forecast growth rate;
9 4) I have used the simple average of the long-term nominal GDP forecast by
10 the EIA, Blue Chip Economic Indicators, and inflation, measured as the
11 difference between 10-year Treasuries and the TIPS as the long-term
12 forecast growth rate.
13

14 As discussed earlier, I adjusted the six-month average dividend yield by one half of
15 the expected short-term growth rate to arrive at the expected dividend yield
16 component of the model. Finally, in accordance with the Commission's past
17 practice, I applied weights of two-thirds and one-third to the short-term and long-
18 term forecast growth rates, respectively. Please refer to Exhibit No. SR-57 for a
19 tabulation of dividend yields and growth rates used in my DCF analysis.

20 **Q. Please explain the approach by which you calculated your range of results.**

21 A. I calculated my range of results in accordance with the Commission's past practice,
22 which is to say that I calculated the two-stage DCF result for each company in the
23 proxy group. I then established the range of reasonableness by reference to the low
24 and high results of the group.

25 **C. DCF Results**

26 **Q. Please describe the results of your DCF analysis.**

27 A. Based on all the factors discussed in my testimony, and as shown in Exhibit No. SR-
28 57, I have established a zone of reasonableness that is based on the high and low

⁵² Order rejecting partial settlement, establishing transportation and storage rates, and directing filings in *Cranberry Pipeline Corp.*, 112 FERC ¶ 61,268 (2005).

DCF results, for the comparable companies, from approximately 11.00 percent to 13.70 percent. I have tabulated the alternative measures of central tendency for my proxy group in Table 3 (below) based on both the Commission's averaging convention⁵³ and the simple 180-day average stock price.

Table 3: DCF Results

	Low	Mean	Median	Mid-point	High
DCF Results	10.96%	12.13%	12.13%	12.26%	13.56%
DCF Result 180 – Day Average Stock Price ⁵⁴	10.99%	12.28%	12.27%	12.34%	13.70%

Q. Did you undertake an additional supplemental analysis to validate your DCF model results?

A. Yes. I used the Bond Yield Plus Risk Premium approach to validate the results of my DCF analysis.

Q. Why is it important to use multiple methodologies when calculating the cost of equity?

A. Each of the models available to estimate the cost of equity is subject to its own set of assumptions or methodological constraints. For example, while the two-stage DCF model uses market-derived yield data, it also assumes a constant (albeit, weighted) growth rate in perpetuity. Consequently, many finance texts recommend using multiple approaches when estimating the cost of equity. Copeland, Koller and

⁵³ The Commission has typically relied on a six month average that is based on the average of six monthly data points, calculated based on the average of the high and the low stock price each month for the six month period.

⁵⁴ 180-day average is calculated as the simple average of 180 trading days.

1 Murrin,⁵⁵ for example, suggest using the CAPM and Arbitrage Pricing Theory
2 model, while Brigham and Gapenski⁵⁶, for example, recommend the CAPM, the
3 DCF, and the Bond Yield Plus Risk Premium approaches. Since each model
4 requires the use of considerable judgment regarding assumptions and the validity of
5 proxy entities, it is prudent to use multiple methodologies to mitigate the effects of
6 assumptions and inputs associated with any single approach. Based on the
7 Commission's preference for the two-stage DCF model and in light of the capital
8 market practices discussed above, the two-stage DCF, supported by the results of
9 the Bond Yield Plus Risk Premium analyses, is a reasonable methodological
10 approach to establish Sea Robin's cost of equity.

11 **Q. Please describe the bond yield plus risk premium approach you employed.**

12 A. This approach estimates the cost of equity as the sum of the estimated risk
13 premium and the yield on a particular class of bonds. Since the equity risk premium
14 is not directly observable, it typically is estimated using one of a variety of
15 approaches that in itself must incorporate an estimate of the cost of equity in the
16 analysis. Inasmuch as any such approach necessarily introduces an additional
17 element of estimation error, an alternative approach is to use the actual authorized
18 returns for natural gas pipelines as the historical measure of the cost of equity.
19 Since both authorized returns and Treasury yields are observable, this approach
20 substantially mitigates the estimation error that otherwise may be included in the
21 analysis.

⁵⁵ Tom Copeland, Tim Koller and Jack Murrin, *Valuation: Measuring and Managing the Value of Companies*, 3rd ed (New York: McKinsey & Company, Inc., 2000) 214.

⁵⁶ Eugene Brigham, Louis Gapenski, *Financial Management: Theory and Practice*, 7th Ed. (Orlando: Dryden Press, 1994) 341.

1 **Q.** Are there other analytical considerations that should be addressed in
2 conducting this analysis?

3 A. Yes. In my view, it is important to recognize both academic and market evidence
4 suggesting that the equity risk premium (as used in this approach) is inversely related
5 to the level of interest rates. That is, as interest rates increase (decrease), the equity
6 risk premium decreases (increases). Consequently, it is important to develop an
7 analysis that (1) reflects the inverse relationship between interest rates and the equity
8 risk premium and (2) is based on more recent market conditions. Such an analysis
9 can be developed based on a regression of the risk premium as a function of
10 Treasury yields. If we let allowed natural gas pipeline ROEs serve as the measure of
11 required equity returns and define the yield on ten-year Treasury Notes as the
12 relevant measure of interest rates, the risk premium simply would be the difference
13 between those two points.⁵⁷

14 **Q.** What did your bond yield plus risk premium analysis reveal?

15 A. As shown on Chart 8 (below), from 1992 through 2006 there was, in fact, a strong
16 negative relationship between the equity risk premium and interest rates. To
17 estimate that relationship, I conducted a regression analysis using the following
18 equation:

19
$$RP = a + b(T_{10}) \quad [2]$$

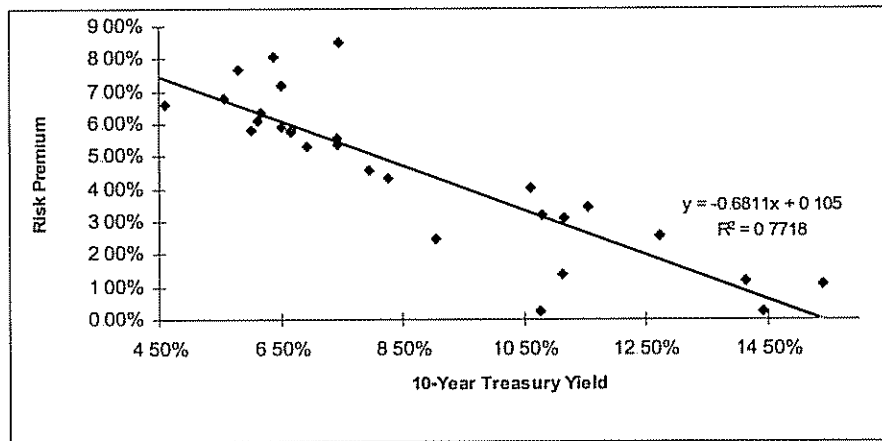
20 where:

⁵⁷ See for example, S. Keith Berry, *Interest Rate Risk and Utility Risk Premia during 1982-93*, Managerial and Decision Economics, Vol 19, No. 2 (March, 1998), in which the author used a methodology similar to the regression approach described below, including using allowed ROEs as the relevant data source, and came to similar conclusions regarding the inverse relationship between risk premia and interest rates. See also Robert S. Harris, *Using Analysts' Growth Forecasts to Estimate Shareholders Required Rates of Return*, Financial Management, Spring 1986, at 66

1 RP = Risk Premium (difference between allowed ROEs and 10-year
2 Treasury yield)
3 a = Intercept Term
4 b = Slope Term
5 T₁₀ = 10-year Treasury Bond Yield
6

7 Data regarding allowed ROEs was derived from 30 rate cases from 1976 through
8 the fourth quarter of 2006. This equation and its coefficients were statistically
9 significant, with an R² of 0.77.

10 **Chart 8: Risk Premium vs. Interest Rates⁵⁸**



11
12
13 As shown in Exhibit No. SR-58, from 1976 through the fourth quarter of 2006 the
14 average risk premium was approximately 6.96 percent. As shown in Exhibit No.
15 SR-58, adding the risk premium to the Blue Chip forecasted risk-free rate results in
16 an ROE of 12.16 percent, which is consistent with the median DCF results but does
17 not reflect the additional business risks faced by Sea Robin.

⁵⁸ Source: Northwest Pipeline Corporation, Docket RP06-416, Prepared Direct Testimony of Charles Olson, Exhibit No. NWP-43; data provided in Dr. Olson's testimony were corroborated by reference to Commission Orders.

VII. SUMMARY AND CONCLUSIONS

1

2 **Q. Please summarize your recommended ROE for Sea Robin**

3 A. Based on all the factors discussed in my testimony, I find that the zone of
4 reasonableness is from approximately 11.00 percent to approximately 13.60 percent.

5 The median of that range, which is approximately 12.10 percent, represents the
6 ROE for a natural gas pipeline of average risk. The 180-day stock price averaging

7 convention results in a zone of reasonableness from approximately 11.00 percent to
8 13.70 percent, with a median of approximately 12.27 percent. As noted earlier, the

9 Company's risk profile requires that a return at above the median results for the
10 pipeline group. In my view, therefore the Company should be provided the

11 opportunity to earn a return of 13.50 percent on its equity capital.

12 **Q. Does this conclude your prepared direct testimony?**

13 A. Yes, it does.

Commonwealth of Massachusetts }
County of Middlesex } SS.

BEFORE ME, the undersigned authority, on this day personally appeared
Robert B. Hevert, who being by me first duly sworn, on oath deposes and says:

That he is the Robert B. Hevert, offering the foregoing prepared direct testimony
and that all statements of fact contained therein are true and correct to the best of his
knowledge, information and belief.

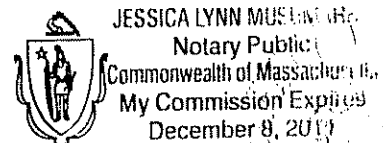

Robert B. Hevert

Subscribed and sworn to before me this 27th day of June, 2007.


Notary Public

My Commission Expires:

12/8/11



Robert B. Hevert, CFA
President

Mr. Hevert is an economic and financial consultant with broad experience in the energy industry. He has an extensive background in the areas of corporate strategic planning, energy market assessment, corporate finance, mergers, and acquisitions, asset-based transactions, asset and business unit valuation, market entry strategies, strategic alliances, project development, feasibility and due diligence analyses. Mr. Hevert has significant management experience with both operating and professional services companies.

REPRESENTATIVE PROJECT EXPERIENCE

Financial and Economic Advisory Services

Retained by numerous leading energy companies and financial institutions throughout North America to provide services relating to the strategic evaluation, acquisition, sale or development of a variety of regulated and non-regulated enterprises. Specific services have included: developing strategic and financial analyses and managing multi-faceted due diligence reviews of proposed corporate M&A counter-parties; developing, screening and recommending potential M&A transactions and facilitating discussions between senior utility executives regarding transaction strategy and structure; performing valuation analyses and financial due diligence reviews of electric generation projects, retail marketing companies, and wholesale trading entities in support of significant M&A transactions.

Specific divestiture-related services have included advising both buy and sell-side clients in transactions for physical and contractual electric generation resources. Sell-side services have included: development and implementation of key aspects of asset divestiture programs such as marketing, offering memorandum development, development of transaction terms and conditions, bid process management, bid evaluation, negotiations, and regulatory approval process. Buy-side services have included comprehensive asset screening, selection, valuation and due diligence reviews. Both buy and sell-side services have included the use of sophisticated asset valuation techniques, and the development and delivery of fairness opinions.

Specific corporate finance experience while a Vice President with Bay State Gas included: negotiation, placement and closing of both private and public long-term debt, preferred and common equity; structured

and project financing; corporate cash management; financial analysis, planning and forecasting; and various aspects of investor relations.

