

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Transwestern Pipeline Company, LLC)
) Docket No. RP06-____-000
)

PREPARED DIRECT TESTIMONY
OF
ROBERT B. HEVERT

I. INTRODUCTION AND QUALIFICATIONS

1
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 Transwestern Pipeline Company, LLC (“Transwestern”).

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

9 A. I have previously served as an executive and manager with other consulting firms (*i.e.*
10 REED Consulting Group and Navigant Consulting, Inc.), and as a financial officer
11 of Bay State Gas Company. I have provided testimony regarding strategic and
12 financial matters, including the cost of capital, before several state utility regulatory
13 agencies, and have advised numerous energy and utility clients on a wide range of
14 financial and economic issues including both asset and corporate-based transactions.
15 Many of those assignments have included the determination of the cost of capital for
16 transaction and valuation purposes. A summary of my professional and educational
17 background is provided in Exhibit No. TW-57 to my testimony.

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

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

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

11 **Q. What is the purpose of your Prepared Direct Testimony?**

12 A. The purpose of my Prepared Direct Testimony is to present evidence and provide a
13 recommendation regarding Transwestern's return on equity ("ROE"). My Direct
14 Testimony also will summarize the data and methodologies used to establish my
15 recommended ROE for Transwestern. My analyses and recommendations are
16 supported by the data presented in Exhibit Nos. TW-58 through TW-66.

17 **Q. What are your conclusions regarding the appropriate ROE for Transwestern?**

18 A. Based on my analysis, I have concluded that Transwestern should be provided the
19 opportunity to earn a ROE in the range of 12.40 percent to 13.90 percent. Taking
20 into consideration that the median of such range is 13.35 percent, and the relative
21 level of business risk faced by Transwestern as detailed in the testimonies of Ms.
22 Corman and Mr. Reed, I recommend an equity cost rate of 13.50 percent. This
23 equity return will adequately compensate investors for their investment in the capital

1 of Transwestern and will provide Transwestern with the opportunity to attract new
2 capital on reasonable terms.

3 In arriving at the appropriate ROE for Transwestern it is important for the
4 Federal Energy Regulatory Commission (“Commission”) to consider the business
5 risk of Transwestern’s pipeline operations, relative to that of the proxy group to
6 determine where within the range, for such group, Transwestern’s ROE rightly
7 falls. As discussed in more detail by Mr. Reed and Ms. Corman, and as
8 summarized in my testimony, Transwestern’s business risks, clearly, are more acute
9 than a pipeline of average risk, requiring an ROE above the median of the range of
10 results.

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

12 A. In order to determine the appropriate ROE, I have employed the two-stage form of
13 the Discounted Cash Flow (“DCF”) model, consistent with Commission precedent
14 regarding the calculation of ROE for interstate natural gas pipelines. My application
15 of the DCF model and analytical results are based on third-party analyst growth
16 projections, as well as market-based information including current annual dividends
17 (or distributions), and recent stock (or unit) prices. In applying and assessing the
18 results of my DCF analyses, I considered certain costs and trends, including the
19 fundamental business risks currently facing the natural gas pipeline industry in
20 general and Transwestern in particular. With these considerations, my recommended
21 ROE is based on a point that is above the median for the proxy group.

22 In my DCF analysis, I have incorporated companies structured as Master
23 Limited Partnerships (“MLPs”) into my proxy group. The Commission,

1 Transwestern and other interstate gas pipelines are at a crossroads in re-evaluating
2 the methodologies employed in their application of the DCF model for purposes of
3 determining ROE. The historic proxy group no longer provides a reasonable proxy
4 for a financially stable interstate gas pipeline, due to industry consolidation, financial
5 instability, and diminished involvement in regulated interstate gas pipeline
6 operations. As such, a new group is needed. Therefore, we propose a framework
7 that has its roots in the well-established DCF approach but evolves to address the
8 prevailing nature of pipeline ownership in the United States.

9 This point is articulated in the recent INGAA white paper, whereby the
10 process used by the Commission to establish ROEs for natural gas pipelines was
11 examined, particularly in the following three areas (1) the Commission's past
12 practice, (2) the implications of excluding MLPs from a DCF analysis of gas pipeline
13 companies; and (3) the shortcomings of the DCF analysis in itself. INGAA's
14 concluding statement with respect to the treatment of MLPs is a fair summary of the
15 industry's position on this issue:

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

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

23 A. My remaining Direct Testimony is organized into five sections. Section III discusses
24 the regulatory guidelines and financial considerations pertinent to rate of return

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 estimates. Section IV discusses current economic conditions that have a bearing on
2 the determination of an appropriate rate of return. Section V discusses the criteria
3 and approach for the selection of my proxy group of comparable companies.
4 Section VI explains the data and methodologies in my analyses and my
5 recommendation of the appropriate ROE for Transwestern. Section VII
6 summarizes my results and conclusions.

7 III. REGULATORY GUIDELINES AND FINANCIAL CONSIDERATIONS

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

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

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

1 too low by changes affecting opportunities for investment, the money
2 market and business conditions generally.²

3
4 * * *

5 Rates which are not sufficient to yield a reasonable return on the value
6 of the property used at the time it is being used to render the service
7 are unjust, unreasonable and confiscatory...³

8
9 * * *

10 From the investor or company point of view, it is important that there
11 be enough revenue not only for operating expenses, but also for the
12 capital costs of the business. These include service on the debt and
13 dividends on the stock. By that standard the return to the equity owner
14 should be commensurate with returns on investments in other
15 enterprises having corresponding risks. That return, moreover, should
16 be sufficient to assure confidence in the financial integrity of the
17 enterprise, so as to maintain its credit and to attract capital.⁴

18
19 **Q. Why is it important for a utility to be allowed the opportunity to earn a return**
20 **adequate to attract capital at reasonable terms?**

21 A. There is a long history regarding the allowed return on equity, the role of capital
22 structure, and the resulting cost of capital in the establishment of just and reasonable
23 rates for utility services. Among the themes common to many Federal, State and
24 Supreme Court cases is the principle that a utility's cost of capital (including its
25 capital structure and allowed return on common equity) must be reflective of other
26 enterprises having comparable risks acting independently in the financial markets. A
27 return that is adequate to attract capital at reasonable terms enables the utility to
28 provide safe, reliable service while maintaining its financial integrity. In keeping with
29 the *Hope* and *Bluefield* standards, that return should be commensurate with the returns

² *Bluefield Waterworks & Improvement Company v. Public Service Commission of West Virginia*, 262 U.S. 679, at 692-693 (1923).

³ *Id.*, at 690-692.

⁴ *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, at 603 (1944), (“Hope”).

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

10 **Q. Please discuss the importance of the allowed rate of return from the**
11 **perspective of the capital markets.**

12 A. The financial community has continued to put the pipeline industry under intense
13 scrutiny. There is little question, for example, that the rating agencies continue to
14 focus on financial profiles and business risks for all pipeline companies. In a recent
15 report, Standard & Poors noted that:

16 When evaluating the creditworthiness of natural gas pipeline companies,
17 Standard & Poor's analysis begins with a qualitative assessment of a
18 company's business risk profile. The company's financial metrics are then
19 examined in light of its business risk profile, since companies with higher
20 business risk require stronger financial metrics at the same rating
21 category.⁵
22

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

⁵ Standard & Poors, "Key Rating Factors for U.S. Natural Gas Pipelines", *Commentary Report* (10 August 2005): at 1.

1 Q. What is the basis for your recommended ROE for Transwestern?

2 A. My recommended ROE is based upon a proxy group of publicly-traded corporations
3 and master limited partnerships with significant interstate pipeline operations. My
4 recommendation relies upon a range of reasonableness, determined by the high and
5 low DCF results. I apply my qualitative assessment of risk to determine where
6 within that range Transwestern's ROE should fall. By selecting a group of
7 companies with comparable risks and business characteristics to Transwestern, I
8 have ensured that my analysis in this proceeding comports with the *Hope* and *Bluefield*
9 standards upon which my recommendation is based, as well as the FERC standard
10 for natural gas pipelines, established in *Williston Basin*.⁶ As such, my analyses result
11 in an allowed ROE for Transwestern that is both commensurate with its total risk
12 level (business risk and financial risk) and sufficient to enable Transwestern to attract
13 capital at reasonable rates.

14 The Commission has stated its preference for the application of a
15 Discounted Cash Flow ("DCF") model that incorporates both near-term earnings
16 growth forecasts and longer-term estimates of macroeconomic growth (referred to
17 herein as the "Two-Stage DCF" model). My testimony, therefore, relies on the Two-
18 Stage DCF model, giving adequate weight to the business risk environment, which
19 has been applied to publicly-available data for all of the proxy group companies.

⁶ *Williston Basin Interstate Pipeline Company*, 104 FERC ¶ 61,036 (2003).

1 [I]the challenges faced by Southern Union's Transwestern (TWP)
2 system could highlight to investors the perils of pipeline systems and
3 undermine the assumption that they perennially generate stable cash
4 flows.⁷
5

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

8 A. While Transwestern currently shares some of the same risk characteristics as the
9 proxy group companies, for the reasons discussed briefly above and more specifically
10 in Ms. Corman's and Mr. Reed's testimony, Transwestern is more risky, on balance,
11 than the proxy group. Based on that assessment, it is my view that Transwestern's
12 ROE should be set above the median of the range of ROEs derived from the proxy
13 group data.

14 **V. PROXY GROUP COMPANIES**

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

17 A. The use of proxy groups is a widely-employed analytical method to assist in
18 estimating the cost of equity for a particular company. As discussed in more detail
19 later in my testimony, the methods most commonly used by financial analysts to
20 estimate the cost of equity are based on company-specific market data and
21 projections. The primary benefit of using a proxy group, therefore, is that it serves
22 to attenuate the effects of anomalous events that may be associated with any one
23 company. Additionally, proxy groups include a range of characteristics for

⁷ *"All Pipelines Are Not Created Equal,"* Banc of America Securities, June 14, 2005, p. 2.

1 companies deemed to be comparable to Transwestern, and thus provide a
2 benchmark to gauge the reasonableness of ROE estimate results.

3 **Q. Please discuss the criteria by which you selected the companies included in**
4 **your proxy group.**

5 A. To ensure that my proxy group meets the comparability standard set forth in *Hope*
6 and *Bluefield*, I began by considering all of the companies that Value Line classifies as
7 the Diversified Natural Gas industry group. This industry group includes the
8 majority of the publicly-traded corporations and MLPs that have significant interests
9 in interstate natural gas transportation. I then considered MLPs with significant
10 natural gas pipeline operations that were not covered by Value Line. From this
11 population, I applied the following criteria, as I have detailed in Exhibit No. TW-58:

- 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 50 percent or more of their operating income
16 from a regulated energy-related line of business;
- 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
19 negative ratings actions that would significantly impact investors' perception
20 of risk; and
21
- 22 6) None of the companies are engaged in significant transactions involving
23 mergers or acquisitions.
24

25 The first two criteria are consistent with the Commission's Order in *EPGT Texas*
26 *Gas Pipeline L.P.*, 99 FERC ¶61,295 (2002), wherein the Commission commented on
27 screening criteria for proxy group companies in natural gas proceedings. To that

1 point, the Commission stated that “The companies should be publicly-traded,
2 engaged largely in natural gas transmission, and own natural gas pipelines regulated
3 by the Commission.”⁸

4 In order to determine the extent to which the candidate companies are
5 engaged in pipeline operations, I have developed a list of interstate pipelines owned
6 by each of the companies, evaluated for inclusion in the proxy group, in Exhibit No.
7 TW-59. Additionally, I have gathered revenue, operating income and asset data by
8 segment for 2006 (year to date), and for the years ended 2005 and 2004. Based on
9 that data, I calculated the percentage of revenues, operating income and assets
10 associated with natural gas transmission; an analysis that is critical to the selection of
11 a reasonable proxy group in identifying peer companies with risks comparable to
12 those of Transwestern. (See Exhibit No. TW-60).

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

14 A. I began with the six company group used by the Administrative Law Judge in her
15 initial decision in *Kern River Gas Transmission Company*, 114 FERC ¶63,031 (2006).
16 These six companies are derived from the same group, adjusted for divestitures and
17 mergers, approved by the Commission in *Williston Basin*, and today represent those
18 corporate entities with the most significant natural gas pipeline holdings. That group
19 consists of El Paso Corporation; Equitable Resources, Inc.; Kinder Morgan, Inc.;
20 National Fuel Gas Company; Questar Corporation; and Williams Companies. It is
21 that group, to which I applied my screening criteria in order to determine their
22 comparability to Transwestern.

⁸ 99 FERC at 62,250.

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

2 A. No, I have not. While all of those companies meet certain screening criteria, there
3 are varying degrees to which their financial performance relies on regulated versus
4 non-regulated operations. Moreover, several of those companies derive only a small
5 portion of their financial results from FERC-regulated natural gas transmission. As
6 discussed in more detail below, the effect of that criterion is to substantively limit the
7 number of corporate natural gas pipeline companies that reasonably can be
8 considered comparable to Transwestern.

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

12 A. Equitable Resources, Questar and National Fuel fail to meet my criterion that the
13 company is engaged largely in natural gas transmission. Further, Equitable
14 Resources failed to meet the criterion that at least 50% of its operating income is
15 derived from regulated utility operations. These companies have been rejected by
16 the Commission in the past due to the fact that they are substantially local
17 distribution companies with significantly different risk profiles than that of
18 Transwestern.⁹ Further, El Paso's financial condition requires that it be excluded
19 from my proxy group due to the reduction of its dividend and its low credit rating.
20 Finally, Kinder Morgan recently announced its intention to go private.¹⁰

⁹ *Williston Basin Interstate Pipeline Co.*, 87 FERC ¶61,264 at 62,007 (1999).

¹⁰ Kinder Morgan, Inc. press release, "Kinder Morgan, Inc. Enters Into Agreement to Sell to Investor Group for \$107.50 Per Share", August 28, 2006.

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 June 30, 2006, the percentage that pipeline
4 operations contributed to revenues, operating income and utility assets varies
5 significantly among the six corporate natural gas pipeline companies:

6 **Table 1: Business Segment Information ¹¹**

COMPANY	% REVENUE FROM PIPELINE OPERATIONS	% OPERATING INCOME FROM PIPELINE OPERATIONS	% ASSETS FROM PIPELINE OPERATIONS	OVERALL WEIGHTING
El Paso Corporation	58%	(b)	57%	57%
Equitable Resources	5%	7%	(c)	6%
Kinder Morgan, Inc.	52%	78% (a)	56%	60%
National Fuel Gas	9%	35%	21%	20%
Questar Corp.	5%	13%	19%	11%
Williams Companies	10%	39%	26%	25%

7 (a) Excludes year to date 2006 results.

8 (b) El Paso Corporation's operating income percentages varied significantly among averaging periods
9 rendering it an unreliable measure of its weighting of natural gas pipeline operations.

10 (c) Data was not available as Equitable Resources does not provide asset data for each utility
11 segment.

12
13 For the purposes of my ROE recommendation, I have considered those companies
14 with an overall weighting for interstate natural gas pipeline operations of greater than
15 25% to be significantly engaged in interstate natural gas transportation.

16 As indicated in Table 1(above), an analysis of Equitable Resources indicates
17 that only six percent of its combined operations were derived from natural gas
18 pipeline operations, whereas 26 percent of its operations are related to its LDC
19 activities and 52 percent relate to natural gas supply. Questar's natural gas pipeline
20 operations comprise only 11 percent of its business, though its gas distribution
21 operations total 22 percent, and its exploration and production operations contribute

¹¹ Source: SEC Forms 10-K and 10-Q. The figures Percentages represent an average of 2006 (year to date), 2005 and 2004. Refer to Exhibit TW-60.

1 35 percent of its total. National Fuel's natural gas pipeline operations represent
2 approximately 20 percent of its operations, while its LDC operations make up 44
3 percent, and the bulk of the remainder is attributable to exploration and production.
4 As a result, these companies are only minimally engaged in natural gas transmission
5 operations and should not be considered to be reasonable proxy companies for
6 Transwestern.

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

9 A. El Paso, although it is owner of a large pipeline network, is still showing the effects
10 of the collapse in the merchant sector, and its financial troubles have significantly
11 affected the company's growth projections. Not only did El Paso reduce its dividend
12 in 2003 and, as a result, has the lowest dividend yield of any company being
13 considered for potential inclusion in the proxy group, it continues to use its cash
14 flow to pay down debt and stabilize its financial position.¹² Such a company cannot
15 be expected to share the same investment expectations as those for a financially
16 stable company such as Transwestern. A recent article in Inside F.E.R.C. described
17 El Paso's current financial condition after its S&P credit rating had been raised to
18 B+ from B as follows:

19 The rating agency said that the company's ventures into diverse
20 unregulated businesses, which entailed significant financial leveraging
21 and market risk, now represent a minimal component of El Paso's
22 profile. The upgrade also incorporates S&P's assessment that El

¹² "Troubled U.S. energy companies announce plans to sell non-utility assets, slash dividends", Foster Electric Report, February 12, 2003.

1 Paso has firmed up “its once precarious liquidity position ahead of
2 still sizable near-term maturities, though refinancing risk remains.”¹³
3

4 Though S&P describes El Paso’s financial condition as having improved
5 substantially, it is also evident that El Paso still faces near-term refinancing hurdles
6 before its recovery gains traction and a return to steady state performance is reflected
7 in its dividend yield and growth rates.

8 **Q. Why haven’t you considered Transwestern’s parent company, Southern Union
9 Company, for inclusion in the proxy group?**

10 A. I have not included Southern Union Company for inclusion in the proxy group due
11 to the limited history of its cash dividend payment, as the company has only been
12 paying dividends for one year. This is not a sufficient time frame from which to
13 project future dividends or growth.

14 **Q. What companies remain from the six companies you considered for inclusion
15 in the proxy group?**

16 A. Only the Williams Companies remain and, therefore, there is no viable proxy group
17 using only publicly-traded corporations. However, Williams Companies’ credit
18 rating remains below investment grade. Typically, to obtain a group of companies
19 with comparable business risks, I would apply a screen to my proxy group candidates
20 to verify that all companies were of investment grade or better. However, if such a
21 credit rating requirement for all proxy group companies’ were applied in this
22 proceeding, even Williams would have been excluded, leaving no corporate pipeline
23 proxy companies whatsoever. As such, it is necessary to expand the universe of

¹³ “FERC rejects El Paso rate compliance filing, orders it to cut daily scheduling penalties”, Inside F.E.R.C., June 5, 2006.

1 potential proxy group companies to include publicly-traded natural gas pipeline
2 companies structured as MLPs.

3 **Q. Did you use the same proxy group screening criteria for the MLPs that you**
4 **applied for the six corporate companies reviewed above?**

5 A. Yes. Accordingly, I have reviewed the percentage of each MLP engaged in natural
6 gas pipeline operations with the same thresholds as I did for the six companies. My
7 review of the MLP business segments and pipeline holdings are combined with those
8 of the six companies discussed above in Exhibits TW-58 – Exhibit TW-60.

9 **Q. Which master limited partnerships have you included in your proxy group?**

10 A. My Proxy Group includes the following MLPs:

- 11 • Enterprise Products Partners, L.P.
- 12 • Kinder Morgan Energy Partners, L.P.
- 13 • Boardwalk Pipeline Partners, L.P.
- 14 • Enbridge Energy Partners, L.P.
- 15 • OneOK Partners, L.P.

16 **Q. Please summarize your rationale for including MLPs in your proxy group?**

17 A. As discussed above, I examined the six companies previously utilized in Commission
18 proceedings, but given the evolution of this group over time, only Williams
19 Companies could be considered comparable to the operations of Transwestern.
20 Moreover, it is apparent that MLPs are becoming an increasingly common form of

1 organization¹⁴ in the natural gas pipeline sector and therefore should be reviewed for
2 comparability to Transwestern and inclusion in the proxy group.

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

4 A. My proxy group is comprised of the following six companies:

- 5 • Williams Companies
- 6 • Enterprise Products Partners, L.P.
- 7 • Boardwalk Pipeline Partners, L.P.
- 8 • Enbridge Energy Partners, L.P.
- 9 • Kinder Morgan Energy Partners, L.P.
- 10 • OneOK Partners, L.P.

11 **Q. Please elaborate on why you consider it appropriate to include master limited**
12 **partnerships in your proxy group?**

13 A. First, since the investment in pipeline assets is beginning to be dominated by MLPs,
14 it is important to recognize their legitimacy as proxy companies in gas pipeline
15 proceedings. To that point, a recent white paper prepared for the Interstate Natural
16 Gas Association of America (“INGAA”) recognizes the importance of MLPs in
17 developing proxy groups:

18 Currently, the fundamental issue in selecting a proxy group in a
19 natural gas pipeline rate case is whether or not to include
20 representatives of the many pipeline companies that are organized as
21 MLPs. The basic premise for creating the proxy-group approach in
22 the first place was that, because gas pipeline companies were not
23 publicly-traded, a group of similar publicly traded companies was
24 needed in order to establish a proxy for investor expectations
25 regarding natural gas pipelines. Now as MLPs have grown in

¹⁴ Standard and Poor’s, *Commentary Report, Key Rating Factors For U.S. Natural Gas Pipelines*, August 10, 2005, at 3.

1 number, scope and importance, they comprise a very representative
2 group of true, publicly-traded pipeline companies to which the
3 Commission can turn for market guidance.
4

5 The Commission has relied on MLPs as proxy companies in oil pipeline cases. Also,
6 the Commission considered a proxy group including MLPs to be “reasonable” in
7 *Natural Gas Pipeline Company of America, and Panther Interstate Pipeline Energy, LLC*, 105
8 FERC ¶61,383 (2003), for purposes of imputing a capital structure on Panther. That
9 proxy group included Equitable Resources, Kinder Morgan, KM Energy, National
10 Fuel, ONEOK, Inc., Questar, and TEPPCO. Finally, it has been recently
11 announced that Transwestern, itself, will be acquired by Energy Transfer Partners
12 L.P. (“ETP”), a master limited partnership.¹⁵ For all of the above reasons, it is
13 appropriate to include MLPs in the proxy group of comparable companies to
14 Transwestern.

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

16 **A.** An MLP is a limited partnership, whose limited partnership interests are represented
17 by units that are publicly-traded, much the same as a stock price represents a
18 shareholder’s interests in a corporation. MLPs do not pay dividends, but rather
19 make distributions to its limited partnership unit holders. I have applied the
20 distribution per unit in the DCF model in the same way that I have applied the
21 dividend yield per share of common stock. In addition, I have addressed the
22 quarterly payment of distributions and dividends in the same way, by multiplying the
23 dividend or distribution yield by $1 + \frac{1}{2}$ of the growth rate to obtain the expected

¹⁵ Reuters, *Energy Transfer to buy Transwestern Pipeline*, Friday September 15, 10:19 am ET. Note: ETP was excluded from the ROE analysis, as it currently does not own 100% of a FERC regulated interstate natural gas pipeline.

1 distribution yield. The cash distributions that are received by the unit holders are
2 analogous to dividends received by common shareholders. In both situations the
3 return to the investor is the cash flow received in quarterly distributions plus the cash
4 that would be received if the units or shares were sold upon a given valuation date.

5 **Q. What was the Commission's concern with respect to the inclusion of MLPs in**
6 **the proxy group in *HIOS*?**

7 A. The Commission's concern centered on whether the distribution payment to the unit
8 holders included a return of a portion of the partner's original investment, and
9 whether the use of such a distribution payment would cause the distribution yield to
10 appear higher than it actually was. Thus, the Commission stated that it would not
11 consider including an MLP in the proxy group, unless the record demonstrates that
12 the distribution used as the "dividend" includes only a payment of earnings and not a
13 return of investment.¹⁶ INGAA recently addressed the Commission's concern,
14 noting that:

15 This white paper concludes that the Commission's concern is
16 misplaced. An examination of a five-year history of actual returns to
17 equity investors from the gas-pipeline MLPs revealed that a short-
18 term DCF analysis for the same period would have been a very
19 accurate predictor of actual returns. Measuring investor expectations
20 by applying the DCF formula to a group that includes MLPs would
21 appear to be as valid as any application of the formula to stock-
22 owned companies.¹⁷

¹⁶ *HIOS, LLC*, 110 FERC ¶ 61,043.

¹⁷ 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.