Representative non-confidential clients have included:

- Conectiv generation asset divestiture
- Eastern Utilities Associates (prior to acquisition by National Grid, PLC) generation asset divestiture
- Niagara Mohawk – sale of Niagara Mohawk Energy
- Potomac Electric Company generation asset divestiture

Representative confidential engagements have included:

- Buy-side valuation and assessment of merchant generation assets in Midwestern US
- Buy-side due diligence and valuation of wholesale energy marketing companies in Eastern and Midwestern US
- Buy-side due diligence of natural gas distribution assets in Northeastern US
- Financial feasibility study of natural gas pipeline in upper Midwestern US
- Financial valuation of natural gas pipeline in Southwestern US

Regulatory Analysis and Ratemaking

On behalf of electric, natural gas and combination utilities throughout North America, provided services relating to energy industry restructuring including merchant function exit, residual energy supply obligations, and stranded cost assessment and recovery. Also performed rate of return and cost of service analyses for municipally owned gas and electric utilities. Specific services provided include: performing strategic review and development of merchant function exit strategies including analysis of provider of last resort obligations in both electric and gas markets; and developing value optimizing strategies for physical generation assets.

Representative engagements have included:

- Performing rate of return analyses for use in cost of service analyses on behalf of municipally owned gas and electric utilities in the Southeastern and Midwestern US
- Developing merchant function exit strategies for Northeastern US natural gas distribution companies
- Developing regulatory and ratemaking strategy for mergers including several Northeastern natural gas distribution companies

Litigation Support and Expert Testimony

Provided expert testimony and support of litigation in various regulatory proceedings on a variety of energy and economic issues including the proposed transfer of power purchase agreements, procurement of residual service electric supply, the legal separation of generation assets, and specific financing transactions. Services provided also included collaborating with counsel, business and technical staff to develop litigation strategies,

preparing and reviewing discovery and briefing materials, preparing presentation materials and participating in technical sessions with regulators and intervenors.

Energy Market Assessment

Retained by numerous leading energy companies and financial institutions nationwide to manage or provide assessments of regional energy markets throughout the US and Canada. Such assessments have included development of electric and natural gas price forecasts, analysis of generation project entry and exit scenarios, assessment of natural gas and electric transmission infrastructure, market structure and regulatory situation analysis, and assessment of competitive position. Market assessment engagements typically have been used as integral elements of business unit or asset-specific strategic plans or valuation analyses.

Representative engagements have included:

- Managing assessments of the NYPOOL, NEPOOL and PJM markets for major North American energy companies considering entering or expanding their presence in those markets
- Assessment of ECAR, MAPP, MAIN and SPP markets for a large US integrated utility considering acquisition of additional electric generation assets
- Assessment of natural gas pipeline and storage capacity in the SERC and FRCC markets for a major international energy company

Resource Procurement, Contracting and Analysis

Assisted various clients in evaluating alternatives for acquiring fuel and power supplies, including the development and negotiation of energy contracts and tolling agreements. Assignments also have included developing generation resource optimization strategies. Provided advice and analyses of transition service power supply contracts in the context of both physical and contractual generation resource divestiture transactions.

Business Strategy and Operations

Retained by numerous leading North American energy companies and financial institutions nationwide to provide services relating to the development of strategic plans and planning processes for both regulated and non-regulated enterprises. Specific services provided include: developing and implementing electric generation strategies and business process redesign initiatives; developing market entry strategies for retail and wholesale businesses including assessment of asset-based marketing and trading strategies; and facilitating executive level strategic planning retreats. As Vice President, Energy Ventures, of Bay State was responsible for the company's strategic planning and business development processes, played an integral role in developing the company's non-regulated marketing affiliate, EnergyUSA, and managed the company's non-regulated investments, partnerships and strategic alliances.

Representative engagements have included:

- Developing and facilitating executive level strategic planning retreats for Northeastern natural gas distribution companies
- Developing organization and business process redesign plans for municipally owned gas/electric/water utility in the Southeastern US
- Reviewing and revising corporate merchant generation business plans for Canadian and US integrated utilities
- Advising client personnel in development of business unit level strategic plans for various natural gas distribution companies

PROFESSIONAL HISTORY

Concentric Energy Advisors, Inc. (2002 – Present)
President

Navigant Consulting, Inc. (1997 – 2001)
Managing Director (2000 – 2001)

Director (1998 – 2000)

Vice President, REED Consulting Group (1997 – 1998)

REED Consulting Group (1997)
Vice President

Bay State Gas Company (1987 – 1997)
Vice President, Energy Ventures and Assistant Treasurer

Boston College (1986 – 1987)
Financial Analyst

General Telephone Company of the South (1984 – 1986)
Revenue Requirements Analyst

EDUCATION

M.B.A., University of Massachusetts at Amherst, 1984

B.S., University of Delaware, 1982

DESIGNATIONS AND PROFESSIONAL AFFILIATIONS

Chartered Financial Analyst, 1991

Association for Investment Management and Research

Boston Security Analyst Society

PUBLICATIONS/PRESENTATIONS

Has made numerous presentations throughout the United States and Canada on several topics, including:

- Generation Asset Valuation and the Use of Real Options
 - Retail and Wholesale Market Entry Strategies
 - The Use Strategic Alliances in Restructured Energy Markets
 - Gas Supply and Pipeline Infrastructure in the Northeast Energy Markets
 - Nuclear Asset Valuation and the Divestiture Process
-

AVAILABLE UPON REQUEST

Extensive client and project listings, and specific references.

EXPERT TESTIMONY OF ROBERT B. HEVERT

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Centerpoint Energy Resources Corp. D/B/A Centerpoint Energy Arkansas Gas	01/07	Centerpoint Energy Resources Corp. D/B/A Centerpoint Energy Arkansas Gas	Docket No. 06-161-U	Return on Equity
Xcel Energy	12/06	Public Service Company of Colorado	Docket No. 06S-__G	Return on Equity (gas)
Transwestern Pipeline Company	9/06	Transwestern Pipeline Company	Docket No. RP06-614-000	Return on Equity
Pepco Holdings, Inc.	9/06	Atlantic City Electric		Divestiture and Valuation of Electric Generating Assets
Columbia Gas Of Virginia, Inc.	6/06	Columbia Gas Of Virginia, Inc.	Case No. PUE-2005-00098	Merger Synergies
Xcel Energy	5/06	Southwestern Public Service	SOAH Docket No. 473-06-2536 Docket No. 32766	Return on Equity (electric)
Xcel Energy	4/06	Public Service Company of Colorado	Docket No. 06S-__E	Return on Equity (electric)
Green Mountain Power	4/06	Green Mountain Power		Return on Equity (electric)
Vermont Gas Systems, Inc.	12/05	Vermont Gas Systems	Docket No. 7109 and No. 7160 (Vermont)	Return on Equity (gas)
Pepco Holdings, Inc.	12/05	Atlantic City Electric	BPU Docket No. EM05121058	Market Value of Electric Generation Assets; Auction
Xcel Energy	11/05	NSP-Minnesota	Docket No. E002/GR-05-1428 (Minnesota)	Return on Equity (electric)
Xcel Energy	08/05	Public Service Company of Colorado	Advice Letter No. 94-Stream (Colorado)	Return on Equity (steam)
Xcel Energy	05/05	Public Service Company of Colorado	Docket No. 05-264G (Colorado)	Return on Equity (gas)
NSTAR Electric	09/04	NSTAR Electric	D.T.E 04-85 (Massachusetts)	Divestiture of Power Purchase Agreement

EXPERT TESTIMONY OF ROBERT B. HEVERT

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Xcel Energy	09/04	NSP Minnesota	G002/GR-04-1511 (Minnesota)	Cost of Capital (gas)
NSTAR Electric	08/04	NSTAR Electric	D.T.E 04-78 (Massachusetts)	Divestiture of Power Purchase Agreement
NSTAR Electric	07/04	NSTAR Electric	D.T.E 04-68 (Massachusetts)	Divestiture of Power Purchase Agreement
NSTAR Electric	07/04	NSTAR Electric	D.T.E 04-61 (Massachusetts)	Divestiture of Power Purchase Agreement
NSTAR Electric	06/04	NSTAR Electric	D.T.E 04-60 (Massachusetts)	Divestiture of Power Purchase Agreement
Unitil Corporation	01/04	Fitchburg Gas and Electric	D.T.E. 03-52 (Massachusetts)	Integrated Resource Plan; Gas Demand Forecast
Conectiv	06/03	Atlantic City Electric Company	BPU EO03020091 (New Jersey)	Market Value of Electric Generation Assets; Auction Process
Dominion Resources	10/01	Virginia Electric and Power Company	PUE000584 (Virginia)	Corporate Structure and Electric Generation Strategy
Niagara Mohawk Power Corporation	07/01	Niagara Mohawk Power Corporation	NY PSC Case 01-E	Power Purchase and Sale Agreement; Standard Offer Service Agreement
GPU International and Aquila	11/00	GPU International	EC01- (FERC)	Market Power Study
Northern Utilities, Inc.	07/95	Northern Utilities	Maine PUC	Gas Distribution System Expansion
Bay State Gas Company	01/93	Bay State Gas Company	DPU 93-14	Long Term Debt Financing
Bay State Gas Company	01/91	Bay State Gas Company	DPU 91-25	Long Term Debt Financing

EL PASO CORPORATION TWO-STAGE CONSTANT GROWTH DCF									
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Consensus Growth	GDP Growth	Weighted Average Growth Rate *	DCF
El Paso Corp	EP	\$0.16	\$14.87	1.08%	1.12%	8.00%	5.35%	7.12%	8.23%

Notes

- [1] Source: Yahoo! Finance
- [2] Source: Yahoo! Finance.
- [3] Equals Col. [1]/Col. [2]
- [4] Equals Col. [3] x (1+.5 x Col. [5])
- [5] Source: Thomson Research
- [6] Average of EIA AEO, and Blue Chip Forecast
- [7] Equals Col [5] x (2/3)+ Col [6] x (1/3)
- [8] Equals Col. [4] + Col. [7]

[1] Source: Yahoo! Finance
[2] Source: Yahoo! Finance.

[8] Equals Col. [4] + Col. [7]

THE WILLIAMS COMPANIES WEIGHTED AVERAGE COST OF DEBT

	Interest Rate	Principal	% of Total Debt	Weighted Interest Rate
Secured (2)				
6.62%-9.45%, payable through 2016	8.00%	\$ 171.70	2.14%	0.17%
Adjustable rate, payable through 2016	6.20%	\$ 74.40	0.93%	0.06%
Capital lease obligations	9.30%	\$ 2.50	0.03%	0.00%
Unsecured				
5.5%-10.25%, payable through 2033	7.60%	\$ 7,690.40	95.96%	7.29%
Adjustable rate, due 2008	6.70%	\$ 75.00	0.94%	0.06%
Other, payable through 2007	6.00%	\$ 0.10	0.00%	0.00%
Total Long-term debt, including current portion		\$ 8,014.10	100.00%	7.59%

Notes:

Source: WMB 2006 SEC FORM 10-K

PROXY GROUP SCREENING CRITERIA									
Company	Ticker	Dividends	Covered by More than 1 Analyst	Owns 100% of major FERC- regulated natural gas pipeline	% Regulated natural gas transmission net income to total regulated net income	Merger	% NG Pipeline Revenue, Op Income and Assets	25% Natural Gas Transmission Assets, Op Income and Revenue	
Boardwalk Pipeline Partners LP	BWP	Yes	Yes	Yes	Yes	No	Yes	Yes	
Buckeye Partners LP	BPL	Yes	Yes	No	No	No	No	No	
Cabot Oil and Gas	COG	Yes	Yes	No	No	No	No	No	
Chesapeake Energy	CHK	Yes	Yes	No	No	No	No	No	
Devon Energy	DVN	Yes	Yes	No	No	Yes	No	No	
Dynegy Inc	DYN	No	Yes	No	No	Yes	No	No	
El Paso Corp	EP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Enbridge Energy Partners LP	EEP	Yes	Yes	Yes	No	No	Yes	Yes	
Enbridge Inc	ENB	Yes	Yes	No	No	No	No	No	
Energizer Corporation	EGN	Yes	Yes	No	No	No	No	No	
Enterprise Products Partners LP	EPD	Yes	Yes	Yes	Yes	No	Yes	Yes	
EOG Resources	EOG	Yes	Yes	No	No	No	No	No	
Equitable Resources, Inc.	EQT	Yes	Yes	Yes	No	Yes	No	No	
Kinder Morgan Energy Partners, L.P.	KMP	Yes	Yes	Yes	Yes	No	Yes	Yes	
Magellan Midstream Partners LP	MMP	Yes	Yes	No	No	No	No	No	
MarkWest Energy Partners, L.P.	MWE	Yes	Yes	Yes	Yes	No	Yes	Yes	
National Fuel Gas Company	NFG	Yes	Yes	Yes	Yes	No	No	Yes	
Newfield Exploration	NFX	No	Yes	No	No	Yes	No	No	
OneOK Partners, L.P.	OKS	Yes	Yes	Yes	Yes	No	Yes	Yes	
OneOK, Inc	OKE	Yes	Yes	No	No	No	No	No	
Questar Corporation	STR	Yes	Yes	Yes	Yes	No	No	No	
Southwestern Energy	SWN	No	Yes	No	No	No	No	No	
Spectra Energy	SE	Yes	No	Yes	Yes	Yes	Yes	Yes	
TC Pipelines L.P.	TCLP	Yes	Yes	No	Yes	Yes	No	Yes	
TEPPCO Partners	TPP	Yes	Yes	Yes	No	Yes	Yes	Yes	
Williams Companies	WMB	Yes	Yes	Yes	Yes	No	Yes	Yes	
XTO Energy, Inc	XTO	Yes	Yes	No	No	Yes	No	No	