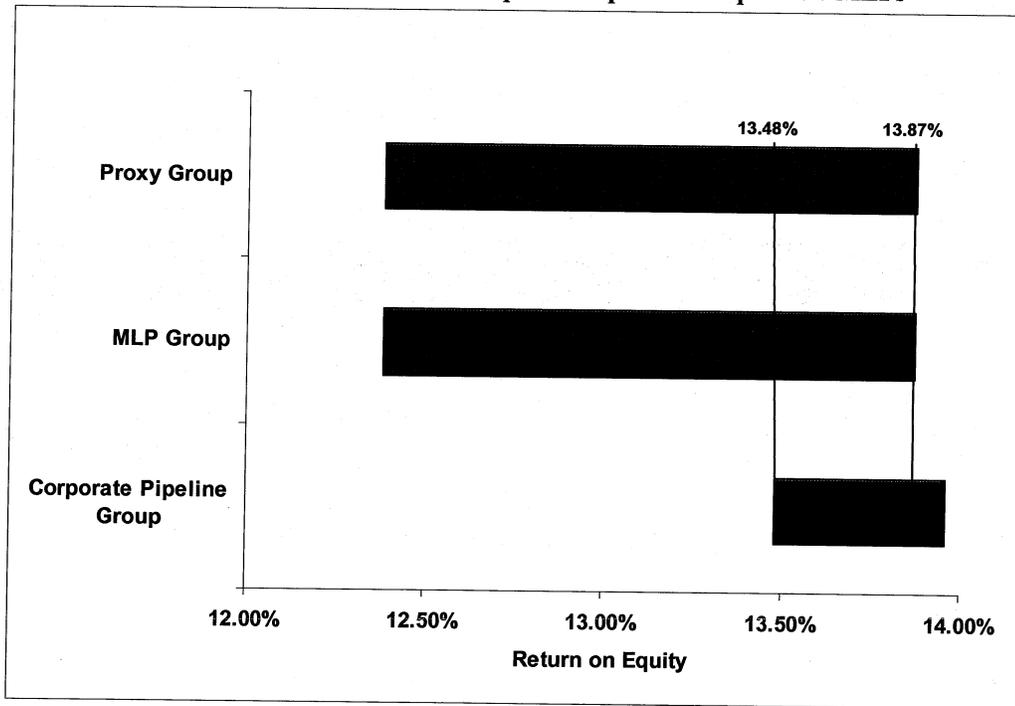
1 **Q. Do you agree with INGAA regarding the inclusion of MLPs in the proxy**
2 **group?**

3 A. Yes. I do. Investors value assets based upon the expected future cash flows they
4 will generate and do not differentiate their valuations based upon whether the source
5 of that cash is a stock dividend or a partnership unit distribution. A fourteen percent
6 investment return on an MLP unit is no different than a fourteen percent investment
7 return on a share of stock, of equivalent risk, regardless of whether it is classified as a
8 dividend or a return on capital. Generally, the primary difference between the two
9 investments is the timing of cash flows, i.e., MLPs will generate greater cash flows
10 during the holding period, with less potential for appreciation upon its ultimate sale.
11 Stocks, on the other hand, pay a lower dividend but have a greater potential for
12 capital appreciation. The unit or share price reflects these timing differences in
13 cash flows, as well as the two investments' differing tax treatments and yield
14 percentages.

15 To the extent that the expected total return on MLPs was greater than that of
16 a corporation of equivalent risk, an arbitrage opportunity would exist prompting
17 investors to invest solely in MLPs, until such time as the market prices of the two
18 competing investments converge such that no arbitrage opportunities are available in
19 the long run. It is interesting to note that no distinguishable differences can be
20 observed in my DCF results at Exhibit No. TW-61 or in my summary of analysts'
21 ROE expectations at Exhibit No. TW-62. Further, notwithstanding the limited
22 number of comparable corporate pipeline companies, I have established and
23 analyzed the results of a corporate pipeline reference group composed of Williams

1 and Kinder Morgan, Inc.¹⁸, using the two-stage DCF model. The results of that
2 analysis can be located at Exhibit No. TW-63, and as depicted in Figure 1 (below),
3 the range of reasonableness (determined by taking the high and the low of the range
4 of DCF results for each group) is not higher or skewed upwards for the MLP group,
5 relative to the corporate group; and in fact, provides a slightly lower return. This
6 suggests that there is no discernible difference in the required return on equity
7 between corporate and MLP pipelines using the DCF model or relying on the
8 projections of equity analysts.

9 **Figure 1: Range of Reasonableness for Corporate Pipeline Companies v MLPs**



10

¹⁸ Although Kinder Morgan, Inc. does not satisfy my proxy group screening criteria, due to its recent announcement that it intends to take the company private, I consider the company to be suitable as a reference point for comparison of the corporate pipeline companies' ROEs versus those of the MLPs. The resulting corporate pipeline range is conservative as the impact of the acquisition announcement will only serve to increase Kinder Morgan, Inc.'s share price, and thus will provide a conservative (low) estimate of the appropriate ROE.

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

4 A. No. It is understood within the investor community that a trade-off exists between
5 distributions and growth. It is true that MLPs generally pay out a greater share of
6 cash in distributions than a corporation would pay in dividends. However, it follows
7 as a consequence of the high payout that MLPs have less cash available for
8 reinvestment, and, as a result, their growth expectations are often lower than the
9 growth expectations for corporations.

10 **Q. Does the “DCF model” provide an accurate measure of investors’**
11 **expectations for MLPs?**

12 A. Yes. The DCF model adequately weighs the income prospects of an investment
13 with its growth prospects and does provide an accurate reflection of future returns.
14 The performance of the DCF model in evaluating the returns of MLPs were
15 examined in the INGAA paper by “backcasting”, or comparing the actual return to
16 investors for a recent past period with the return that would have been predicted by
17 a short-term DCF study for the same period. That study indicated that a short-term
18 DCF approach would have predicted a return of 17.22 percent, compared to the
19 18.48 percent return that was actually realized by the investors. This study provides
20 reasonable evidence that, in fact, the DCF formula, applied directly to the MLPs
21 provides an accurate (if not conservative) representation of investors’ expectations.¹⁹

¹⁹ 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.

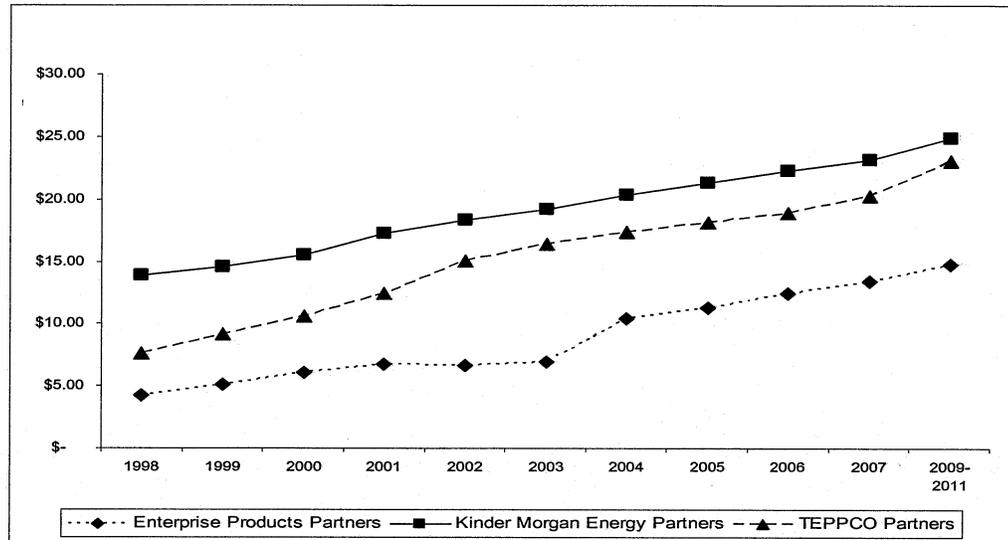
1 **Q. Is the fact that a portion of the distributions to unit holders are paid out of**
2 **capital a cause for concern in the application of the DCF model?**

3 A. No. Whenever cash is paid out of the company, whether it be for dividends or
4 distributions, all else being equal, the capital of the company decreases. It is not
5 uncommon for corporations as well as limited partnerships to make distributions in
6 excess of earnings in any given year. However, corporate dividends are never
7 considered a return of capital.

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

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

1 **Figure 2: Partnership Capital per Unit (Adjusted for Market to Book Effect on New**
2 **Issuances)**



3
4 As shown in Figure 2 (above) and in Exhibit No. TW-64, my results affirm that there
5 is no diminution of capital resulting from equity distributions, in nominal or real
6 terms; and that book value per unit, distributions per unit, and earnings per unit
7 grow steadily over the analyzed period from 1998 to 2011.

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

9 A. MLPs combine the benefits of a partnership with the liquidity of a publicly-traded
10 stock. According to the IRS, an MLP is a partnership whose interests are traded on
11 an established securities market or are readily tradeable on a secondary market (or its
12 substantial equivalent). Distribution holders are taxed directly at their marginal
13 income tax rate for their share of partnership net income, regardless of the amount
14 of the distribution that they have received. Generally, MLPs distribute the majority
15 of their free cash leaving little cash retained in the business. Because there generally
16 is a significant delta between free cash flow and net income, due to the large
17 depreciation charge on pipeline assets, unit holders are afforded a significant tax

1 incentive by minimizing taxable income recognition during the holding period and
2 deferring payment on the majority of taxes until the ultimate sale of the partnership
3 units. To the extent that the cash distribution exceeds the unit holder's share of
4 marginal income (which generally is the case), the unit holder's tax basis in the
5 partnership will be reduced, which has the effect of deferring taxation on that
6 portion of the distribution until such time as the partnership unit is sold.

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

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

18 In Exhibit No. TW-65, I have developed a simplistic example that illustrates
19 that the unit holder or shareholder is ultimately taxed on 100 percent of all
20 distributions or dividends and all capital gains, over the holding period, in both the
21 corporate and MLP scenarios. The illustration in my exhibit assumes that net
22 income is \$5 per share, the payout ratio is 100 percent, and distributions are \$20 per
23 share. The example assumes that a \$100 investment in a stock share or MLP unit

1 was made at the end of year 0, and the investment was sold, at the end of year 4, for
2 \$200. Capital gain amounts are determined by subtracting the basis, at the end of
3 year 4, from the proceeds of the sale. Growth rates are assumed to be zero for
4 purposes of simplifying the example.

5 The example illustrates the tax deferral feature of the MLP, as the taxable
6 gain in the year of sale is greater than it would be upon the sale of a corporate stock,
7 to the extent that distributions exceeded partnership income. However, in the end,
8 every dollar received, whether it be distributions, dividends, or capital gains, is
9 taxable both to the MLP unitholder and corporate stockholder. It should be noted
10 that once the MLP basis is reduced to zero, 100 percent of all distributions are fully
11 taxable in the period they are received. Further, the Exhibit shows that MLP
12 distributions are higher than corporate dividends, but every dollar distributed is
13 subject to tax, and does not represent a return of capital, which accordingly would
14 not be subject to tax.

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

17 A. Investors consider the two primary components of the return on their investments,
18 yield and growth. The decision to invest in MLPs, relative to other publicly traded
19 securities, is largely dependent on the investor's preference, with respect to
20 distributions, tax treatment, growth prospects, and their appetite for risk. S&P
21 discusses the features of MLPs in the context of the greater market, acknowledging
22 that there is a trade-off between the receipt of large cash distributions and the
23 resulting loss of financial flexibility that is characteristic of MLPs:

1 The main attractive feature of MLPs for investors is that they avoid
2 double taxation by paying out nearly all free cash flow to unitholders.
3 In addition, general partners of MLPs can receive an increasingly
4 large interest in distributions as dividends are raised. However,
5 MLPs therefore also often have limited financial flexibility and must
6 rely on their ability to raise fresh debt or equity to fund new
7 investments.²⁰

8
9 The above excerpt illustrates the primary consideration for investing in MLPs,
10 namely the tradeoff between growth and yield. Though many MLPs are known to
11 pursue aggressive growth strategies, their growth must come entirely from outside
12 investment. Though some MLPs aggressively seek new capital for investments, and
13 expect growth comparable to that of a corporation, generally MLPs have lower
14 growth rates and higher distributions than those of corporate stocks.²¹ The
15 following quote from Citigroup exemplifies that MLPs are considered to be an
16 alternative investment to fixed income bonds and the broader stock market, and
17 must compete with both for capital investment.

18 Additionally, we continue to view midstream MLPs as an attractive
19 asset class that offers a unique combination of yield and growth that
20 is more attractive than fixed income securities and the broader
21 market on a risk adjusted basis.²²

²⁰ Standard and Poor's, *Commentary Report, Key Rating Factors For U.S. Natural Gas Pipelines*, August 10, 2005, at 3.

²¹ INGAA, "Allowed Returns on Equity in the Interstate Gas Pipeline Industry Issues and Options Regarding the FERC DCF Approach", dated August 24, 2006, at 22.

²² Citigroup, *Master Limited Partnerships*, MLP Monthly: July 2006, at 2.

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

4 A. It is appropriate to treat the distribution yield exactly the same as the dividend yield
5 for purposes of calculating the DCF ROE estimates. It is understood that MLPs
6 typically have higher distribution yields than corporations have dividend yields, but
7 this difference is necessarily offset in the growth rates of the two companies'
8 structures. The MLPs will assume a lower growth rate with less cash available to
9 fund growth, where as corporate pipeline companies would generally expect a higher
10 growth rate in conjunction with a lower dividend yield. My results indicate that there
11 is no distinguishable difference between the returns required by investors for a
12 publicly-traded corporation versus a publicly-traded MLP, all else being equal.