GAS PIPELINE COMPANIES OWNED BY PROXY GROUP CANDIDATE COMPANIES

Proxy Group Company	Gas Transportation Companies/Pipelines	% Ownership	Capacity	Capacity units	Length (miles)
Williams Companies	Gulfstream	50%	1	MMcf/d	691
	Northwest Pipeline Corporation	100%	3	Bcf/d	3,900
	Transcontinental Gas Pipeline Corporation	100%	8	Bcf/d	10,500
Enterprise Products Partners, L.P.	San Juan Gathering System	100%	1,100	MMcf/d	5,404
	Permian Basin System	100%	490	MMcf/d	1,477
	High Island Offshore System	100%	1,800	MMcf/d	204
	NGL Pipelines				
	Mid-American Pipeline System	100%			7,378
	Dixie Pipeline	74%			1,370
	Seminole Pipeline	90%			1,326
	EPD South Texas NGL System	100%			1,039
	Louisiana Pipeline System	Various			612
	Promix NGL Gathering System	50%			362
	DEP South Texas NGL Pipeline System	100%			286
	Houston Ship Channel	100%			266
	Low-Tex NGL	100%			204
	Other (5 Systems)	Various			452
	Onshore Natural Gas Pipelines				
	Texas Intrastate System	100%	5,155	MMcf/d	8,140
	Jonah Gathering System	14%	1,750	MMcf/d	643
	Piceance Creek Gathering System	100%	1,600	MMcf/d	48
	San Juan Gathering System	100%	1,200	MMcf/d	6,065
	Acadian Gas System	Various	954	MMcf/d	1,042
	Permian Basin System	100%	490	MMcf/d	1,387
	Alabama Intrastate System	100%	200	MMcf/d	408
	Encinal Gathering System	100%	143	MMcf/d	452
	Other (5 Systems)	Various			704
	Offshore Natural Gas Pipelines				
	VESCO Gathering System	13%	800	MMcf/d	260
	Manta Ray Offshore Gathering System	26%	206	MMcf/d	250
	High Island Offshore System	100%	1,800	MMcf/d	204
	Viosca Knoll Gathering System	100%	1,000	MMcf/d	164
	Green Canyon Laterals	Various	649	MMcf/d	136
	Anaconda Gathering System	100%	550	MMcf/d	136
	Independence Trail	100%	1,000	MMcf/d	134
	Nautilus System	26%	154	MMcf/d	101
	East Breaks System	100%	400	MMcf/d	85
	Phoenix Gathering System	100%	450	MMcf/d	78
	Nemo Gathering System	34%	102	MMcf/d	24
	Falcon Natural Gas Pipeline	100%	400	MMcf/d	14

GAS PIPELINE COMPANIES OWNED BY PROXY GROUP CANDIDATE COMPANIES

Proxy Group Company	Gas Transportation Companies/Pipelines	% Ownership	Capacity	Capacity units	Length (miles)
Kinder Morgan Energy Partners, L.P.	Kinder Morgan Interstate Gas Transmission	100%	169	MDth/d	5,100
	Rockies Express Pipeline	51%	1,800	MMcf/d	1,662
	Trailblazer Pipeline Company	100%	846	MMcf/d	436
	Pacific Operations	100%	1	Mbpd	
	West Line	100%			515
	East Line	100%			420
	San Diego Line	100%			135
	CALNEV Line	100%			303
	North Line	100%			864
	Bakersfield Line	100%			100
	Oregon Line	100%			114
	Plantation Pipeline Company	51%	555,060	Mbpd	3,100
	Central Florida Pipeline	100%	112,000	bpd	110
	North System	100%	8	Mbpd	1,600
	Cochin Pipeline System	50%	124,000	bpd	1,900
	Cypress Pipeline	100%	30,000	bpd	104
	Southeast Terminals	100%	347,000	bpd	
	Kinder Morgan Southeast Terminals	100%			
	Guilford County Terminal Co	100%			
	Texas Intrastate Natural Gas Pipeline Group	100%			
	Kinder Morgan Texas Pipeline	100%	5,200	MMcf/d	6,000
	Kinder Morgan Tejas Pipeline	100%	300	MMcf/d	97
	Mier-Monterrey Mexico Pipeline	100%	735	MMcf/d	95
	Kinder Morgan North Texas Pipeline	100%	325	MMcf/d	86
	TransColorado Gas Transmission Company	100%	869	MMcf/d	300
	Kinder Morgan Louisiana Pipeline	100%	3,200	MMcf/d	133
	Casper and Douglas Natural Gas	100%	185	MMcf/d	
	Red Cedar Gathering Company	49%	250	MMcf/d	
	Thunder Creek Gas Services	25%	240	MMcf/d	549
	Trailblazer Pipeline Company	100%	730	MMcf/d	436
	Rockies Express Pipeline	51%	1,500	MMcf/d	1,662
Boardwalk Pipeline Partners, L.P.	Texas Gas Transmission Company	100%	3	Bcf/d	5,900
	Gulf South Pipeline	100%	4	Bcf/d	7,570
Enbridge Energy Partners, L.P.	Enbridge Pipelines (AlaTenn)	100%	200	MMcf/d	218
	Enbridge Pipelines (Midla)	100%	200	MMcf/d	405
	Enbridge Pipelines (KPC)	100%	160	MMcf/d	1,120
	Enbridge Offshore Pipelines (UTOS)	100%	1,200	MMcf/d	30
OneOK Partners, L.P.	Northern Border Pipeline Company	50%	2,374	MMcf/d	1,249
	Midwestern Gas Transmission Company	100%	1,125	MMcf/d	350
	Viking Gas Transmission Company	100%	496	MMcf/d	578
	Guardian Pipeline	33 1/3%	750	MMcf/d	143
Boardwalk Pipeline Partners, L.P.	Texas Gas System	100%	3	Bcf/d	5,900
	Gulf South System	100%	4	Bcf/d	7,500
	Expansion Projects (projects under construction)				
	Carthage to Keatchie Loop	100%	120	MMcf/d	25
	East Texas to Mississippi	100%	2	Bcf/d	242
	Gulf Crossing Project		2	Bcf/d	355
	Southeast Expansion	100%	2	Bcf/d	112
Enbridge Energy Partners	Fayetteville Shale	100%	800	MMcf/d	165
	Crude Oil				
	Lakehead System	100%	350,000	Bpd	3,300
	Mid-Continent System	100%	244,000	Bpd	480
	North Dakota System	100%	95,000	Bpd	950
	Natural Gas				
	East Texas System		1,300	MMcf/d	2,900
	Anadarko System		440	MMcf/d	1,200
	North Texas System		1,800	MMcf/d	4,200

GAS PIPELINE COMPANIES OWNED BY PROXY GROUP CANDIDATE COMPANIES

Proxy Group Company	Gas Transportation Companies/Pipelines	% Ownership	Capacity	Capacity units	Length (miles)
MarkWest Energy Partners LP	Southwest Business Unit				
	East Texas	100%	401.400	MMcf/d	
	Forest Lake	100%	95.200	MMcf/d	
	Woodford	100%	51.200	MMcf/d	
	Grimes	100%	12.700	MMcf/d	
	Northeast Business Unit				
	Appalachia	100%	203.400	MMcf/d	
	Michigan	100%	6.000	MMcf/d	
	Gulf Coast Business Unit				
	Javelina	100%	2.800	NGLs/d	
	Starfish Pipeline Company	50%			
Chesapeake Energy Corp.	Mid-Continent/Appalachian region	100%			8,000
Buckeye Partners L.P.	Buckeye Pipe Line Company, L P	100%			2,463
	Laurel Pipe Line Company, L P	100%			345
	Wood River Pipe Lines LLC	100%			925
	Buck Eye Pipe Line Transportation	100%			478
	Everglades Pipe Line Company, L P	100%			37
	Buckeye NGL Pipe Lines LLC	100%			350
	Buckeye Pipe Line Holdings, L P.	100%			574
	Buckeye and Norco Pipe Line Company, LLC				
Enbridge, Inc.	Olympic Pipe Line	65%	290.000	Bpd	400
	Alliance Pipeline	100%	1	Bcf/d	1,875
	Vector Pipeline	100%	2	Bcf/d	348
	Enbridge Offshore Pipelines	100%	2	Bcf/d	1,500
Magellan Midstream Partners L.P.					8,500

PROXY GROUP BUSINESS SEGMENTS

Williams Companies

	Total	Power	Gas Pipeline	Exploration and Production	Midstream Gas and Liquids	Other	Eliminations	Power	Gas Pipeline	Exploration and Production	Midstream Gas and Liquids	Other	Eliminations	Total
Williams Co. Segment Revenues	2006 11,813	7,462	1,348	1,418	1,125	37	(2,615.0)	63%	11%	11%	11%	11%	-42%	100%
	2005 12,593.6	9,933.9	1,412.8	1,269.1	3,322.7	37.2	(2,452.1)	72%	11%	10%	20%	20%	-10%	100%
	2004 12,413.3	9,272.4	1,362.3	777.6	2,482.6	32.8	(1,866.4)	74%	11%	6%	23%	0%	-15%	100%
Williams Co. Segment Operating Income	2006 1,369.4	(224)	430	530	631	2	2	-16%	31%	37%	46%	0%	0%	100%
	2005 1,376.0	(234.6)	542.2	568.4	416.6	5.6	5.6	-18%	41%	43%	34%	0%	0%	100%
	2004 1,403.7	86.5	557.6	223.9	552.2	(14.5)		6%	40%	16%	39%	-1%	0%	100%
2004 YTD	25,004.400	9,719,800	8,095,600	7,631,800	5,349,000	3,617,400	(8,849,200)	38%	32%	36%	21%	14%	-35%	100%
Williams Co. Segment Assets	2005 378,618	14,983.2	7,581.0	4,672.0	4,677.7	3,929.9		38%	19%	22%	13%	10%	0%	100%
	2004 28,223.0	8,205.1	7,631.8	5,376.4	4,311.7	2,884.0		29%	27%	20%	15%	9%	0%	100%
								32%	25%	22%	28%	4%	-10%	100%

Enterprise Products Partners, L.P.

	Total	Offshore Pipelines and Services	Onshore Pipelines and Services	NGL Pipelines and Services	Petrochemical Services	Adjustments and Eliminations	Offshore Pipelines and Services	Onshore Pipelines and Services	NGL Pipelines and Services	Petrochemical Services	Adjustments and Eliminations	Total
Enterprise Segment Revenues	2006 21,531,631	147,542	1,812,027	14,231,719	2,340,022	4,630,341	1%	8%	62%	10%	20%	0%
	2005 19,220.9	121,447	1,577,178	12,538,182	1,931,600	3,724,150	1%	8%	63%	10%	19%	0%
	2004 6,321,282	31,981	418,337	4,166,065	1,533,360	(2,347,423)	0%	10%	98%	20%	-28%	0%
Enterprise Segment Operating Income	2006 1,362,449	101,407	333,339	752,548	173,095		8%	24%	55%	13%	0%	0%
	2005 1,136,347	77,503	333,076	579,706	126,060		7%	31%	51%	11%	0%	0%
	2004 621,166	36,478	90,977	374,196	121,515		6%	15%	60%	19%	0%	0%
Enterprise Segment Assets	2006 9,932,547	734,639	3,611,974	3,249,486	502,345	1,734,083	7%	37%	33%	5%	18%	0%
	2005 8,689,024	632,222	3,623,318	3,075,048	561,841	854,595	7%	42%	35%	6%	10%	0%
	2004 7,821,467	648,181	3,729,650	2,753,934	469,337	230,375	8%	48%	35%	6%	3%	0%
							5%	25%	55%	11%	5%	0%

Kinder Morgan Energy Partners, L.P.

	Total	Produce Pipelines	Natural Gas Pipelines	CO ₂	Terminals	Produce Pipelines	Natural Gas Pipelines	CO ₂	Terminals	Total
Kinder Morgan Energy Partners Segment Revenues	2006 16,732,183	6,577,661	716,248	716,248	8,641,730	5%	39%	4%	52%	100%
	2005 9,787,128	711,886	637,594	637,594	692,264	7%	79%	7%	71%	100%
	2004 7,932,861	645,249	492,834	492,834	541,837	8%	79%	6%	71%	100%
Kinder Morgan Energy Partners Operating Income	2006 1,542,483	401,900	509,140	293,231	331,592	26%	33%	19%	22%	100%
	2005 1,500,398	287,503	438,386	318,980	255,527	22%	34%	23%	20%	100%
	2004 1,200,279	370,321	364,872	241,258	231,848	31%	30%	19%	20%	100%
Kinder Morgan Energy Partners Segment Assets	2006 12,035,622	3,942,766	1,838,223	1,838,223	2,564,801	32%	33%	15%	20%	100%
	2005 11,839,121	3,873,939	1,773,716	1,773,716	2,855,457	31%	33%	15%	17%	100%
	2004 10,447,257	3,631,637	1,691,437	1,691,437	1,576,333	32%	33%	15%	15%	100%
						22%	44%	14%	20%	100%

Boardwalk Pipeline Partners, L.P.

	Total	Gas Transportation	Packing and Lending	Gas Storage	Other	Gas Transportation	Packing and Lending	Gas Storage	Other	Total
Boardwalk Segment Revenues	2006 2,403,143	1,824,636	471,643	32,396	17,462	84%	8%	5%	3%	100%
	2005 1,881,350	1,407,055	21,426	21,667	12,225	90%	4%	4%	2%	100%
	2004 253,621	257,488		7,249	2,444	96%	0%	5%	1%	100%
Boardwalk Segment Assets	2006 2,403,143	1,824,636	195,800	195,800	378,707	76%	0%	8%	16%	100%
	2005 1,881,350	1,407,055	127,274	127,274	345,001	78%	0%	7%	15%	100%
	2004 1,871,924	1,407,055	127,274	127,274	355,375	74%	0%	7%	19%	100%
						84%	2%	5%	8%	100%

[1] Average outside Operating Income and 2003 Segment assets

PROXY GROUP BUSINESS SEGMENTS

Enbridge Energy Partners, L.P.

		Total	Liquids	Natural Gas	Marketing	Crude	Oil and Natural Gas Liquids Transportation	Natural Gas Gathering and Processing	Marketing	Crude	Total
2006	Enbridge Segment Revenues	9,099.2	512.8	5,401.1	3,182.3		0%	5%	31%	0%	100%
2005		9,247.3	418.0	4,945.1	3,884.2		0%	5%	31%	0%	100%
2004		5,946.3	409.3	2,890.1	2,646.9		0%	7%	48%	0%	100%
2006	Enbridge Operating Income	346.9	199.8	133.9	56.1	(2.9)	52%	35%	14%	-1%	100%
2005		195.1	127.3	110.5	(42.4)	(0.4)	65%	57%	-22%	0%	100%
2004		237.2	139.1	98.1	3.6	(3.6)	65%	57%	-22%	0%	100%
2006	Enbridge Segment Assets	3,223.8	1,816.4	2,797.3	366.9	243.2	35%	34%	7%	5%	100%
2005		3,212.5	1,694.0	2,145.9	523.3	180.2	38%	48%	12%	2%	100%
2004		3,703.1	1,579.8	1,177.2	313.7	100.0	38%	48%	12%	2%	100%
							34%	51%	14%	1%	100%

OneOK Partners, L.P.

		Total	Intermediate Natural Gas Pipeline	Natural Gas Gathering and Processing	Crude Short Pipeline	Natural Gas Liquids	Pipelines and Storage	Other	Intermediate Natural Gas Pipeline	Natural Gas Liquids	Pipelines and Storage	Other	Total
2006	OneOK Partners Segment Revenues	3,328.348	\$ 942.93	\$ 1,475,039	\$ 24,372	\$ 3,492,976	\$ 24,539	\$ 2%	\$ 36%	\$ 41%	\$ 66%	\$ 0%	77%
2005		678,569	\$ 378,701	\$ 715,287	\$ 24,372	\$ 3,492,976	\$ 24,539	\$ 36%	\$ 41%	\$ 4%	\$ 0%	\$ 0%	100%
2004		590,383	\$ 381,635	\$ 184,738	\$ 22,020	\$ 3,492,976	\$ 24,539	\$ 63%	\$ 31%	\$ 4%	\$ 0%	\$ 0%	100%
2006	OneOK Partners Operating Income	535,357	\$ 154,505	\$ 182,242	\$ 5,186	\$ 88,693	\$ 107,919	\$ 30%	\$ 34%	\$ 0%	\$ 17%	\$ 20%	100%
2005		256,768	\$ 214,168	\$ 44,714	\$ 5,186	\$ 88,693	\$ 107,919	\$ 83%	\$ 17%	\$ 2%	\$ 0%	\$ 0%	100%
2004		253,385	\$ 231,027	\$ 28,278	\$ 3,416	\$ 88,693	\$ 107,919	\$ 91%	\$ 11%	\$ 1%	\$ 0%	\$ 0%	100%
2006	OneOK Partners Segment Assets	5,035,356	1,941,259	1,616,119	16,410	1,645,474	1,120,029	21%	32%	0%	33%	22%	100%
2005		2,527,766	1,848,980	594,379	16,410	1,645,474	1,120,029	75%	24%	1%	0%	0%	100%
2004		2,514,690	1,901,689	578,497	18,268	1,645,474	1,120,029	76%	23%	1%	0%	1%	100%
								55%	24%	1%	13%	5%	97%

Markwest Energy

		Total	Starfish Pipeline	Sardis Pipeline	Total
2006	Markwest Segment Revenues	32,078	\$ 32,078		100%
2005		19,343	\$ 19,343		100%
2006	Markwest Operating Income	9,190	\$ 9,190		100%
2005		(728)	\$ (728)		100%
2006	Markwest Segment Assets	147,177	\$ 147,177		100%
2005		194,072	\$ 194,072		100%
					100%

ANALYSIS OF BOOK VALUE PER UNIT FOR THE MLP GROUP																	
Name		Source / Calculation	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2012			
Boardwalk Pipeline Partners, LP																	
1	Earnings per Unit	ValueLine								\$	\$	1.85	\$	1.90	\$	2.70	
2	Cash Flow Per Unit	ValueLine								\$	1.68	2.53	\$	2.45	\$	3.75	
3	Distributions per Unit	ValueLine								\$	0.16	1.32	\$	1.74	\$	2.42	
4	Units Outstanding (millions)	ValueLine									101.35	108.29	118.00	120.00		128.00	
5	Avg Annual P/E Ratio	ValueLine									19.7	13.3	16.0	16.0		16.0	
6	Market Value Per Unit	[1] x [5]									\$	24.61	\$	30.40	\$	43.20	
7	Market to Book Ratio	[1] / [2]									1.70	2.03	2.06	2.06		2.55	
8	Newly Issued Shares	[9] _(n-1) - [8] _n									101.35	6.90	9.75	2.00		6.00	
9	Partners Capital per Value Line (millions)	ValueLine							\$	1,092.9	\$	988.7	\$	1,450.0	\$	2,350.0	
10	Partners Capital Adjusted to Base Year (millions)	$\frac{[10]_{(n-1)} + ([9] \times [6]) / 7) - ([4]_{(n-1)} \times [3]_{(n-1)}) + ([4] \times [2])}{[9] / [4]}$							\$	1,092.9		\$	355.7	\$	647.7	\$	804.2
11	Book Value per Unit	[9] / [4]							\$	14.87	\$	14.50	\$	14.95	\$	15.95	
12	Adjusted Book Value per Unit	[10] / [4]							\$	3.79	\$	3.79	\$	5.49	\$	6.70	
Buckeye Partners																	
1	Earnings per Unit	ValueLine								\$	2.68	2.56	\$	2.76	\$	2.84	
2	Cash Flow Per Unit	ValueLine								\$	3.39	3.41	\$	3.15	\$	3.38	
3	Distributions per Unit	ValueLine								\$	2.54	2.45	\$	2.64	\$	3.03	
4	Units Outstanding (millions)	ValueLine									26.99	27.04	27.09	27.16	34.53	36.16	
5	Avg Annual P/E Ratio	ValueLine									13.9	11.5	13.5	13.9	14.8	16.9	
6	Market Value Per Unit	[1] x [5]									\$	28.50	\$	27.37	\$	34.56	
7	Market to Book Ratio	[1] / [2]									2.50	2.32	2.12	2.66	2.60	3.00	
8	Newly Issued Shares	[9] _(n-1) - [8] _n									0.00	0.05	0.05	0.07	1.79	5.56	
9	Partners Capital per Value Line (millions)	ValueLine							\$	298.5	\$	317.0	\$	348.4	\$	352.9	
10	Partners Capital Adjusted to Base Year (millions)	$\frac{[10]_{(n-1)} + ([9] \times [6]) / 7) - ([4]_{(n-1)} \times [3]_{(n-1)}) + ([4] \times [2])}{[9] / [4]}$							\$	288.5	\$	325.1	\$	349.2	\$	374.5	
11	Book Value per Unit	[9] / [4]							\$	11.08	\$	11.72	\$	12.90	\$	13.15	
12	Adjusted Book Value per Unit	[10] / [4]							\$	11.06	\$	12.02	\$	12.89	\$	13.78	
Enbridge Energy																	
1	Earnings per Unit	ValueLine								\$	3.07	2.48	\$	1.78	\$	0.98	
2	Cash Flow Per Unit	ValueLine								\$	4.68	4.41	\$	3.88	\$	3.12	
3	Distributions per Unit	ValueLine								\$	3.36	3.49	\$	3.50	\$	3.63	
4	Units Outstanding (millions)	ValueLine									26.20	26.80	26.90	32.97	44.46	54.14	
5	Avg Annual P/E Ratio	ValueLine									15.9	17.3	21.6	17.3	24.5	23.4	
6	Market Value Per Unit	[1] x [5]									\$	47.89	\$	42.90	\$	38.45	
7	Market to Book Ratio	[1] / [2]									2.53	2.12	2.07	2.30	1.95	2.04	
8	Newly Issued Shares	[9] _(n-1) - [8] _n									0.00	2.70	0.00	4.07	11.49	9.68	
9	Partners Capital per Value Line (millions)	ValueLine							\$	495.0	\$	586.1	\$	535.9	\$	644.2	
10	Partners Capital Adjusted to Base Year (millions)	$\frac{[10]_{(n-1)} + ([9] \times [6]) / 7) - ([4]_{(n-1)} \times [3]_{(n-1)}) + ([4] \times [2])}{[9] / [4]}$							\$	495.0	\$	589.2	\$	600.4	\$	681.7	
11	Book Value per Unit	[9] / [4]							\$	18.89	\$	20.28	\$	18.54	\$	22.30	
12	Adjusted Book Value per Unit	[10] / [4]							\$	18.89	\$	20.39	\$	20.78	\$	20.68	