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

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

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

22
$$k = \frac{D(1+g)}{P} + g \quad [1]$$

1 where " k " equals the required return, " D " is the current dividend (or distribution),
2 " g " is the expected growth rate, and " P " represents the subject company's stock (or
3 unit) price.²³ As noted later in my testimony, consistent with Commission
4 precedent, the two-stage form of the DCF model used in my analysis is essentially
5 similar to Equation [1], but for the fact that the growth rate, g , is calculated as the
6 weighted average of a near-term and a long-term growth rate.

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

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

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

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

16 A. In keeping with Commission precedent, I have used the current annualized dividend
17 (or distribution) together with the average of the high and low stock prices for each
18 of the most recent six-months for each of the proxy group companies as of
19 August 31, 2006.²⁴ My calculation of the average stock or unit prices for each proxy
20 group company is shown on Exhibit No. TW-66.

²³ 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.

²⁴ 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 interstate natural gas pipeline companies tend to increase their quarterly
4 dividends (or distributions) at different times throughout the year, it is reasonable to
5 assume that such increases will be evenly distributed over calendar quarters. Given
6 that assumption, it is reasonable to apply one-half of the expected annual dividend
7 (or distribution) growth rate for the purposes of calculating the expected dividend
8 (or distribution) yield component of the DCF model. This adjustment ensures that
9 the expected yield is representative of the coming 12-month period. Accordingly,
10 the DCF estimates, provided in Exhibit No. TW-61, reflect one-half of the expected
11 near-term 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
22 *earnings per share* (EPS). Earnings growth, in turn, results from a
23 number of factors, including (1) inflation, (2) the amount of

1 earnings the company retains and invests, and (3) the rate of
2 return the company earns on its equity (ROE).²⁵

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

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

7 A. The ROE is a forward-looking concept that focuses on investor expectations
8 regarding future returns. The estimation of such returns, therefore, should be based
9 on forward-looking or projected data. Indeed, substantial academic research has
10 demonstrated the relationship between analysts' forecasts and investor
11 expectations.²⁶ In my view, I/B/E/S earnings growth rates, a source which provides
12 a consensus estimate of earnings growth by collecting 5-year earnings growth
13 forecasts from a large pool of analysts on approximately 5,000 companies, and also a
14 source commonly used by the Commission in ROE proceedings, provide a reliable
15 measure of growth estimates for use in the DCF model.

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

17 A. In keeping with the Commission's preference, I have used the five-year growth
18 estimates in earnings per share published by I/B/E/S.²⁷

²⁵ Eugene F. Brigham and Joel F. Houston, *Fundamentals of Financial Management*, at 317 (Concise Fourth Edition, Thomson South-Western) [emphasis added].

²⁶ 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."

²⁷ Opinion No. 414-A, 84 FERC ¶ 61,084, (1998).

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

3 A In *Williston Basin* (84 FERC ¶ 61,081), the Commission affirmed the use of a simple
4 average of the near and long-term growth rate forecasts. Subsequently, in Opinion
5 No. 414-A, the Commission modified the Two-Stage DCF analysis to “give greater
6 weight to the short-term growth rate than to the long-term growth rate.”²⁸ That
7 approach, which applied weights of two-thirds and one-third to a short-term and
8 long-term forecast, respectively, was affirmed in Opinion 414-B.²⁹ Consistent with
9 the Commission’s recent practice, therefore, I have given my near-term growth
10 estimates, based on I/B/E/S estimates, a weighting factor of two-thirds (as
11 discussed below, my long-term growth estimate is given a weighting factor of one-
12 third).

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

14 A. In Opinion No. 414-A³⁰ the Commission indicated a clear preference for the use of
15 measures of long-term Gross Domestic Product (“GDP”) growth as the long-term
16 component of the growth estimate. That Opinion affirmed the Commission’s
17 findings in *Williston Basin* that GDP is an appropriate estimate of long-term growth
18 because:

19 ...as companies reach maturity over the long-term, their growth slows,
20 and their growth rate will approach that of the economy as a whole;
21 second, the Commission concluded that, over the long-run, an
22 expectation that a regulated firm will grow at the rate of the average firm
23 in the economy is reasonable; third, the purpose of using the DCF
24 analysis in this proceeding is to approximate the rate of return an

²⁸ Ibid.

²⁹ Opinion No. 414-B, 85 FERC ¶ 61,323 at 62,269-70.

³⁰ Id.

1 investor would reasonably expect from a pipeline company, and record
2 in those proceedings showed that the long-term growth of the economy
3 is used by two large investment houses as their long-term growth figure
4 in conducting DCF analyses for investment purposes; and fourth,
5 witnesses in those proceedings used the long-term growth of the
6 economy as a whole as confirmation or support for their analyses.³¹
7

8 It is important to note, however, that while GDP growth may well provide a
9 reasonable estimate of long-term earnings growth, it is not necessarily the case that
10 earnings growth will equal revenue growth over the long term. It is worthy of note
11 that the Blue Chip Economic Indicators consensus forecast indicates that over the
12 latter portion of Blue Chip's forecast period, pre-tax income is expected to grow at
13 an annual rate of approximately 5.7 percent. Thus, while I have not included a
14 separate pre-tax income growth rate in my Two-Stage DCF model, I have considered
15 that data in forming my recommendation of where, within the range of results,
16 Transwestern's ROE should fall.

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

18 A. My long-term growth estimate is derived from (1) the *Annual Energy Outlook*,
19 published by the Energy Information Administration; (2) Blue Chip Economic
20 Indicators Consensus Forecast; and (3) the Social Security Administration's 2006
21 Annual Report of the Board of Trustees of the Federal Old Age and Survivors
22 Insurance and Federal Disability Insurance Trust Funds. The simple average of
23 those three sources produces a long-term nominal GDP growth rate of 5.28 percent.
24 This is approximately a 42 basis point difference from the pretax income growth rate
25 discussed above.

³¹ 84 FERC ¶ 61,081, at 61,385.

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

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

- 4 1) Based on Commission precedent,³² I have averaged the nearest six monthly
5 low and high stock (or unit) prices for the period ended August 31, 2006.
6 This is the most current data available to obtain a perspective on market
7 conditions as I prepare my testimony for the term *P*;
- 8 2) The current annualized dividend (or distribution) per share as of August 31,
9 2006;
- 10 3) I have used the I/B/E/S forecast for each of the proxy group companies as
11 the short-term forecast growth rate;
- 12 4) I have used the simple average of the long-term nominal GDP forecast by
13 the EIA, Blue Chip Economic Indicators, and the Social Security
14 Administration as the long-term forecast growth rate.

15 As discussed earlier, I adjusted the six-month average dividend yield by one half of
16 the expected short-term growth rate to arrive at the expected dividend yield
17 component of the model. Finally, in accordance with the Commission's past
18 practice, I applied weights of two-thirds and one-third to the short-term and long-

³² Opinion No. 299, *Boston Edison Company*, 42 FERC ¶ 61,374 (1988); Order rejecting partial settlement, establishing transportation and storage rates, and directing filings in *Cranberry Pipeline Corp.*, 112 FERC ¶ 61,268 (2005).

1 term forecast growth rates, respectively. Please refer to Exhibit No. TW-66 for a
2 tabulation of dividend yields and growth rates used in my DCF analysis.

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

4 A. I calculated my range of results in accordance with the Commission's past practice,
5 which is to say that I calculated the Two-Stage DCF result for each company in the
6 proxy group. I then established the range of reasonableness by reference to the low
7 and high results of the group.

8 **C. DCF RESULTS**

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

10 A. Based on all the factors discussed in my testimony, and as shown in Exhibit No.
11 TW-61, I have established a zone of reasonableness that is based on the high and
12 low DCF results, for the comparable companies, from approximately 12.4 percent to
13 13.9 percent. I presented those results earlier in my testimony in Figure 1. I have
14 tabulated the alternative measures of central tendency for my proxy group in Table 2
15 (below), as well as the point in the middle of the upper half of the range of
16 reasonableness, i.e., the 75th percentile:

17 **Table 2: Measures of Central Tendency**

	MEAN	MEDIAN	MIDPOINT	75 TH PERCENTILE
DCF RESULTS	13.25%	13.35%	13.13%	13.64%

18

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

3 A. Yes. Exhibit No. TW-62 provides the returns on equity for the proxy group
4 companies, as projected by equity analysts, as of September 2006. This data shows
5 that the median projected ROE for the proxy group is 13.83 percent. These analyst
6 projections confirm that my analysis and recommended 13.5 percent ROE for
7 Transwestern is reasonable, if not conservative.

8 **Q. Is it appropriate to consider the ROE projections of other analysts?**

9 A. Yes. It is clear that analysts' forecasts are commonly used by investors in
10 formulating their stock price forecasts and equity return requirements. In that
11 regard, Professor Robert Harris found that, "...a growing body of knowledge shows
12 that analysts' earnings forecasts are indeed reflected in stock prices" and that
13 "...stock prices react more to changes in analysts' forecasts of earnings than they do
14 to changes in earnings themselves."³³ As such, it is both reasonable and prudent to
15 consider the results of published equity analysts in assessing recommended equity
16 cost rates.

17 **Q. Based on the testimonies of Ms. Corman and Mr. Reed, have you determined**
18 **the appropriate risk adjustment for Transwestern?**

19 A. While my recommended ROE does not include any specific adjustments for the risk
20 factors considered, it is above the median results, based upon my assessment of

³³ Robert S. Harris, "Using Analysts' Growth Forecasts to Estimate Shareholders' Required Returns," *Financial Management* (Spring 1986), at 59.

1 where within a reasonable range Transwestern's level of business risk lies in relation
2 to its proxy group.

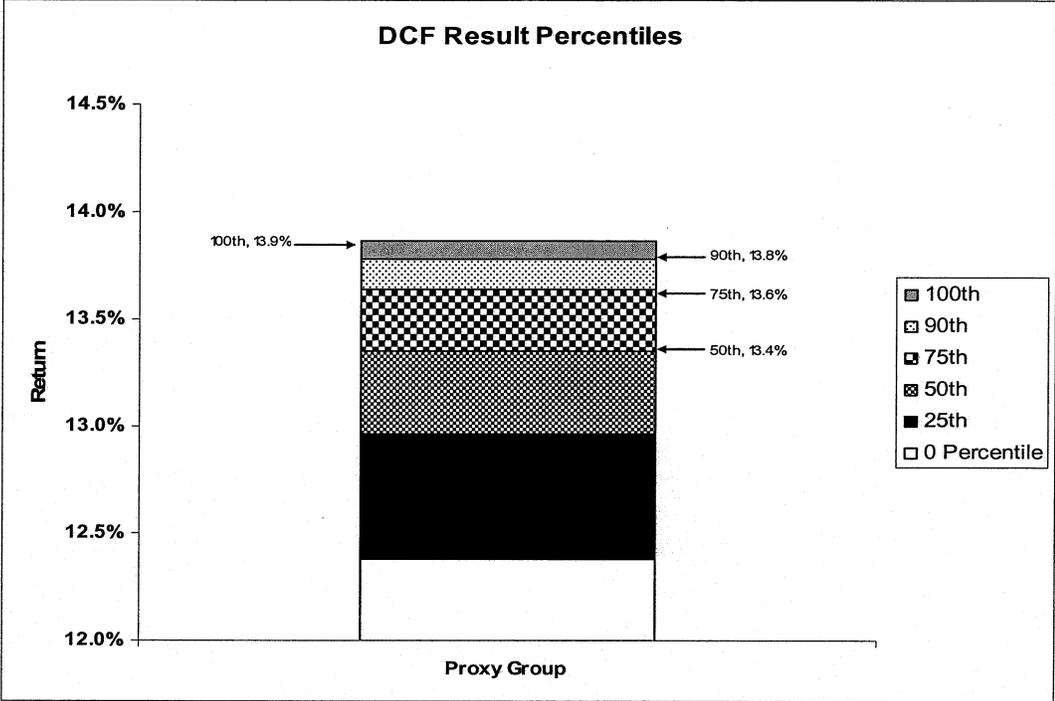
3 **VII. SUMMARY AND CONCLUSIONS**

4 **Q. Please summarize your recommended ROE for Transwestern.**

5 A. Based on all the factors discussed in my testimony, I find that the zone of
6 reasonableness is from approximately 12.4 percent to 13.9 percent. The median of
7 that range, which is approximately 13.4 percent, represents the ROE for a natural gas
8 pipeline of average risk. In light of the fundamental risks discussed by Ms. Corman
9 and Mr. Reed, and a comparison of Transwestern's exposure to these risks relative to
10 the exposure of the proxy group to the same risks, it is my view that the relevant
11 range for Transwestern is between 13.4 percent and 13.9 percent. As such, it is my
12 opinion that Transwestern should be provided the opportunity to earn an ROE
13 within that range and I recommend an ROE that falls within that range. Figure 3
14 (below) shows the relevant percentiles based upon the DCF results of the proxy
15 group. Placing Transwestern between the 50th and 75th percentile based on its
16 business risk relative to the proxy group, results in an ROE recommendation of 13.5
17 percent.