ANALYSIS OF BOOK VALUE PER UNIT FOR THE MLP GROUP														
Enterprise Products Partners														
1	Earnings per Unit	ValueLine	\$ 0.31	\$ 0.82	\$ 1.32	\$ 1.39	\$ 0.54	\$ 0.58	\$ 0.87	\$ 0.91	\$ 1.14	\$ 1.20	\$ 1.45	\$ 1.80
2	Cash Flow Per Unit	ValueLine	\$ 0.42	\$ 1.08	\$ 1.55	\$ 1.69	\$ 1.11	\$ 1.09	\$ 1.27	\$ 2.16	\$ 2.35	\$ 2.65	\$ 3.15	\$ 3.50
3	Distributions per Unit	ValueLine	\$ 0.16	\$ 0.90	\$ 1.05	\$ 1.16	\$ 1.33	\$ 1.44	\$ 1.54	\$ 1.66	\$ 1.80	\$ 1.92	\$ 2.06	\$ 2.65
4	Units Outstanding (millions)	ValueLine	133.93	133.93	168.87	174.21	172.95	210.98	368.77	368.86	432.41	446.00	450.00	458.00
5	Avg Annual P/E Ratio	ValueLine	28.2	11.1	8.8	14.7	39.2	37.5	25.9	28.4	23.1	24.0	24.0	24.0
6	Market Value Per Unit	[11]x[5]	\$ 8.74	\$ 9.10	\$ 11.62	\$ 20.43	\$ 21.17	\$ 21.75	\$ 22.53	\$ 25.84	\$ 26.33	\$ 28.80	\$ 34.80	\$ 43.20
7	Market to Book Ratio	[6]/[12]	2.08	1.54	2.10	3.10	3.05	2.77	1.58	1.77	1.76	1.89	2.24	2.47
8	Newly Issued Shares	[9] _{0:n-1} - [8] ₀	0.00	0.00	34.94	5.34	-1.28	44.03	151.79	21.09	42.55	13.59	4.00	8.00
9	Partners Capital per Value Line (millions)	ValueLine	\$ 562.5	\$ 789.5	\$ 838.0	\$ 1,146.9	\$ 1,200.9	\$ 1,706.0	\$ 5,328.8	\$ 5,679.3	\$ 6,480.2	\$ 6,800.0	\$ 7,000.0	\$ 8,000.0
10	Partners Capital Adjusted to Base Year (millions)	$[10]_{0:n} + ([9] \times [6]/[7]) - ([4]_{0:n} \times [3]_{0:n-1}) + ([4] \times [2])$	\$ 562.5	\$ 685.7	\$ 1,020.6	\$ 1,172.8	\$ 1,154.0	\$ 1,506.7	\$ 3,855.9	\$ 4,437.4	\$ 5,444.0	\$ 6,054.8	\$ 6,678.2	\$ 7,493.9
11	Book Value per Unit	[9]/[4]	\$ 4.20	\$ 5.89	\$ 5.54	\$ 6.58	\$ 6.84	\$ 7.86	\$ 14.45	\$ 14.57	\$ 14.98	\$ 15.25	\$ 15.56	\$ 17.47
12	Adjusted Book Value per Unit	[10]/[4]	\$ 4.20	\$ 5.12	\$ 6.04	\$ 6.73	\$ 6.67	\$ 6.94	\$ 10.40	\$ 11.38	\$ 12.59	\$ 13.58	\$ 14.84	\$ 16.36
EOG Resources, Inc.														
1	Earnings per Unit	ValueLine	\$ 0.18	\$ 0.67	\$ 1.02	\$ 1.60	\$ 0.40	\$ 1.83	\$ 2.42	\$ 5.21	\$ 4.83	\$ 4.90	\$ 5.25	\$ 6.00
2	Cash Flow Per Unit	ValueLine	\$ 1.21	\$ 2.62	\$ 3.23	\$ 3.28	\$ 2.09	\$ 3.44	\$ 4.50	\$ 7.92	\$ 8.44	\$ 9.05	\$ 9.70	\$ 11.15
3	Distributions per Unit	ValueLine	\$ 0.06	\$ 0.06	\$ 0.07	\$ 0.08	\$ 0.08	\$ 0.09	\$ 0.12	\$ 0.15	\$ 0.24	\$ 0.36	\$ 0.40	\$ 0.52
4	Units Outstanding (millions)	ValueLine	307.45	249.48	233.81	233.81	229.44	249.46	237.85	242.07	243.74	245.00	247.00	250.00
5	Avg Annual P/E Ratio	ValueLine	52.1	14.4	9.6	12.3	47.4	11.2	11.8	10.9	14.3	15.0	15.0	15.0
6	Market Value Per Unit	[11]x[5]	\$ 9.38	\$ 9.65	\$ 15.55	\$ 19.68	\$ 18.96	\$ 20.50	\$ 28.56	\$ 56.78	\$ 69.07	\$ 73.50	\$ 78.75	\$ 90.00
7	Market to Book Ratio	[6]/[12]	2.25	2.13	2.63	2.78	2.60	2.30	2.31	3.18	3.01	2.90	2.86	2.65
8	Newly Issued Shares	[9] _{0:n-1} - [8] ₀	0.00	-57.99	-15.05	0.00	-4.37	20.02	-11.61	4.22	1.67	1.26	2.00	3.00
9	Partners Capital per Value Line (millions)	ValueLine	\$ 1,280.3	\$ 1,129.6	\$ 1,380.9	\$ 1,652.7	\$ 1,672.4	\$ 2,223.4	\$ 2,945.4	\$ 4,316.3	\$ 5,598.7	\$ 6,200.0	\$ 6,800.0	\$ 11,000.0
10	Partners Capital Adjusted to Base Year (millions)	$[10]_{0:n} + ([9] \times [6]/[7]) - ([4]_{0:n} \times [3]_{0:n-1}) + ([4] \times [2])$	\$ 1,280.3	\$ 1,652.8	\$ 2,300.7	\$ 3,051.2	\$ 3,480.2	\$ 4,498.4	\$ 5,402.5	\$ 7,386.4	\$ 9,425.6	\$ 11,616.2	\$ 13,979.0	\$ 16,799.7
11	Book Value per Unit	[9]/[4]	\$ 4.16	\$ 4.53	\$ 5.91	\$ 7.07	\$ 7.29	\$ 8.91	\$ 12.38	\$ 17.83	\$ 22.97	\$ 25.31	\$ 27.53	\$ 44.00
12	Adjusted Book Value per Unit	[10]/[4]	\$ 4.16	\$ 6.63	\$ 9.84	\$ 13.05	\$ 15.17	\$ 18.03	\$ 22.71	\$ 30.43	\$ 38.67	\$ 47.41	\$ 56.80	\$ 67.20
Kinder Morgan Energy Partners														
1	Earnings per Unit	ValueLine	\$ 1.05	\$ 1.22	\$ 1.34	\$ 1.56	\$ 1.96	\$ 2.00	\$ 2.22	\$ 2.37	\$ 1.98	\$ 1.70	\$ 2.05	\$ 3.15
2	Cash Flow Per Unit	ValueLine	\$ 1.30	\$ 1.43	\$ 2.00	\$ 2.38	\$ 2.84	\$ 3.17	\$ 3.32	\$ 3.69	\$ 3.76	\$ 3.85	\$ 4.00	\$ 5.10
3	Distributions per Unit	ValueLine	\$ 1.19	\$ 1.39	\$ 1.60	\$ 2.08	\$ 2.36	\$ 2.58	\$ 2.81	\$ 3.07	\$ 3.26	\$ 3.44	\$ 3.65	\$ 4.40
4	Units Outstanding (millions)	ValueLine	97.63	116.27	135.03	165.80	180.91	189.04	207.01	220.24	224.62	235.00	245.00	255.00
5	Avg Annual P/E Ratio	ValueLine	16.8	16.1	16.0	21.8	17.0	20.1	20.0	20.7	23.5	16.5	16.5	16.5
6	Market Value Per Unit	[11]x[5]	\$ 17.64	\$ 19.64	\$ 21.44	\$ 34.01	\$ 33.32	\$ 40.20	\$ 44.40	\$ 49.06	\$ 46.53	\$ 28.05	\$ 33.83	\$ 51.88
7	Market to Book Ratio	[6]/[12]	1.27	1.31	1.37	1.78	1.70	2.16	2.36	2.09	2.60	1.50	1.74	2.19
8	Newly Issued Shares	[9] _{0:n-1} - [8] ₀	0.00	20.64	18.76	30.77	15.11	8.13	17.07	13.23	4.38	10.38	10.00	10.00
9	Partners Capital per Value Line (millions)	ValueLine	\$ 1,360.7	\$ 1,774.8	\$ 2,117.1	\$ 3,159.0	\$ 3,415.9	\$ 3,510.9	\$ 3,890.5	\$ 3,613.7	\$ 4,021.7	\$ 4,385.0	\$ 4,770.0	\$ 6,040.0
10	Partners Capital Adjusted to Base Year (millions)	$[10]_{0:n} + ([9] \times [6]/[7]) - ([4]_{0:n} \times [3]_{0:n-1}) + ([4] \times [2])$	\$ 1,360.7	\$ 1,723.4	\$ 2,091.8	\$ 2,856.6	\$ 3,310.9	\$ 3,634.2	\$ 4,213.4	\$ 4,703.3	\$ 4,950.1	\$ 5,316.3	\$ 5,692.6	\$ 6,325.7
11	Book Value per Unit	[9]/[4]	\$ 13.94	\$ 15.01	\$ 15.68	\$ 19.05	\$ 18.88	\$ 18.57	\$ 18.32	\$ 18.41	\$ 17.90	\$ 18.66	\$ 19.47	\$ 23.69
12	Adjusted Book Value per Unit	[10]/[4]	\$ 13.94	\$ 14.57	\$ 15.49	\$ 17.23	\$ 18.30	\$ 19.22	\$ 20.35	\$ 21.36	\$ 22.04	\$ 22.62	\$ 23.19	\$ 24.81

ANALYSIS OF BOOK VALUE PER UNIT FOR THE MLP GROUP																				
Magellan Midstream Partners LP																				
1	Earnings per Unit	ValueLine	\$	0.95	\$	1.84	\$	1.66	\$	1.94	\$	2.03	\$	2.24	\$	2.40	\$	2.55	\$	3.00
2	Cash Flow Per Unit	ValueLine	\$	1.47	\$	2.47	\$	2.28	\$	2.48	\$	3.25	\$	3.82	\$	3.40	\$	3.60	\$	4.30
3	Distributions per Unit	ValueLine	\$	1.01	\$	1.36	\$	1.53	\$	1.78	\$	2.06	\$	2.34	\$	2.46	\$	2.65	\$	3.35
4	Units Outstanding (millions)	ValueLine		22.72		54.38		54.39		66.36		66.36		66.36		66.50		66.50		66.50
5	Avg Annual P/E Ratio	ValueLine		18.0		9.7		13.3		13.6		15.9		15.6		15.0		15.0		15.0
6	Market Value Per Unit	(1) x (5)	\$	17.10	\$	17.85	\$	22.08	\$	26.38	\$	32.28	\$	34.94	\$	39.00	\$	38.25	\$	45.00
7	Market to Book Ratio	(6) / (12)		1.73		2.15		2.41		2.22		2.65		2.88		2.90		3.01		3.33
8	Newly Issued Shares	(8)(t-1) - (8)t		22.72		31.68		0.01		11.97		0.00		0.00		0.14		0.00		0.00
9	Partners Capital per Value Line (millions)	ValueLine	\$	224.9	\$	451.8	\$	498.1	\$	789.1	\$	806.0	\$	806.5	\$	825.0	\$	845.0	\$	900.0
10	Partners Capital Adjusted to Base Year (millions)	(10)(t-1) + ((8)(6)(7) - ((4)(t-1) x (3)(t-1) + ((4)x(2))	\$	224.9	\$	599.3	\$	649.5	\$	873.1	\$	972.0	\$	1,088.8	\$	1,181.4	\$	1,237.2	\$	1,346.9
11	Book Value per Unit	(9) / (4)	\$	9.90	\$	8.31	\$	9.16	\$	11.89	\$	12.18	\$	12.15	\$	12.41	\$	12.71	\$	13.53
12	Adjusted Book Value per Unit	(10) / (4)	\$	9.90	\$	11.02	\$	11.94	\$	13.16	\$	14.65	\$	16.41	\$	17.46	\$	18.60	\$	20.25
Markwest Energy																				
1	Earnings per Unit	ValueLine			\$	2.42	\$	0.59	\$	0.69	\$	0.01	\$	2.44						
2	Cash Flow Per Unit	ValueLine			\$	3.00	\$	1.24	\$	1.37	\$	1.23								
3	Distributions per Unit	ValueLine			\$	0.36	\$	1.24	\$	1.49	\$	1.62								
4	Units Outstanding (millions)	ValueLine				8.94		11.63		21.28		25.74		15.0						
5	Avg Annual P/E Ratio	ValueLine				4.5		26.8		31.6		42.9								
6	Market Value Per Unit	(1) x (5)			\$	10.69	\$	15.54	\$	20.66	\$	0.43								
7	Market to Book Ratio	(6) / (12)				1.60		2.78		1.84		0.04								
8	Newly Issued Shares	(8)(t-1) - (8)t				8.94		2.69		9.65		4.48								
9	Partners Capital per Value Line (millions)	ValueLine			\$	60.9	\$	65.1	\$	241.1	\$	307.2								
10	Partners Capital Adjusted to Base Year (millions)	(10)(t-1) + ((8)(6)(7) - ((4)(t-1) x (3)(t-1) + ((4)x(2))			\$	60.9	\$	87.2	\$	211.2	\$	264.4								
11	Book Value per Unit	(9) / (4)			\$	6.81	\$	5.60	\$	11.33	\$	11.93								
12	Adjusted Book Value per Unit	(10) / (4)			\$	6.81	\$	7.49	\$	9.93	\$	10.27								
OneOK Partners																				
1	Earnings per Unit	ValueLine	\$	1.97	\$	2.70	\$	2.15	\$	2.44	\$	(2.27)	\$	2.81	\$	2.82	\$	2.82	\$	4.00
2	Cash Flow Per Unit	ValueLine	\$	3.54	\$	4.56	\$	4.37	\$	4.34	\$	0.20	\$	4.82	\$	5.02	\$	5.02	\$	5.94
3	Distributions per Unit	ValueLine	\$	2.30	\$	2.44	\$	2.65	\$	2.89	\$	3.20	\$	3.20	\$	3.20	\$	3.20	\$	3.60
4	Units Outstanding (millions)	ValueLine		29.35		29.35		31.50		41.62		46.40		46.40		46.40		46.40		82.89
5	Avg Annual P/E Ratio	ValueLine		16.9		11.1		11.2		17.5		15.4		14.9		16.4		16.4		13.2
6	Market Value Per Unit	(1) x (5)	\$	33.29	\$	29.97	\$	28.00	\$	37.63	\$	(34.96)	\$	41.87	\$	47.89	\$	47.89	\$	52.80
7	Market to Book Ratio	(6) / (12)		1.63		1.71		1.54		1.74		-2.03		2.46		2.90		2.90		2.00
8	Newly Issued Shares	(8)(t-1) - (8)t		0.00		0.00		2.15		10.12		2.59		0.00		0.00		0.00		36.49
9	Partners Capital per Value Line (millions)	ValueLine	\$	507.4	\$	513.3	\$	572.3	\$	915.0	\$	800.6	\$	789.3	\$	765.6	\$	765.6	\$	2,189.7
10	Partners Capital Adjusted to Base Year (millions)	(10)(t-1) + ((8)(6)(7) - ((4)(t-1) x (3)(t-1) + ((4)x(2))	\$	507.4	\$	573.7	\$	678.8	\$	983.5	\$	1,010.1	\$	1,090.0	\$	1,174.4	\$	1,174.4	\$	2,481.8
11	Book Value per Unit	(9) / (4)	\$	17.29	\$	17.49	\$	18.17	\$	21.88	\$	21.55	\$	17.25	\$	17.01	\$	16.50	\$	26.40
12	Adjusted Book Value per Unit	(10) / (4)	\$	17.29	\$	19.55	\$	21.55	\$	23.63	\$	25.03	\$	21.77	\$	23.49	\$	25.31	\$	29.94

(a) P/E Ratio for 2006 and 2007 were not available and were estimated by taking the Value Line projected P/E for 2009-2011.
(b) Assume 0 shares issued in 1996
(c) Assume base year is 1998

Distribution Coverage Ratios

BOARDWALK PIPELINE PARTNERS

	2007	2008	2009
Revenues	\$ 632.1	\$ 647.9	\$ 664.1
Other Operating Items:			
Costs and Operating	\$ (165.5)	\$ (169.6)	\$ (173.9)
Depreciation	(105.1)	(168.9)	(201.1)
SG&A	(104.3)	(107.5)	(110.8)
Other Costs	(30.1)	(28.1)	(27.9)
Total Other Operating Items	\$ (405.0)	\$ (474.1)	\$ (513.7)
Other Income Adjustments	\$ 41.3	\$ 213.8	\$ 446.5
Operating Income	268.4	387.6	596.9
EBITDA	\$ 373.5	\$ 556.5	\$ 798.0
Other Income (Expenses)			
Interest, net	\$ (77.6)	\$ (103.9)	\$ (128.5)
Other	10.9	8.0	8.0
Total Other Income (Expense)	\$ (66.7)	\$ (95.9)	\$ (120.5)
Pretax Income	\$ 201.7	\$ 291.7	\$ 476.4
Income Tax	(0.2)	-	-
Minority Interest	-	-	-
Reported Net Income from Continuing Operations	\$ 201.5	\$ 291.7	\$ 476.4
Extraordinary Items/Discontinued Operations	-	-	-
Income to General Partner	(8.8)	(40.0)	(113.3)
Reported Net Income to Common Units	\$ 192.7	\$ 251.7	\$ 363.1
Non-recurring Items	\$ 2.6	\$ -	\$ -
Operating Earnings to Common	\$ 195.3	\$ 251.7	\$ 363.1
Average units outstanding - Basic	114.5	127.7	132.1
Average units outstanding - Diluted	114.5	127.7	132.1
Earnings per Unit			
Reported EPU - Basic	\$ 1.68	\$ 1.97	\$ 2.75
Reported EPU - Diluted	\$ 1.68	\$ 1.97	\$ 2.75
Operating EPU - Diluted	\$ 1.71	\$ 1.97	\$ 2.75
Distributable Cash Flow			
Recurring Net Income to Common	\$ 195.3	\$ 251.7	\$ 363.1
Depreciation	105.1	168.9	201.1
Other	0.8	2.8	11.1
Maintenance Capital Spending	(51.4)	(60.0)	(88.9)
Total Distributable Cash Flow	\$ 249.8	\$ 363.4	\$ 486.4
Distributable Cash Flow per Unit - Diluted	\$ 2.18	\$ 2.85	\$ 3.68

Ratios and other items

Distribution per Unit	\$ 1.86	\$ 2.33	\$ 2.83
Total Unit Coverage	1.2	1.2	1.3
Distribution Pay Out	85.3%	81.9%	76.9%

Total Debt to Capital 54% 57% 52%

Estimated Yield	5.53%	5.91%	5.15%
Implied Price	\$ 33.66	\$ 39.42	\$ 54.97
Exp. P/E Ratio	20.00	20.00	20.00

Source: Value Line

Adjusted Yield (incl. payments to GP) 5.75% 6.71% 6.71%
Assumed ROE 15.50% 15.50% 15.50% Source: Value Line
Retention Ratio 14.74% 18.12% 23.14%
Estimated Growth 2.29% 2.81% 3.59%
DCF 8.04% 9.51% 10.29%

Distribution Coverage Ratios

ENBRIDGE ENERGY PARTNERS

	2007	2008	2009
Revenues	\$ 8,717.1	\$ 11,142.3	\$ 12,151.1
Other Operating Items:			
Costs and Operating	\$ (597.8)	\$ (711.2)	\$ (817.2)
Depreciation	(155.9)	(202.3)	(232.9)
SG&A	(7,645.1)	(9,831.0)	(10,634.3)
Other Costs	-	-	-
Total Other Operating Items	\$ (8,398.8)	\$ (10,744.5)	\$ (11,684.4)
Other Income Adjustments	\$ -	\$ -	\$ -
Operating Income	318.3	397.8	466.7
EBITDA	\$ 162.4	\$ 195.5	\$ 233.8
Other Income (Expenses)			
Interest, net	\$ (109.6)	\$ (148.1)	\$ (196.4)
Other	6.9	7.0	6.9
Total Other Income (Expense)	\$ (102.7)	\$ (141.1)	\$ (189.5)
Pretax Income	\$ 215.6	\$ 256.7	\$ 277.2
Income Tax	(2.6)	(2.0)	(2.0)
Minority Interest	-	-	-
Reported Net Income from Continuing Operations	\$ 213.0	\$ 254.7	\$ 275.2
Extraordinary Items/Discontinued Operations	-	-	-
Income to General Partner	(30.1)	(33.7)	(41.9)
Reported Net Income to Common Units	\$ 182.9	\$ 221.0	\$ 233.3
Non-recurring Items	\$ 16.3	\$ -	\$ -
Operating Earnings to Common	\$ 199.2	\$ 221.0	\$ 233.3
Average units outstanding - Basic	79.5	92.5	105.3
Average units outstanding - Diluted	79.5	92.5	105.3
Earnings per Unit			
Reported EPU - Basic	\$ 2.30	\$ 2.39	\$ 2.22
Reported EPU - Diluted	\$ 2.30	\$ 2.39	\$ 2.22
Operating EPU - Diluted	\$ 2.51	\$ 2.39	\$ 2.22
Distributable Cash Flow			
Recurring Net Income to Common	\$ 199.2	\$ 221.0	\$ 233.3
Depreciation	155.9	202.3	232.9
Other	(3.2)	(6.7)	(5.9)
Maintenance Capital Spending	(57.8)	(66.0)	(77.0)
Total Distributable Cash Flow	\$ 294.1	\$ 350.6	\$ 383.3
Distributable Cash Flow per Unit - Diluted	\$ 3.70	\$ 3.79	\$ 3.64

Ratios and other items

Distribution per Unit	\$ 3.70	\$ 3.75	\$ 3.80
Total Unit Coverage	1.0	1.0	1.0
Distribution Pay Out	100.0%	98.9%	104.4%

Total Debt to Capital 55% 57% 52%

Estimated Yield	8.04%	7.85%	8.58%
Implied Price	\$ 46.01	\$ 47.78	\$ 44.31
Price/EBITDA	20.00	20.00	20.00

Source: Value Line

Adjusted Yield (incl. payments to GP)	8.86%	8.61%	9.47%	
Assumed ROE	13.90%	13.90%	13.90%	Source: Value Line
Retention Ratio	-0.02%	1.06%	-4.39%	
Estimated Growth	0.00%	0.15%	0.00%	
DCF	8.86%	8.76%	9.47%	

Distribution Coverage Ratios

KINDER MORGAN ENERGY PARTNERS

	2006	2007	2008
Revenues	\$ 8,954.6	\$ 11,199.6	\$ 15,365.5
Other Operating Items:			
Costs and Operating	\$ (6,976.7)	\$ (9,008.5)	\$ (12,718.3)
Depreciation	(413.7)	(499.0)	(642.5)
SG&A	(219.6)	(220.4)	(221.7)
Other Costs	(118.8)	(112.0)	(153.7)
Total Other Operating Items	\$ (7,728.8)	\$ (9,839.9)	\$ (13,736.2)
Other Income Adjustments	\$ 100.8	\$ 56.1	\$ 56.1
Operating Income	1,326.6	1,415.8	1,685.4
EBITDA	\$ 1,740.3	\$ 1,914.8	\$ 2,327.9
Other Income (Expenses)			
Interest, net	\$ (331.5)	\$ (253.2)	\$ (305.6)
Other	-	-	-
Total Other Income (Expense)	\$ (331.5)	\$ (253.2)	\$ (305.6)
Pretax Income	\$ 995.1	\$ 1,162.6	\$ 1,379.8
Income Tax	(19.0)	(28.7)	(31.1)
Minority Interest	(15.0)	(13.0)	(15.3)
Reported Net Income from Continuing Operations	\$ 961.1	\$ 1,120.9	\$ 1,333.4
Extraordinary Items/Discontinued Operations	-	-	-
Income to General Partner	(513.0)	(560.4)	(666.8)
Reported Net Income to Common Units	\$ 448.1	\$ 560.5	\$ 666.6
Non-recurring Items	\$ 8.6	\$ -	\$ -
Operating Earnings to Common	\$ 456.7	\$ 560.5	\$ 666.6
Average units outstanding - Basic	224.8	238.7	261.2
Average units outstanding - Diluted	224.8	238.7	261.2
Earnings per Unit			
Reported EPU - Basic	\$ 1.99	\$ 2.35	\$ 2.55
Reported EPU - Diluted	\$ 1.99	\$ 2.35	\$ 2.55
Operating EPU - Diluted	\$ 2.03	\$ 2.35	\$ 2.55
Distributable Cash Flow			
Recurring Net Income to Common	\$ 456.7	\$ 560.5	\$ 666.6
Depreciation	413.7	499.0	642.5
Other	(4.2)	(39.2)	(34.7)
Maintenance Capital Spending	(125.5)	(150.0)	(170.0)
Total Distributable Cash Flow	\$ 740.7	\$ 870.3	\$ 1,104.4
Distributable Cash Flow per Unit - Diluted	\$ 3.29	\$ 3.65	\$ 4.23