1

Figure 3: Range of Reasonableness Percentiles



2

3

My 13.5 percent recommendation is also supported by the ROE estimates developed by analysts.

4

5

Q. Does this conclude your prepared direct testimony?

6

A. Yes, it does.

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, 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 WITNESS TESTIMONY OF ROBERT B. HEVERT

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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		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-Steam (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
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

EXPERT WITNESS TESTIMONY OF ROBERT B. HEVERT

SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
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 Northern Utilities, Inc.	11/00 07/95	GPU International Northern Utilities	EC01- (FERC) Maine PUC	Market Power Study 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

TRANSWESTERN PIPELINE COMPANY, LLC

PROXY GROUP SCREENING CRITERIA

Line No.	Company	Ticker (a)	S&P (b)	Dividends (c)	Covered by More than 1 Analyst (d)	ValueLine Beta (e)	ValueLine Safety Rank (f)	ValueLine Timeliness Rank (g)	Owens 100% of major FERC-regulated natural gas pipeline? (h)	Derives 50% or more of its operating earnings from a regulated energy-related line of business? (i)
1	El Paso Corp.	EP	B+	YES	YES	2.25	5	2	YES	YES
2	Equitable Resources, Inc.	EQT	A-	YES	YES	0.85	2	4	YES	NO
3	Kinder Morgan, Inc.	KMI	BBB	YES	YES	0.95	3	-	YES	YES
4	National Fuel Gas Company	NFG	BBB+	YES	YES	0.95	2	3	YES	YES
5	OneOK, Inc.	OKE	BBB	YES	YES	1.00	3	3	NO	NO
6	Questar Corp. (1)	STR	A-	YES	YES	0.95	3	3	YES	YES
7	Western Gas Resources, Inc.	WGR	-	YES	YES	1.10	3	2	NO	NO
8	Williams Companies	WMB	BB-	YES	YES	2.80	4	3	YES	YES
9	XTO Energy, Inc.	XTO	BBB	YES	YES	0.90	3	3	NO	NO
10	Enterprise Products Partners, L.P.	EPD	BB+	YES	YES	0.65	3	3	YES	YES
11	Kinder Morgan Energy Partners, L.P.	KMP	BBB+	YES	YES	0.75	2	4	YES	YES
12	TEPPCO Partners	TPP	BBB-	YES	YES	0.65	3	4	NO	YES
13	Boardwalk Pipeline Partners, L.P.	BWP	BBB+	YES	YES	-	-	-	YES	YES
14	Enbridge Energy Partners, L.P.	EEP	BBB	YES	YES	-	-	-	YES	YES
15	MarkWest Energy Partners, L.P.	MWE	B+	YES	YES	-	-	-	NO	NO
16	OneOK Partners, L.P.	OKS	BBB	YES	YES	-	-	-	YES	YES
17	TC Pipelines L.P.	TCLP	A-	YES	YES	-	-	-	NO	YES

(1) There is no corporate S&P credit rating for Questar; subsidiary credit ratings are: Questar Market Resources, Inc. BBB+; Questar Pipeline Co., A-; and Questar Gas Co. A-.

TRANSWESTERN PIPELINE COMPANY, LLC
GAS PIPELINE COMPANIES OWNED BY PROXY GROUP CANDIDATE COMPANIES

Line No.	Proxy Group Company	Gas Transportation Companies/Pipelines	% Ownership (a)	Capacity (b)	Capacity Units (c)	Length/(miles) (d)	Files FERC Form 2 (e)
1	National Fuel Gas Company	National Fuel Gas Supply Corporation	100%	2,212	MDth/d	2,972	Y
2	Equitable Resources	Equitrans, L.P.	100%	2,672	MMcfd/d	1,500	Y
3	El Paso Corp.	ANR Pipeline Company	100%	6,775	MMcfd/d	10,500	Y
4		Cheyenne Plains Gas Pipeline Company	100%	757	MMcfd/d	400	Y
5		Colorado Interstate Gas Company	100%	3,000	MMcfd/d	4,000	Y
6		El Paso Natural Gas Company	100%	5,650	MMcfd/d	10,700	Y
7		Florida Gas Transmission	50%	2,090	MMcfd/d	4,867	Y
8		Great Lakes Gas Transmission	50%	2,500	MMcfd/d	2,115	Y
9		Mojave Pipeline Company	100%	407	MMcfd/d	400	Y
10		Southern Natural Gas Company	100%	3,450	MMcfd/d	7,700	Y
11		Tennessee Gas Pipeline Company	100%	6,876	MMcfd/d	14,100	Y
12		Wyoming Interstate Company	100%	1,997	MMcfd/d	600	Y
13	Kinder Morgan, Inc.	Horizon Pipeline Company	50%	380	MDth/d	70	Y
14		Kinder Morgan Interstate Gas Transmission ¹	100%	260	MDth/d	6,018	Y
15		Natural Gas Pipeline Company of America	100%	1,668	MDth/d	9,800	Y
16		TransColorado Gas Transmission ¹	100%	575	MDth/d	300	Y
17	Questar Corp.	Overthrust Pipeline	100%	1,119	MDth/d	88	Y
18		Questar Pipeline Company	100%	2,192	MDth/d	2,011	Y
19		Questar Southern Trails Pipeline	100%	88	MDth/d	488	Y
20	Williams Companies	Gulfstream Natural Gas System	50%	1	Bcf/d	691	Y
21		Northwest Pipeline Corporation	100%	4	Bcf/d	4,120	Y
22		Transcontinental Gas Pipeline Corporation	100%	8	Bcf/d	10,560	Y

TRANSWESTERN PIPELINE COMPANY, LLC

GAS PIPELINE COMPANIES OWNED BY PROXY GROUP CANDIDATE COMPANIES

Line No.	Proxy Group Company	Gas Transportation Companies/Pipelines	% Ownership (a)	Capacity (b)	Capacity Units (c)	Length/(miles) (d)	Files FERC Form 2 (e)
23	Enterprise Products Partners, L.P.	San Juan Gathering System	100%	1,100	MMcfd/d	5,404	N
24		Permian Basin System	100%	490	MMcfd/d	1,477	N
25		High Island Offshore System	100%	1,800	MMcfd/d	204	Y
26	Kinder Morgan Energy Partners, L.P.	Kinder Morgan Interstate Gas Transmission	100%	260	MDth/d	6,018	Y
27		Rockies Express Pipeline	51%	500	MDth/d	136	N
28		Trailblazer Pipeline Company	100%	846	MMcfd/d	436	Y
29	Boardwalk Pipeline Partners, L.P.	Texas Gas Transmission Company	100%	3	Bcf/d	5,900	Y
30		Gulf South Pipeline Company	100%	4	Bcf/d	7,570	Y
31	Enbridge Energy Partners, L.P.	Enbridge Pipelines (AlaTenn)	100%	200	MMcfd/d	218	N: 2-A
32		Enbridge Pipelines (Midla)	100%	200	MMcfd/d	405	N: 2-A
33		Enbridge Pipelines (KPC)	100%	160	MMcfd/d	1,120	N: 2-A
34		Enbridge Offshore Pipelines (UTOS)	100%	1,200	MMcfd/d	30	Y
35	OneOK Partners, L.P.	Northern Border Pipeline Company	70%	2,374	MMcfd/d	1,249	Y
36		Midwestern Gas Transmission Company	100%	1,125	MMcfd/d	350	Y
37		Viking Gas Transmission Company	100%	496	MMcfd/d	578	Y
38		Guardian Pipeline Company	33 1/3%	750	MMcfd/d	143	Y
39	TC Pipelines, L.P.	Northern Border Pipeline Company	30%	2,374	MMcfd/d	1,249	Y
40		Tuscarora Gas Transmission Company	49%	180	MMcfd/d	240	N: 2-A
41	TEPPCO Partners	Val Verde Gathering System	100%	1	Bcf/d	400	N

TRANSWESTERN PIPELINE COMPANY, LLC
PROXY GROUP BUSINESS SEGMENTS

Line No.	Proxy Group Company	Period	National Fuel Gas Company														
			Total (a)	Utility (b)	Pipeline & Storage (c)	Exploration & Production (d)	Energy Marketing (e)	Timber (f)	Corporate and Intersegment Eliminations (g)	Other (h)	Utility (i)	Pipeline & Storage (j)	Exploration & Production (k)	Energy Marketing (l)	Timber (m)	Corporate and Intersegment Eliminations (n)	Other (o)
1	National Fuel Gas Company	2006 YTD	2,017,189	1,154,375	104,835	257,406	446,367	51,377	2,250	57%	5%	13%	22%	3%	0%	0%	100%
2	National Fuel Gas Segment	2005	1,923,548	1,117,067	215,859	293,425	325,714	61,285	(107,156)	58%	11%	15%	17%	3%	-5%	100%	
3	Revenues [1]	2004	1,907,968	1,152,641	209,707	293,698	284,349	55,970	(102,092)	60%	11%	15%	15%	3%	-5%	100%	
4	National Fuel Gas Segment	2006 YTD	136,123	51,234	45,384	28,152	5,909	5,235	(195)	38%	35%	21%	4%	0%	0%	100%	
5	Operating Income	2005	153,515	39,197	60,454	50,659	5,077	5,032	(4,288)	26%	35%	33%	3%	-3%	-3%	100%	
6	Operating Income	2004	154,265	46,718	47,726	54,344	5,535	5,637	(7,225)	30%	31%	35%	4%	-5%	-5%	100%	
7	National Fuel Gas Segment Assets	2006 YTD	3,722,652	1,394,019	799,704	not reported	91,999	161,648	1,362	37%	21%	33%	not reported	4%	0%	100%	
8	Assets	2005	3,717,603	1,355,964	763,145	1,078,217	69,599	140,992	213,673	36%	21%	29%	2%	4%	2%	100%	
9	Assets	2004	3,717,603	1,355,964	763,145	1,078,217	69,599	140,992	213,673	36%	21%	29%	2%	4%	2%	100%	
10	Averages									44%	20%	25%	9%	3%	-2%	100%	

[1] Of Pipeline and Storage Revenues, 121,659 in 2005, relates to Pipeline Transportation or roughly 6% of total revenues. In 2004, 123,527, relates to pipeline transportation or 6.5% of total revenues.

[2] Weighting excludes 2006 YTD Segment Operating Income, as it appears to be an outlier.

Line No.	Proxy Group Company	Period	Equitable Resources													
			Total (a)	Utility (b)	Pipeline (c)	Energy Marketing (d)	Intra-Segment Revenues (e)	Supply (f)	Corporate and Intersegment Eliminations (g)	Other (h)	Utility (i)	Pipeline (j)	Energy Marketing (k)	Supply (l)	Corporate and Intersegment Eliminations (m)	Other (n)
11	Equitable Resources Segment	2006 YTD	715,501	283,303	39,656	181,237	(30,451)	241,776	6%	40%	25%	-4%	34%	0%	0%	100%
12	Revenues	2005	1,352,502	469,102	57,954	382,479	(45,804)	489,191	4%	35%	28%	-3%	36%	0%	0%	100%
13	Operating Income	2004	1,122,289	422,436	55,123	300,513	(46,213)	390,428	5%	38%	27%	-4%	35%	0%	0%	100%
14	Equitable Resources Segment	2006 YTD	212,315	29,671	19,948	25,670	-	137,426	9%	14%	12%	0%	65%	0%	0%	100%
15	Operating Income	2005	391,835	40,322	17,345	40,697	-	293,581	10%	10%	10%	0%	75%	0%	0%	100%
16	Operating Income	2004	335,518	56,877	24,656	26,616	-	227,369	17%	7%	8%	0%	69%	0%	0%	100%
17	Equitable Resources Segment Assets	2006 YTD	2,923,048	1,257,162	1,665,886	1,412,215	1,884,833	1,416,212	0%	43%	0%	0%	57%	0%	0%	100%
18	Assets	2005	3,297,048	1,412,215	1,884,833	1,412,215	1,884,833	1,416,212	0%	43%	0%	0%	57%	0%	0%	100%
19	Assets	2004	2,589,586	1,176,374	1,176,374	1,176,374	1,176,374	1,176,374	0%	43%	0%	0%	57%	0%	0%	100%
20	Averages								25%	6%	18%	-2%	52%	0%	0%	100%

[3] Average of the Utilities Segment excludes Segment Assets, as there is no breakdown of assets within the utility segment.