Ratios and other items

Distribution per Unit	\$ 3.26	\$ 3.44	\$ 3.80
Total Unit Coverage	1.0	1.1	1.1
Distribution Pay Out	98.9%	94.3%	89.9%

Total Debt to Capital 52% 55% 52%

Estimated Yield	8.18%	7.32%	7.44%
Implied Price	\$ 39.87	\$ 46.96	\$ 51.04
Price/EBITDA	20.00	20.00	20.00

Source: Value Line

Distribution Yield 8.18% 7.32% 7.44%
Assumed ROE 7.90% 6.90% 9.40%
Retention Ratio 1.06% 5.65% 10.13%
Estimated Growth 0.08% 0.39% 0.95%
DCF 8.26% 7.71% 8.40%

Source: RBC

CASH FLOWS FROM OPERATIONS VERSUS CAPITAL EXPENDITURES, DIVIDENDS AND DISTRIBUTIONS

	EQUITABLE RESOURCES			NATIONAL FUEL GAS			QUESTAR			AVERAGE
	2006	2005	2004	2006	2005	2004	2006	2005	2004	
Cash Flows from Operations	\$ 619.3	\$ (312.0)	\$ 180.0	\$ 471.1	\$ 317.3	\$ 437.1	\$ 966.2	\$ 695.1	\$ 585.7	
Capital Expenditures	(404.5)	(275.8)	(201.8)	(294.2)	(219.5)	(172.3)	(916.1)	(712.7)	(446.5)	
Other Investing Activities	(3.2)	623.6	43.3	13.0	116.1	9.2	33.4	19.2	7.2	
Total Investing Activities	\$ (407.7)	\$ 347.8	\$ (158.5)	\$ (281.2)	\$ (103.4)	\$ (163.1)	\$ (882.7)	\$ (693.5)	\$ (439.3)	
Dividends and Repurchases - Common Stock	\$ (104.9)	\$ (222.2)	\$ (207.9)	\$ (183.5)	\$ (84.2)	\$ (89.1)	\$ (85.9)	\$ (85.3)	\$ (76.2)	
Other Cash Flows from Financing Activities	(161.7)	234.8	102.2	39.6	(121.1)	(180.7)	13.6	101.5	(80.4)	
Total Financing Activities	\$ (266.6)	\$ 12.6	\$ (105.7)	\$ (143.9)	\$ (215.3)	\$ (259.8)	\$ (72.3)	\$ 16.2	\$ (155.6)	
Net Cash Flow (Operations, Investing, Financing)	\$ (75.0)	\$ 48.4	\$ (84.2)	\$ 46.0	\$ (1.4)	\$ 4.2	\$ 11.2	\$ 17.8	\$ (10.2)	
Cash Flows from Operations less CAPEX and Dividends	\$ 109.9	\$ (810.0)	\$ (229.7)	\$ (6.6)	\$ 3.6	\$ 175.7	\$ (35.8)	\$ (102.9)	\$ 63.0	
Capital Expenditures and Dividends/Cash Flows from Operations	-82.25%	159.62%	-227.61%	-101.40%	-98.87%	-59.80%	-103.71%	-114.80%	-89.24%	-109.71% [1]

Source: SEC Forms 10-K
[1] Excludes Equitable Resources 2005 data due to negative operating cash flows

Internal Growth Rate of Corporations						
	Questar	Equitable	National Fuel Gas	Williams Companies	Average	
2006 Earnings	\$ 5.07	\$ 1.77	\$ 1.61	\$ 0.55		
2006 Dividends	\$ 0.93	\$ 0.87	\$ 1.18	\$ 0.35		
Payout Ratio	18.34%	49.15%	73.29%	62.73%	50.88%	
2005 Earnings	\$ 3.74	\$ 2.09	\$ 2.23	\$ 0.53		
2005 Dividends	\$ 0.89	\$ 0.82	\$ 1.40	\$ 0.25		
Payout Ratio	23.80%	39.23%	62.78%	47.17%	43.25%	
2004 Earnings	\$ 2.67	\$ 2.37	\$ 2.01	\$ 0.18		
2004 Dividends Paid	\$ 0.85	\$ 0.72	\$ 1.10	\$ 0.08		
Payout Ratio	31.84%	30.38%	54.73%	44.44%	40.35%	
Average Payout Ratio	24.66%	39.59%	63.60%	51.45%	44.82%	
Average Retention Ratio	75.34%	60.41%	36.40%	48.55%	55.18%	
DCF Result	9.75%	10.47%	8.01%	10.96%	9.80%	
Internal Growth Rate	7.35%	6.32%	2.92%	5.32%	5.48%	
I/B/E/S Growth Rate	8.50%	10.00%	5.00%	11.50%	8.75%	
Difference	1.15%	3.68%	2.08%	6.18%	3.27%	

QUESTAR CORPORATION TWO-STAGE CONSTANT GROWTH DCF								
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
				Expected	I/B/E/S		Weighted	
	Annualized	Average	Dividend	Dividend	Consensus		Average	
	Dividend	Stock Price	Yield	Yield	Growth	GDP Growth	Growth	DCF
Company							Rate	
Questar Corp.	STR	\$88.68	1.11%	1.15%	8.50%	5.35%	7.45%	9.75%

Notes

- [1] Source: Yahoo! Finance
- [2] Source: Yahoo! Finance.
- [3] Equals Col. [1]/Col. [2]
- [4] Equals Col. [3] x (1+ (.5 x Col. [7]))
- [5] Source: Thomson Research
- [6] Average of EIA AEO, and Blue Chip Forecast
- [7] Equals Col [5] x (2/3)+ Col [6] x (1/3)
- [8] Equals Col. [4] + Col. [7]

EQUITABLE TWO-STAGE CONSTANT GROWTH DCF							
	[1]	[2]	[3]	[4]	[5]	[6]	[8]
Company	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	I/B/E/S Consensus Growth	GDP Growth	Weighted Average Growth Rate
Equitable	EQT	\$45.76	1.92%	2.02%	10.00%	5.35%	8.45%
							DCF 10.47%

Notes

- [1] Source: Yahoo! Finance
- [2] Source: Yahoo! Finance.
- [3] Equals Col. [1]/Col. [2]
- [4] Equals Col. [3] x (1+(-.5 x Col. [7]))
- [5] Source: Thomson Research
- [6] Average of EIA AEO, and Blue Chip Forecast
- [7] Equals Col [5] x (2/3)+ Col [6] x (1/3)
- [8] Equals Col. [4] + Col. [7]

NATIONAL FUEL GAS TWO-STAGE CONSTANT GROWTH DCF								
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Company	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	I/B/E/S Consensus Growth	GDP Growth	Weighted Average Growth Rate	DCF
National Fuel Gas	\$1.20	\$42.48	2.83%	2.90%	5.00%	5.35%	5.12%	8.01%

Notes

- [1] Source: Yahoo! Finance
[2] Source: Yahoo! Finance.
[3] Equals Col. [1]/Col. [2]
[4] Equals Col. [3] x (1+(-.5 x Col. [7]))
[5] Source: Thomson Research
[6] Average of EIA AEO, and Blue Chip Forecast
[7] Equals Col [5] x (2/3)+ Col [6] x (1/3)
[8] Equals Col. [4] + Col. [7]

ANALYSIS OF TAXABLE INCOME UNDER CORPORATE SCENARIO AND MLP SCENARIO

ASSUMPTIONS

Purchase at end of Y0 of 1 unit/share	\$ 100 00
Sale in Y4 of 1 unit/share for \$200	\$ 200 00
Growth	0%
Distributions	\$ 20 00
Net Income	\$ 5 00
Payout Ratio	100%

CORPORATION SCENARIO	Y0	Y1	Y2	Y3	Y4	Taxable Total		
Basis in Share of Stock	\$ 100 00	\$ 100 00	\$ 100 00	\$ 100 00	\$ 100 00		Unit Selling Price	\$ 200 00
Dividend		\$ 5 00	\$ 5 00	\$ 5 00	\$ 5 00	\$ 20 00	Dividends Received	\$ 20 00
Capital Gain					\$ 100.00	\$ 100.00	Less: Basis	\$ (100.00)
Taxable to S/H, corporation	\$ -	\$ 5.00	\$ 5.00	\$ 5.00	\$ 105.00	\$ 120.00	Taxable Amount	\$ 120.00

MLP SCENARIO	Y0	Y1	Y2	Y3	Y4	Taxable Total		
Basis in Partnership Unit	\$ 100 00	\$ 85 00	\$ 70 00	\$ 55 00	\$ 40 00		Unit Selling Price	\$ 200 00
Distribution		\$ 20 00	\$ 20 00	\$ 20 00	\$ 20 00		Distributions Received	\$ 80 00
Partnership Income	\$ -	\$ 5 00	\$ 5 00	\$ 5 00	\$ 5 00	\$ 20 00	Less: Basis	\$ (100.00)
Capital Gain					\$ 160.00	\$ 160.00		
Taxable to MLP Unit Holder		\$ 5.00	\$ 5.00	\$ 5.00	\$ 165.00	\$ 180.00	Taxable Amount	\$ 180.00

PROXY GROUP GROWTH RATES AND YIELDS							
MLP Growth Rates and Yields							
	Ticker	Valueline EPS	I/B/E/S	Yahoo First Call	Mean Growth Rate	Dividend Yield	
Boardwalk Pipeline Partners LP	BWP	-	7.0%	7.0%	7.0%	4.96%	
Enbridge Energy Partners LP	EEP	-	5.0%	5.0%	5.0%	6.84%	
Enterprise Products Partners LP	EPD	11.0%	8.0%	8.00%	9.0%	6.20%	
Kinder Morgan Energy Partners, L.P.	KMP	6.0%	7.0%	7.00%	6.7%	6.42%	
MarkWest Energy Partners, L.P.	MWE	-	6.2%	6.20%	6.2%	6.24%	
OneOK Partners, L.P.	OKS	-	5.0%	5.0%	5.0%	5.98%	
Mean		8.5%	-	6.4%	6.5%	6.1%	
Median		8.5%	-	6.6%	6.4%	6.2%	

Corporate Growth Rates and Yields						
	Ticker	Valueline EPS	I/B/E/S	Yahoo First Call	Mean Growth Rate	Dividend Yield
Williams Companies	WMB	18.5%	11.5%	11.50%	13.8%	1.43%

Monthly High and Low Stock Prices^[1]
For Proxy Companies

Dates	Enbridge Energy Partners LP			El Paso Corp			Enterprise Products Partners LP			Equitable Resources, Inc.			Kinder Morgan Energy Partners, L.P.			MarkWest Energy Partners, L.P.		
	High	Low	Avg	High	Low	Avg	High	Low	Avg	High	Low	Avg	High	Low	Avg	High	Low	Avg
1-May-07	\$ 60.39	\$ 54.66	\$ 57.53	\$ 17.04	\$ 14.95	\$ 16.00	\$ 32.88	\$ 30.50	\$ 31.69	\$ 52.36	\$ 50.29	\$ 51.33	\$ 55.65	\$ 54.08	\$ 55.37	\$ 36.58	\$ 33.80	\$ 35.19
1-Apr-07	\$ 61.82	\$ 56.29	\$ 59.06	\$ 15.52	\$ 14.66	\$ 15.09	\$ 33.15	\$ 31.75	\$ 32.45	\$ 52.82	\$ 48.48	\$ 50.64	\$ 56.96	\$ 52.78	\$ 54.88	\$ 37.50	\$ 34.00	\$ 35.75
1-Mar-07	\$ 56.05	\$ 52.51	\$ 54.28	\$ 14.76	\$ 13.76	\$ 14.26	\$ 32.60	\$ 30.10	\$ 31.40	\$ 48.62	\$ 41.19	\$ 44.91	\$ 53.36	\$ 50.35	\$ 51.86	\$ 35.75	\$ 32.98	\$ 34.37
1-Feb-07	\$ 53.33	\$ 52.41	\$ 52.87	\$ 15.60	\$ 14.35	\$ 14.98	\$ 30.59	\$ 29.58	\$ 30.09	\$ 44.26	\$ 42.35	\$ 43.31	\$ 51.65	\$ 50.24	\$ 50.95	\$ 32.47	\$ 30.56	\$ 31.52
1-Jan-07	\$ 52.91	\$ 48.68	\$ 50.80	\$ 15.56	\$ 14.42	\$ 14.99	\$ 29.80	\$ 28.46	\$ 29.13	\$ 43.36	\$ 39.67	\$ 41.52	\$ 50.72	\$ 47.46	\$ 49.09	\$ 31.38	\$ 28.78	\$ 30.08
1-Dec-06	\$ 50.67	\$ 49.39	\$ 50.03	\$ 15.45	\$ 14.56	\$ 15.01	\$ 29.80	\$ 28.46	\$ 29.13	\$ 44.04	\$ 41.75	\$ 42.90	\$ 48.58	\$ 47.60	\$ 48.09	\$ 29.63	\$ 28.53	\$ 29.18
Average Price ^[2]			\$ 54.09			\$ 15.05			\$ 30.65			\$ 45.76			\$ 51.70			\$ 32.68