Line No.	Proxy Group Company	Period	El Paso Corp.													
			Total (a)	Pipelines (b)	Exploration and Production (c)	Marketing and Trading (d)	Power (e)	Field Services (f)	Corporate (g)	Other (h)	Pipelines (i)	Exploration and Production (j)	Marketing and Trading (k)	Power (l)	Field Services (m)	Corporate (n)
21	El Paso Segment Revenues	2006 YTD	2,745	1,511	315	853	3	63	55%	11%	31%	0%	0%	2%	2%	100%
22	Operating Income	2005	3,834	2,706	466	411	71	84	71%	12%	11%	2%	3%	2%	2%	100%
23	Operating Income	2004	5,362	2,554	535	697	241	132	48%	10%	13%	4%	22%	2%	2%	100%
24	El Paso Segment Income (2005 & 2006 EBIT)	2006 YTD	1,375	813	362	221	13	(34)	59%	25%	16%	1%	0%	-2%	-2%	100%
25	Operating Income	2005	398	1,226	696	(837)	(451)	(621)	308%	175%	-210%	-113%	72%	-131%	-100%	100%
26	Operating Income	2004	206	1,129	726	(562)	(468)	(214)	548%	352%	-273%	-198%	-226%	-104%	-100%	100%
27	El Paso Segment Assets	2006 YTD	28,739	16,765	5,901	1,652	805	3,616	58%	21%	6%	3%	0%	13%	100%	
28	Assets	2005	29,678	16,421	5,215	3,786	70	4,087	55%	18%	13%	0%	0%	14%	100%	
29	Assets	2004	28,108	15,930	3,714	2,372	982	4,424	57%	13%	8%	3%	2%	16%	100%	
30	Averages								57%	14%	14%	2%	5%	8%	100%	

[4] Averages Exclude Segment Income as it is too variable to produce a meaningful average.

TRANSWESTERN PIPELINE COMPANY, LLC
PROXY GROUP BUSINESS SEGMENTS

Line No.	Proxy Group Company	Period	Enterprise Products Partners, L.P.		Adjustments and Eliminations (f)	Offshore Pipelines and Services (g)	Onshore Pipelines and Services (c)	NGL Pipelines and Services (d)	Petrochemical Services (e)	Adjustments and Eliminations (f)	Offshore Pipelines and Services (g)	Onshore Pipelines and Services (h)	NGL Pipelines and Services (i)	Petrochemical Services (j)	Adjustments and Eliminations (k)	Total (l)
			Total (a)	Total (a)												
81	Enterprise Products Partners, L.P.	2008 YTD	6,787,927	53,152	940,009	6,809,749	1,065,507	(2,220,490)	1%	14%	102%	16%	-33%	100%		
82	Enterprise Segment Revenues	2005	12,286,959	112,149	1,577,178	12,356,182	1,833,600	(3,724,150)	1%	13%	101%	16%	-30%	100%		
83	Enterprise Segment Revenues	2004	8,321,202	33,061	616,159	8,166,045	1,655,380	(2,349,423)	0%	10%	98%	20%	-28%	100%		
84	Enterprise Segment Operating Income	2005 YTD	693,417	97,757	163,454	317,364	84,562	-	6%	29%	51%	14%	0%	100%		
85	Enterprise Segment Operating Income	2005	1,136,317	71,595	350,075	914,150	125,060	-	7%	31%	51%	11%	0%	100%		
86	Enterprise Segment Operating Income	2004	823,166	36,478	90,977	374,156	121,515	-	6%	15%	60%	19%	0%	100%		
87	Enterprise Segment Assets	2006 YTD	9,018,275	733,047	3,557,642	3,143,499	509,922	1,074,165	5%	39%	35%	6%	12%	100%		
88	Enterprise Segment Assets	2005	8,689,024	632,222	3,922,318	3,075,048	504,841	854,655	6%	42%	35%	6%	10%	100%		
89	Enterprise Segment Assets	2004	7,831,487	648,181	3,729,650	2,753,934	469,327	230,375	6%	46%	35%	6%	3%	100%		
70									5%	27%	63%	13%	-7%	100%		
			Products Pipelines (i)		Natural Gas Pipelines (g)		CO ₂ (h)		Terminals (e)		Products Pipelines (i)		Terminals (e)		Total (l)	
71	Kinder Morgan Energy Partners, L.P.	2008 YTD	4,588,089	369,547	3,431,786	360,480	428,306	8%	75%	8%	9%	100%				
72	Kinder Morgan Energy Partners Segment Revenues	2005	9,577,126	711,686	7,715,384	657,594	895,264	7%	79%	7%	7%	100%				
73	Kinder Morgan Energy Partners Segment Revenues	2004	7,352,821	645,249	6,252,921	492,634	541,857	8%	79%	6%	7%	100%				
74	Kinder Morgan Energy Partners Operating Income	2005 YTD	784,045	202,722	282,255	163,478	155,590	25%	33%	21%	20%	100%				
75	Kinder Morgan Energy Partners Operating Income	2005	1,300,988	287,503	438,396	318,980	255,590	22%	34%	25%	20%	100%				
76	Kinder Morgan Energy Partners Operating Income	2004	1,208,399	370,321	364,872	234,258	238,848	31%	30%	19%	20%	100%				
77	Kinder Morgan Energy Partners Segment Assets	2006 YTD	11,933,244	3,950,877	3,891,768	1,876,842	2,213,757	33%	33%	18%	18%	100%				
78	Kinder Morgan Energy Partners Segment Assets	2005	11,839,121	3,873,839	4,139,959	1,772,756	2,052,457	33%	33%	15%	17%	100%				
79	Kinder Morgan Energy Partners Segment Assets	2004	10,447,257	3,651,657	3,891,457	1,527,610	1,576,333	35%	35%	15%	15%	100%				
80								23%	48%	15%	15%	100%				
			Gas Transportation (f)		Parking and Lending (c)		Gas Storage (d)		Other (e)		Gas Transportation (f)		Parking and Lending (c)		Total (l)	
81	Boardwalk Pipeline Partners, L.P.	2008 YTD	303,108	256,402	22,831	16,814	6,961	8%	8%	2%	100%					
82	Boardwalk Segment Revenues	2005	560,469	528,574	-	21,667	12,223	4%	2%	2%	100%					
83	Boardwalk Segment Revenues	2004	263,821	253,488	-	7,289	2,944	0%	0%	1%	100%					
84	Boardwalk Segment Operating Income	2005 YTD	-	-	-	-	-	0%	0%	0%	100%					
85	Boardwalk Segment Operating Income	2005	-	-	-	-	-	0%	0%	0%	100%					
86	Boardwalk Segment Operating Income	2004	-	-	-	-	-	0%	0%	0%	100%					
87	Boardwalk Segment Assets	2006 YTD	1,985,619	1,484,801	155,717	128,294	345,001	75%	74%	8%	17%	100%				
88	Boardwalk Segment Assets	2005	1,891,924	1,407,055	128,294	128,294	355,575	74%	74%	7%	18%	100%				
89	Boardwalk Segment Assets	2004	-	-	-	-	-	85%	2%	5%	8%	100%				
90								85%	2%	5%	8%	100%				

TRANSWESTERN PIPELINE COMPANY, LLC
PROXY GROUP BUSINESS SEGMENTS

Line No.	Proxy Group Company	Period	Enbridge Energy Partners, L.P.				OneOK Partners, L.P.				Total (d)					
			Total (a)	Liquids (b)	Natural Gas (c)	Marketing (e)	Corporate (e)	Total (a)	Interstate Natural Gas Pipeline (h)	Natural Gas Gathering and Processing (i)		Coal Slurry Pipeline (j)	Natural Gas Liquids (k)	Pipelines and Storage (l)	Other (m)	
91	Enbridge Segment Revenues	2006 YTD	2,023.8	124.9	1,231.3	667.6	-	61%	33%	0%	100%					
92		2005	9,247.3	418.0	4,945.1	3,884.2	-	53%	32%	0%	100%					
93		2004	5,985.3	409.3	2,890.1	2,686.9	-	48%	45%	0%	100%					
94	Enbridge Operating Income	2006 YTD	93.6	49.7	38.7	6.0	(0.8)	53%	6%	-1%	100%					
95		2005	191.9	127.3	110.5	(42.4)	(3.5)	66%	58%	-2%	100%					
96		2004	237.2	139.1	98.1	3.8	(3.6)	59%	41%	2%	100%					
97	Enbridge Segment Assets	2006 YTD	4,487.9	1,704.7	2,421.6	276.5	85.1	38%	6%	2%	100%					
98		2005	4,428.4	1,864.0	2,145.9	512.3	106.2	38%	48%	12%	100%					
99		2004	3,770.7	1,639.8	1,717.2	313.7	100.0	43%	46%	8%	100%					
100							35%	50%	15%	0%	100%					
	OneOK Partners, L.P.															
	Proxy Group Company	Period	Total (a)	Interstate Natural Gas Pipeline (b)	Natural Gas Gathering and Processing (c)	Coal Slurry Pipeline (d)	Natural Gas Liquids (e)	Pipelines and Storage (f)	Other (g)	Interstate Natural Gas Pipeline (h)	Natural Gas Gathering and Processing (i)	Coal Slurry Pipeline (j)	Natural Gas Liquids (k)	Pipelines and Storage (l)	Other (m)	Total (n)
101	OneOK Partners Segment Revenues	2006 YTD	1,159,350	23,230	347,874	-	881,525	59,271	(152,550)	2%	30%	0%	76%	5%	-13%	100%
102		2005	678,560	378,701	275,287	24,572	-	-	-	56%	41%	4%	0%	0%	0%	100%
103		2004	590,383	383,625	184,738	22,020	-	-	-	65%	31%	4%	0%	0%	0%	100%
104	OneOK Partners Operating Income	2006 YTD	212,596	125,110	46,279	5,186	29,232	25,000	(13,025)	59%	22%	0%	14%	12%	6%	100%
105		2005	256,788	214,168	44,714	3,446	-	(7,300)	17%	83%	17%	2%	0%	0%	-3%	100%
106		2004	253,385	231,027	28,278	3,446	-	(9,366)	-	91%	11%	1%	0%	0%	-4%	100%
107	OneOK Partners Segment Assets	2006 YTD	5,040,491	979,580	1,389,161	16,410	1,681,839	1,055,536	(65,625)	19%	28%	0%	33%	21%	-1%	100%
108		2005	2,527,766	1,888,980	594,379	18,268	-	27,997	-	75%	24%	1%	0%	0%	1%	100%
109		2004	2,514,690	1,904,689	576,497	18,268	-	15,236	-	76%	23%	1%	0%	0%	1%	100%
110										58%	25%	1%	14%	4%	-3%	100%
	TC Pipelines, L.P.															
	Proxy Group Company	Period	Total (a)	Pipelines (b)												Total (d)
111	TC Pipelines Segment Revenues	2006 YTD	21	21												100%
112		2005	50	50												100%
113		2004	55	55												100%
114	TC Pipelines Operating Income	2006 YTD	611	611												100%
115		2005	316	316												100%
116		2004	332	332												100%
117	TC Pipelines Segment Assets	2006 YTD	611	611												100%
118		2005	316	316												100%
119		2004	332	332												100%
120																100%

TRANSWESTERN PIPELINE COMPANY, LLC
PROXY GROUP BUSINESS SEGMENTS

Line No.	Proxy Group Company	Period	Total (a)	Downstream (b)	Upstream (c)	Midstream (d)	Other (e)	Downstream (f)	Upstream (g)	Midstream (h)	Other (i)	Total (j)
121	TEPPCO Partners	2006 YTD	277,809	143,400	24,280	112,946	(2,817)	52%	9%	41%	-1%	100%
122	TEPPCO Partners Segment	2005	8,618,488	287,191	8,110,239	224,625	(3,567)	3%	94%	3%	0%	100%
123	Revenues	2004	5,858,192	279,400	5,475,995	206,004	(3,207)	5%	92%	3%	0%	100%
124	TEPPCO Partners Operating	2006 YTD	120,808	40,055	33,651	47,102		33%	28%	39%	0%	100%
125	Income	2005	223,183	88,143	33,174	101,866		39%	15%	46%	0%	100%
126		2004	187,133	71,263	32,265	83,605		38%	17%	45%	0%	100%
127	TEPPCO Partners Segment Assets	2006 YTD	3,687,135	1,059,421	1,419,512	1,227,797	(19,595)	29%	38%	33%	-1%	100%
128		2005	3,690,257	1,056,217	1,353,492	1,280,546		29%	37%	35%	0%	100%
129		2004	3,212,233	989,042	1,069,007	1,184,184		30%	33%	37%	0%	100%
130				28%	40%	31%	0%	28%	40%	31%	0%	100%

TRANSWESTERN PIPELINE COMPANY, LLC

TWO-STAGE CONSTANT GROWTH DCF - PROXY GROUP

Line No.	Company	Ticker	Annualized Dividend (a)	Stock Price (b)	Dividend Yield (c)	Expected Dividend Yield (d)	EPS Growth (IB/E/S) (e)	Long Term GDP Growth (f)	Two-Stage Average Growth Rate (g)	Mean DCF ROE (h)
1	Williams Companies	WMB	\$0.36	\$22.48	1.60%	1.72%	15.0%	5.28%	11.76%	13.48%
2	Enterprise Products Partners	EPD	\$1.81	\$25.20	7.19%	7.44%	7.0%	5.28%	6.43%	13.87%
3	Kinder Morgan Energy Partners	KMP	\$3.24	\$46.13	7.02%	7.27%	7.0%	5.28%	6.43%	13.70%
4	Boardwalk Pipeline Partners	BWP	\$1.52	\$23.64	6.43%	6.62%	6.0%	5.28%	5.76%	12.38%
5	Enbridge Energy Partners	EEP	\$3.70	\$44.73	8.27%	8.46%	4.5%	5.28%	4.76%	13.22%
6	OneOK Partners	OKS	\$3.80	\$50.02	7.60%	7.79%	5.0%	5.28%	5.09%	12.88%
7				PROXY GROUP MEAN	6.35%	6.55%	7.42%	5.28%	6.70%	13.25%
8				PROXY GROUP MEDIAN						13.35%
9										
10										
11										
12										

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

75TH PERCENTILE

Notes

- (a) Source: Yahoo! Finance
- (b) Source: Yahoo! Finance. Average of most recent 6 months high and low stock prices through August 31, 2006
- (c) Equals Col. (a)/Col. (b)
- (d) Equals Col. (c) x (1+(.5 x Col. (e)))
- (e) Source: IB/E/S
- (f) Equals average of Social Security GDP Forecast of 5.2%, EIA forecast of 5.6%, and Blue Chip Nominal GDP forecast of 5.2%
- (g) Equals Col. (e) * 2/3 + Col. (g) * 1/3
- (h) Equals Col. (d)+ Col. (g)

TRANSWESTERN PIPELINE COMPANY, LLC

ANALYST ROE FORECASTS

Line No.	Company	Ticker	CITIGROUP FY'06 (a)	RBC CAPITAL MARKET			VALUE LINE		AVERAGE		Avg. All Years (i)
				FY '06 (b)	FY '07 (c)	FY '08 (d)	FY'06 (e)	FY'09-FY'11 (f)	FY'06 (g)	FY'07-FY'11 (h)	
1	Williams Companies	WMB					9.00%	12.00%	9.00%	12.00%	10.50%
2	Enterprise Products Partners	EPD	7.00%				8.50%	13.50%	7.75%	13.50%	10.63%
3	Kinder Morgan Energy Partners	KMP	13.80%				22.50%	25.00%	18.15%	25.00%	21.58%
4	Boardwalk Pipeline Partners	BWP	16.30%						16.30%	-	16.30%
5	Enbridge Energy Partners	EEP	13.40%						13.40%	-	13.40%
6	OneOK Partners	OKS	16.40%	11.90%	14.10%	14.60%			14.15%	14.35%	14.25%
7									13.78%	13.93%	13.83%
8									13.13%	16.21%	14.44%

TRANSWESTERN PIPELINE COMPANY, LLC
 TWO-STAGE CONSTANT GROWTH DCF - CORPORATE PIPELINE REFERENCE GROUP

Line No.	Company	Ticker	Annualized Dividend (a)	Stock Price (b)	Dividend Yield (c)	Expected Dividend Yield (d)	EPS Growth (I/B/E/S) (e)	Long Term GDP Growth (f)	Two-Stage Average Growth Rate (g)	Mean DCF ROE (h)	
1	CORPORATE PIPELINE PROXY GROUP										
2	Kinder Morgan, Inc.	KMI	\$3.50	\$96.17	3.64%	3.87%	12.5%	5.28%	10.09%	13.96%	
3	Williams Companies	WMB	\$0.36	\$22.48	1.60%	1.72%	15.0%	5.28%	11.76%	13.48%	
4					2.62%	2.79%	13.75%	5.28%	10.93%	13.72%	
										13.72%	
5											
6											
7											
8											

PROXY GROUP MEAN
 PROXY GROUP MEDIAN
 ZONE OF REASONABLENESS HIGH
 ZONE OF REASONABLENESS LOW
 ZONE OF REASONABLENESS MIDPOINT

75TH PERCENTILE
 13.8%

Notes

- (a) Source: Yahoo! Finance
- (b) Source: Yahoo! Finance. Average of most recent 6 months high and low stock prices through August 31, 2006
- (c) Equals Col. (a)/Col. (b)
- (d) Equals (Col. (c) x (1+(5 x Col. (e))))
- (e) Source: I/B/E/S
- (f) Equals average of Social Security GDP Forecast of 5.2%, EIA forecast of 5.6%, and Blue Chip Nominal GDP forecast of 5.2%
- (g) Equals Col. (e) * 2/3 + Col. (f) * 1/3
- (h) Equals Col (d) + Col (g)

TRANSWESTERN PIPELINE COMPANY, LLC
 TWO-STAGE CONSTANT GROWTH DCF - MLP REFERENCE GROUP

Line No.	Company	Ticker	Annualized Dividend (a)	Stock Price (b)	Dividend Yield (c)	Expected Dividend Yield (d)	EPS Growth (1/B/E/S) (e)	Long Term GDP Growth (f)	Two-Stage Average Growth Rate (g)	Mean DCF ROE (h)	
1	MASTER LIMITED PARTNERSHIP GROUP										
2	Enterprise Products Partners	EPD	\$1.81	\$25.20	7.19%	7.44%	7.0%	5.28%	6.43%	13.87%	
3	Kinder Morgan Energy Partners	KMP	\$3.24	\$46.13	7.02%	7.27%	7.0%	5.28%	6.43%	13.70%	
4	Boardwalk Pipeline Partners	BWP	\$1.52	\$23.64	6.43%	6.62%	6.0%	5.28%	5.76%	12.38%	
5	Enbridge Energy Partners	EEP	\$3.70	\$44.73	8.27%	8.46%	4.5%	5.28%	4.76%	13.22%	
6	OneOK Partners	OKS	\$3.80	\$50.02	7.60%	7.79%	5.0%	5.28%	5.09%	12.88%	
7	PROXY GROUP MEAN										
	PROXY GROUP MEDIAN										
					7.30%	7.52%	5.90%	5.28%	5.69%	13.21%	
8										13.87%	
9										12.88%	
10										13.13%	
11									75TH PERCENTILE	13.7%	

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

Notes

- (a) Source: Yahoo! Finance
- (b) Source: Yahoo! Finance. Average of most recent 6 months high and low stock prices through August 31, 2006
- (c) Equals Col. (a)/Col. (b)
- (d) Equals Col. (c) x (1+(.5 x Col. (e)))
- (e) Source: I/B/E/S
- (f) Equals average of Social Security GDP Forecast of 5.2%, EIA forecast of 5.6%, and Blue Chip Nominal GDP forecast of 5.2%
- (g) Equals Col. (e) * 2/3 + Col. (f) * 1/3
- (h) Equals Col (d) + Col (g)

TRANSWESTERN PIPELINE COMPANY, LLC

ANALYSIS OF BOOK VALUE PER UNIT FOR THE MLP GROUP

Line No.	Name	Source / Calculation	1998 (a)	1999 (b)	2000 (c)	2001 (d)	2002 (e)	2003 (f)	2004 (g)	2005 (h)	2006 (i)	2007 (j)	2009-2011 (k)
Enterprise Products Partners													
1	Earnings per Unit	ValueLine	\$ 0.31	\$ 0.82	\$ 1.32	\$ 1.39	\$ 0.54	\$ 0.58	\$ 0.87	\$ 0.91	\$ 1.10	\$ 1.30	\$ 1.55
2	Cash Flow Per Unit	ValueLine	\$ 0.42	\$ 1.08	\$ 1.55	\$ 1.69	\$ 1.11	\$ 1.09	\$ 1.27	\$ 2.20	\$ 2.30	\$ 2.70	\$ 3.20
3	Distributions per Unit	ValueLine	\$ 0.16	\$ 0.90	\$ 1.05	\$ 1.16	\$ 1.33	\$ 1.44	\$ 1.54	\$ 1.66	\$ 1.79	\$ 1.95	\$ 2.40
4	Units Outstanding (millions)	ValueLine	133.93	133.93	168.87	174.21	172.95	216.98	368.77	381.86	420.00	426.00	450.00
5	Avg Annual P/E Ratio	ValueLine	28.2	11.1	8.8	14.7	39.2	37.5	25.9	28.4	24.0	24.0	24.0
6	Market Value Per Unit	[1] x [5]	\$ 8.74	\$ 9.10	\$ 11.62	\$ 20.43	\$ 21.17	\$ 21.75	\$ 22.53	\$ 25.84	\$ 26.40	\$ 31.20	\$ 37.20
7	Market to Book Ratio	[6] / [12]	2.10	1.55	2.10	3.11	3.05	2.77	1.56	1.74	1.82	2.09	2.54
8	Newly Issued Shares	[8] _(t-1) - [8] _t	0.00	0.00	34.94	5.34	-1.26	44.03	151.79	13.09	38.14	6.00	24.00
9	Partners Capital per Value Line (millions)	ValueLine	\$ 562.5	\$ 789.5	\$ 936.0	\$ 1,146.9	\$ 1,200.9	\$ 1,706.0	\$ 5,328.8	\$ 5,679.3	\$ 6,100.0	\$ 6,250.0	\$ 6,600.0
10	Partners Capital Adjusted to Base Year (millions)	[10] _(t-1) + ([8] _t [6] _t) / [7] - ([4] _(t-1)) x [3] _(t-1) + ([4] _t [2] _t)	\$ 562.5	\$ 685.7	\$ 1,020.5	\$ 1,172.7	\$ 1,153.9	\$ 1,506.4	\$ 3,855.7	\$ 4,322.5	\$ 5,207.7	\$ 5,695.8	\$ 6,656.7
11	Book Value per Unit	[9] / [4]	\$ 4.16	\$ 5.86	\$ 5.54	\$ 6.58	\$ 6.94	\$ 7.86	\$ 14.45	\$ 14.87	\$ 14.50	\$ 14.95	\$ 14.65
12	Adjusted Book Value per Unit	[10] / [4]	\$ 4.20	\$ 5.12	\$ 6.04	\$ 6.73	\$ 6.67	\$ 6.94	\$ 10.46	\$ 11.32	\$ 12.40	\$ 13.37	\$ 14.79
Kinder Morgan Energy Partners													
13	Earnings per Unit	ValueLine	\$ 1.05	\$ 1.22	\$ 1.34	\$ 1.56	\$ 1.96	\$ 2.00	\$ 2.22	\$ 2.37	\$ 2.30	\$ 2.40	\$ 3.15
14	Cash Flow Per Unit	ValueLine	\$ 1.30	\$ 1.43	\$ 2.00	\$ 2.38	\$ 2.84	\$ 3.17	\$ 3.52	\$ 3.88	\$ 4.00	\$ 4.15	\$ 5.10
15	Distributions per Unit	ValueLine	\$ 1.19	\$ 1.39	\$ 1.80	\$ 2.08	\$ 2.36	\$ 2.58	\$ 2.81	\$ 3.07	\$ 3.25	\$ 3.48	\$ 3.90
16	Units Outstanding (millions)	ValueLine	97.63	118.27	135.03	165.80	180.91	189.04	207.01	220.24	225.00	227.00	235.00
17	Avg Annual P/E Ratio	ValueLine	16.8	16.1	16.0	21.8	17.0	20.1	20.0	20.7	16.5	16.5	16.5
18	Market Value Per Unit	[1] x [5]	\$ 17.64	\$ 19.64	\$ 21.44	\$ 34.01	\$ 33.32	\$ 40.20	\$ 44.40	\$ 49.06	\$ 37.95	\$ 39.60	\$ 51.98
19	Market to Book Ratio	[6] / [12]	1.27	1.31	1.37	1.78	1.76	2.16	2.36	2.99	2.13	2.05	2.34
20	Newly Issued Shares	[8] _(t-1) - [8] _t	0.00	20.64	16.76	30.77	15.11	8.13	17.97	13.23	4.76	2.00	8.00
21	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	\$ 3,896.5	\$ 3,613.7	\$ 4,000.0	\$ 4,385.0	\$ 5,210.0
22	Partners Capital Adjusted to Base Year (millions)	[10] _(t-1) + ([8] _t [6] _t) / [7] - ([4] _(t-1)) x [3] _(t-1) + ([4] _t [2] _t)	\$ 1,360.7	\$ 1,723.4	\$ 2,091.8	\$ 2,856.6	\$ 3,310.9	\$ 3,634.2	\$ 4,213.4	\$ 4,703.3	\$ 5,011.8	\$ 5,261.2	\$ 5,847.1
23	Book Value per Unit	[9] / [4]	\$ 13.94	\$ 15.01	\$ 15.68	\$ 19.05	\$ 18.88	\$ 18.57	\$ 18.82	\$ 16.41	\$ 17.78	\$ 19.32	\$ 22.17
24	Adjusted Book Value per Unit	[10] / [4]	\$ 13.94	\$ 14.57	\$ 15.49	\$ 17.23	\$ 18.30	\$ 19.22	\$ 20.35	\$ 21.36	\$ 22.27	\$ 23.18	\$ 24.88