Dates	National Fuel Gas Company			OneOK, Inc			Williams Companies			10-Year Treasury			Spread		
	High	Low	Avg	High	Low	Avg	High	Low	Avg	High	Low	Avg	High	Low	Avg
1-May-07	\$ 47.49	\$ 45.21	\$ 46.35	\$ 54.19	\$ 48.69	\$ 51.44	\$ 32.19	\$ 28.25	\$ 30.22	\$ 4.89	\$ 4.63	\$ 4.76	\$ 2.48	\$ 2.40	\$ 2.44
1-Apr-07	\$ 47.76	\$ 44.14	\$ 45.95	\$ 48.41	\$ 44.57	\$ 46.49	\$ 30.21	\$ 28.20	\$ 29.21	\$ 4.76	\$ 4.62	\$ 4.69	\$ 2.52	\$ 2.36	\$ 2.44
1-Mar-07	\$ 43.54	\$ 40.90	\$ 42.22	\$ 46.13	\$ 40.12	\$ 43.13	\$ 28.94	\$ 25.98	\$ 27.46	\$ 4.66	\$ 4.49	\$ 4.58	\$ 2.49	\$ 2.27	\$ 2.38
1-Feb-07	\$ 43.21	\$ 40.89	\$ 42.05	\$ 43.76	\$ 41.66	\$ 42.71	\$ 28.33	\$ 26.94	\$ 27.64	\$ 4.81	\$ 4.51	\$ 4.66	\$ 2.41	\$ 2.16	\$ 2.29
1-Jan-07	\$ 40.89	\$ 37.26	\$ 39.08	\$ 43.27	\$ 41.48	\$ 42.38	\$ 27.15	\$ 25.32	\$ 26.24	\$ 4.89	\$ 4.66	\$ 4.78	\$ 2.44	\$ 2.26	\$ 2.35
1-Dec-06	\$ 40.02	\$ 38.41	\$ 39.22	\$ 44.26	\$ 42.99	\$ 43.63	\$ 27.95	\$ 26.12	\$ 27.04	\$ 4.71	\$ 4.48	\$ 4.60	\$ 2.40	\$ 2.21	\$ 2.31
Average Price			\$ 42.48			\$ 44.98			\$ 27.97			\$ 4.88			\$ 2.37

Notes

- [1] Stock prices through 5/30/2007
[2] FERC averaging convention

PROXY GROUP TWO-STAGE CONSTANT GROWTH DCF

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Company	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Consensus Growth (Thomson)	GDP Growth	Weighted Average Growth Rate *	DCF
PROXY GROUP NATURAL GAS TRANSPORTATION COMPANIES								
Boardwalk Pipeline Partners LP	\$1.72	\$33.29	5.17%	5.35%	7.00%	5.35%	6.45%	11.58%
Enbridge Energy Partners LP	\$3.70	\$53.03	6.98%	7.15%	5.00%	5.35%	5.12%	12.13%
Enterprise Products Partners LP	\$1.90	\$30.02	6.33%	6.58%	8.00%	5.35%	7.12%	13.56%
Kinder Morgan Energy Partners, L.P.	\$3.32	\$50.57	6.56%	6.79%	7.00%	5.35%	6.45%	13.09%
MarkWest Energy Partners, L.P.	\$2.04	\$31.30	6.52%	6.72%	6.20%	5.35%	5.92%	12.35%
OneOK Partners, L.P.	\$3.96	\$65.01	6.09%	6.24%	5.00%	5.35%	5.12%	11.24%
Williams Companies	\$0.40	\$27.53	1.45%	1.54%	11.50%	5.35%	9.45%	10.96%
	Proxy Group Mean			5.77%	7.10%		6.52%	12.13%
	Proxy Group Median			6.58%	7.00%		6.45%	12.13%

ZONE OF REASONABLENESS HIGH
ZONE OF REASONABLENESS LOW
ZONE OF REASONABLENESS MIDPOINT

Notes

- [1] Source: Yahoo! Finance
[2] Source: Yahoo! Finance.
[3] Equals Col. [1]/Col. [2]
[4] Equals Col. [1] x (1+ (.5 x Col. [7]))/Col. [2]
[5] Source: Thomson Research
[6] Average of EIA AEO, and Blue Chip Forecast
[7] Equals Col [9] x (2/3)+ Col [10] x (1/3)
[8] Equals Col. [4] + Col. [11]

180 DAY PROXY GROUP TWO-STAGE CONSTANT GROWTH DCF

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Consensus Growth (Thomson)	GDP Growth	Weighted Average Growth Rate *	DCF
PROXY GROUP NATURAL GAS TRANSPORTATION COMPANIES								
Boardwalk Pipeline Partners LP	\$1.72	\$33.29	5.17%	5.35%	7.00%	5.34%	6.45%	11.80%
Enbridge Energy Partners LP	\$3.70	\$53.03	6.98%	7.15%	5.00%	5.34%	5.11%	12.27%
Enterprise Products Partners LP	\$1.90	\$30.02	6.33%	6.58%	8.00%	5.34%	7.11%	13.70%
Kinder Morgan Energy Partners, L.P.	\$3.32	\$50.57	6.56%	6.79%	7.00%	5.34%	6.45%	13.24%
MarkWest Energy Partners, L.P.	\$2.04	\$31.30	6.52%	6.72%	6.20%	5.34%	5.91%	12.63%
OneOK Partners, L.P.	\$3.96	\$65.01	6.09%	6.24%	5.00%	5.34%	5.11%	11.36%
Williams Companies	\$0.40	\$27.53	1.45%	1.54%	11.50%	5.34%	9.45%	10.99%
		MEAN OF MIDPOINTS		5.77%	7.10%		6.51%	12.28%
		MEDIAN OF MIDPOINTS		6.58%			6.45%	12.27%

ZONE OF REASONABLENESS HIGH
ZONE OF REASONABLENESS LOW
ZONE OF REASONABLENESS MIDPOINT

Notes

- [1] Source: Yahoo! Finance
[2] Source: Yahoo! Finance.
[3] Equals Col. [1]/Col. [2]
[4] Equals (Col. [1] x (1+(.5 x Col. [7])))/Col. [2]
[5] Source: Thomson Research
[6] Average of EIA AEO, and Blue Chip Forecast
[7] Equals Col [9] x (2/3)+ Col [10] x (1/3)
[8] Equals Col. [4] + Col. [11]

RISK PREMIUM ANALYSIS (10 YR TREASURY VERSUS FERC AUTHORIZED ROES IN CONTESTED CASES)

	10 Year Treasury ^TNX	FERC Authorized ROES	Risk Premium vs Treasuries	Calculated Risk Premium Vs Treasuries using regression equation [0.11 + (Tyield x - 0.68105)]
Nov-73	6.69%	12.00%	5.31%	5.95%
Oct-76	7.42%	13.00%	5.58%	5.45%
Feb-77	7.45%	15.95%	8.50%	5.43%
Jul-77	7.42%	12.80%	5.38%	5.45%
Jan-78	7.94%	12.50%	4.56%	5.10%
May-79	9.06%	11.50%	2.44%	4.33%
Jan-80	11.13%	12.50%	1.37%	2.92%
Feb-80	12.72%	15.30%	2.58%	1.64%
Apr-80	10.76%	11.00%	0.24%	3.18%
Aug-80	11.55%	15.00%	3.45%	2.64%
Aug-81	15.41%	16.50%	1.09%	0.01%
Jan-82	14.14%	15.30%	1.16%	0.87%
Jun-82	14.44%	14.70%	0.26%	0.67%
Jan-83	10.80%	14.00%	3.20%	3.15%
Mar-83	10.62%	14.64%	4.02%	3.27%
Jan-85	11.17%	14.25%	3.08%	2.90%
Nov-90	8.28%	12.60%	4.34%	4.88%
Sep-92	6.37%	14.45%	8.08%	6.17%
Nov-93	5.80%	13.46%	7.66%	6.55%
Sep-95	6.16%	12.49%	6.33%	6.31%
Jan-96	5.58%	12.36%	6.78%	6.70%
Feb-96	6.11%	12.22%	6.11%	6.34%
Aug-96	6.94%	12.25%	5.31%	5.78%
Jan-97	6.50%	12.38%	5.88%	6.08%
May-97	6.66%	12.40%	5.74%	5.97%
Jun-97	6.50%	13.67%	7.17%	6.08%
Jan-00	6.67%	12.48%	5.81%	5.96%
Mar-00	6.02%	11.83%	5.81%	6.40%
Jul-03	4.47%	11.22%	6.75%	7.46%
Oct-06	4.61%	11.20%	6.59%	7.36%

Mar-07 10 Yr Treasury 5.20%
Treasuries

Upper and Lower Bound based on 1 x Standard Error of Each Variable

upper	7.98%	13.18%
Model calc	6.96%	12.16%
lower	5.95%	11.15%

Upper and Lower Bound of Equation based on 1 x Standard Error

upper	8.11%	13.31%
Model calc	6.96%	12.16%
lower	5.81%	11.01%

Upper and Lower Bound of Equation based on 2 x Standard Error

upper	9.27%	14.47%
Model calc	6.96%	12.16%
lower	4.66%	9.88%

Overall Maximum and Minimum Risk Premium of All Observations

minimum	5.31%	10.51%
maximum	5.31%	10.51%

Regression Statistics	
Multiple R	0.878547478
R Square	0.771845071
Adjusted R Square	0.76339551
Standard Error	0.011514166
Observations	29

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	0.012109619	0.012109619	91.34094965	3.71735E-10
Residual	27	0.003579552	0.000132576		
Total	28	0.015689172			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.105046107	0.006473948	16.22597238	1.89343E-15	0.091762663	0.118329552	0.091762663	0.11833
	0.0869	-0.681050794	-9.557245924	3.71735E-10	-0.627264546	-0.534837042	-0.627264546	-0.534637

RESIDUAL OUTPUT

Observation	Predicted 0.0531	Residuals
1	0.054512138	0.001287862
2	0.054307823	0.030692177
3	0.054512138	-0.000712138
4	0.050970674	-0.005370674
5	0.043342905	-0.018942905
6	0.029245154	-0.015545154
7	0.018416446	0.007383554
8	0.031765042	-0.029365042
9	0.026384741	0.008115259
10	9.618E-05	0.01080362
11	0.008745525	0.002854475
12	0.008702373	-0.004102373
13	0.031492622	0.000507378
14	0.032718513	0.007481487
15	0.026972734	0.001827266
16	0.048791312	-0.005391312
17	0.061663172	0.019136828
18	0.065545161	0.011054839
19	0.063093378	0.000206622
20	0.087043473	0.000756527
21	0.063433904	-0.002333904
22	0.057781182	-0.004881182
23	0.060777806	-0.001977806
24	0.059688125	-0.002288125
25	0.060777806	0.010922194
26	0.059620019	-0.001520019
27	0.06404685	-0.00594685
28	0.074603137	-0.007103137
29	0.073649666	-0.007749666