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

TRANSWESTERN PIPELINE COMPANY, LLC

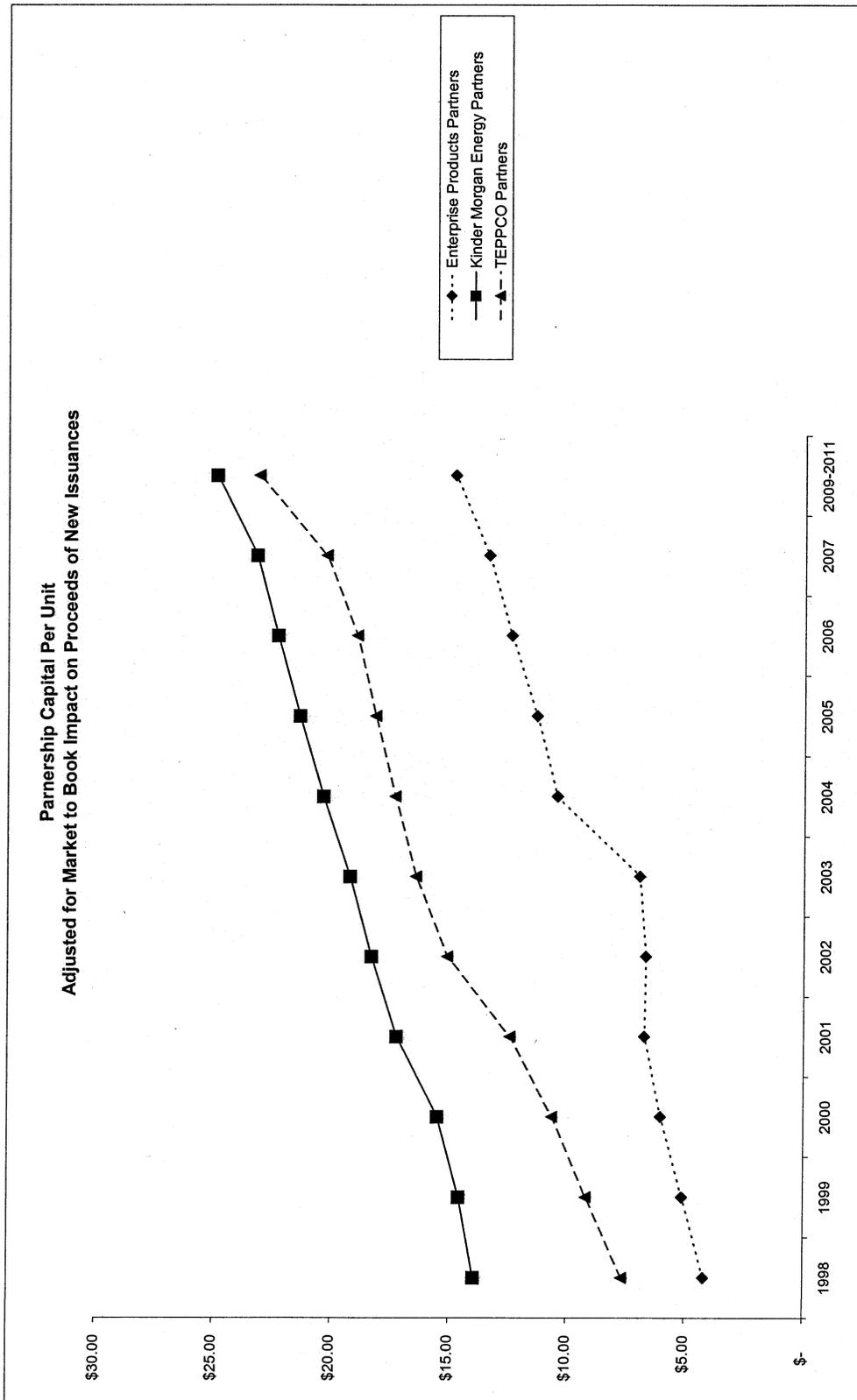
ANALYSIS OF BOOK VALUE PER UNIT FOR THE MLP GROUP

Line No.	Name	Source / Calculation	1998 (a)	1999 (b)	2000 (c)	2001 (d)	2002 (e)	2003 (f)	2004 (g)	2005 (h)	2006 (i)	2007 (j)	2009-2011 (k)
TEPPCO Partners													
25	Earnings per Unit	ValueLine	\$ 1.61	\$ 1.91	\$ 1.89	\$ 1.84	\$ 1.79	\$ 1.46	\$ 1.61	\$ 1.71	\$ 1.75	\$ 1.90	\$ 2.70
26	Cash Flow Per Unit	ValueLine	\$ 2.52	\$ 3.33	\$ 3.03	\$ 2.88	\$ 3.24	\$ 2.98	\$ 3.40	\$ 3.23	\$ 3.65	\$ 4.00	\$ 5.65
27	Distributions per Unit	ValueLine	\$ 1.75	\$ 1.85	\$ 2.00	\$ 2.15	\$ 2.35	\$ 2.50	\$ 2.64	\$ 2.68	\$ 2.70	\$ 2.86	\$ 3.05
28	Units Outstanding (millions)	ValueLine	29.66	29.00	32.70	40.45	53.81	63.00	63.00	69.96	90.00	92.00	96.00
29	Avg Annual P/E Ratio	ValueLine	17.1	12.4	12.2	16.0	16.8	23.6	24.3	23.7	16.0	16.0	16.0
30	Market Value Per Unit	[1] x [5]	\$ 27.53	\$ 23.68	\$ 23.05	\$ 29.44	\$ 30.07	\$ 34.46	\$ 39.12	\$ 40.53	\$ 28.00	\$ 30.40	\$ 43.20
31	Market to Book Ratio	[6] / [12]	3.59	2.99	2.39	2.19	1.81	1.96	2.41	2.36	1.91	1.93	2.30
32	Newly Issued Shares	[8] _(t-1) - [8] _t	0.00	-0.66	3.70	7.75	13.36	9.19	0.00	6.96	20.04	2.00	4.00
33	Partners Capital per Value Line (millions)	ValueLine	\$ 227.2	\$ 229.8	\$ 315.1	\$ 543.2	\$ 891.8	\$ 1,109.3	\$ 1,021.4	\$ 1,201.4	\$ 1,320.0	\$ 1,450.0	\$ 1,800.0
34	Partners Capital Adjusted to Base Year (millions)	[10] _(t-1) + ([8] _t [6] _t) / [7] - ([4] _(t-1)) x [3] _(t-1) + ([4] _t) x [2]	\$ 227.2	\$ 266.6	\$ 347.7	\$ 502.9	\$ 811.7	\$ 1,034.8	\$ 1,091.5	\$ 1,270.7	\$ 1,705.6	\$ 1,862.1	\$ 2,216.4
35	Book Value per Unit	[9] / [4]	\$ 7.66	\$ 7.92	\$ 9.64	\$ 13.43	\$ 16.57	\$ 17.61	\$ 16.21	\$ 17.17	\$ 14.67	\$ 15.76	\$ 18.75
36	Adjusted Book Value per Unit	[10] / [4]	\$ 7.66	\$ 9.19	\$ 10.63	\$ 12.43	\$ 15.08	\$ 16.43	\$ 17.33	\$ 18.16	\$ 18.95	\$ 20.24	\$ 23.09

(1) P/E Ratio for 2006 and 2007 were not available and were estimated by taking the Value Line projected P/E for 2009-2011.

(2) Assume 0 shares issued in 1998

(3) Assume base year is 1998



TRANSWESTERN PIPELINE COMPANY, LLC

ANALYSIS OF TAXABLE INCOME UNDER CORPORATE SCENARIO AND MLP SCENARIO

Line No.	ASSUMPTIONS	Y0	Y1	Y2	Y3	Y4	Y4	Taxable Total	(g)
		(a)	(b)	(c)	(d)	(e)	(e)	(f)	
1	Purchase at end of Y0 of 1 unit/share	\$ 100.00							
2	Sale in Y4 of 1 unit/share for \$200	\$ 200.00							
3	Growth	0%							
4	Distributions	\$ 20.00							
5	Net Income	\$ 5.00							
6	Payout Ratio	100%							
CORPORATION SCENARIO									
7	Basis in Share of Stock	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00		Unit Selling Price \$ 200.00
8	Dividend		\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 20.00	Dividends Received \$ 20.00
9	Capital Gain						\$ 100.00	\$ 100.00	Less: Basis \$(100.00)
10	Taxable to S/H, corporation	\$ -	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 105.00	\$ 120.00	Taxable Amount \$ 120.00
MLP SCENARIO									
11	Basis in Partnership Unit	\$ 100.00	\$ 85.00	\$ 70.00	\$ 55.00	\$ 40.00	\$ 40.00		Unit Selling Price \$ 200.00
12	Distribution		\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00	\$ 20.00	Distributions Received \$ 80.00
13	Partnership Income		\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 20.00	Less: Basis \$(100.00)
14	Capital Gain						\$ 160.00	\$ 160.00	Taxable Amount \$ 180.00
15	Taxable to MLP Unit Holder	\$ -	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00	\$ 165.00	\$ 180.00	Taxable Amount \$ 180.00

TRANSWESTERN PIPELINE COMPANY, LLC

Dividend Yields for Proxy Companies
Monthly High and Low Stock Prices

Line No.	Company	Ticker	March 2006		April 2006		May 2006		June 2006		July 2006		August 2006		Avg Price (m)	Annual Divd (n)	Yield (o)
			High (a)	Low (b)	High (c)	Low (d)	High (e)	Low (f)	High (g)	Low (h)	High (i)	Low (j)	High (k)	Low (l)			
1	Williams Companies	WMB	22.33	19.35	23.34	21.20	23.47	20.01	23.59	20.06	24.56	22.40	25.40	23.99	22.48	0.36	1.60%
2	Enterprise Products Partners	EPD	24.80	23.69	25.44	24.40	25.71	24.12	25.23	23.76	27.06	25.00	27.06	26.15	25.20	1.81	7.19%
3	Kinder Morgan Energy Partners	KMP	48.73	44.70	48.80	46.11	47.99	43.71	47.33	43.62	46.49	45.05	46.53	44.45	46.13	3.24	7.02%
4	Boardwalk Pipeline Partners	BWP	22.00	19.40	22.53	20.90	23.25	21.32	25.18	22.64	27.95	23.63	28.99	25.86	23.64	1.52	6.43%
5	Enbridge Energy Partners	EOP	45.00	42.88	44.55	43.02	44.70	42.00	44.80	42.20	48.27	43.26	49.51	46.54	44.73	3.70	8.27%
6	OneOK Partners	OKS	48.72	46.10	49.60	47.75	51.24	47.50	51.39	47.76	52.70	49.50	56.50	51.45	50.02	3.80	7.60%

Yield Plus Growth Using IBES Earnings Growth and GDP Growth Forecasts

Line No.	Company	Ticker	Dividend Yield (a)	IBES (b)	Second Stage Growth (GDP) (c)	Social Security GDP Forecast (d)	EIA GDP Forecast (e)	Blue Chip Nominal GDP Forecast (f)	Mean:
7	Williams Companies	WMB	1.60%	15.00%	5.28%	5.06%	5.575%	5.2%	
8	Enterprise Products Partners	EPD	7.19%	7.00%	5.28%				
9	Kinder Morgan Energy Partners	KMP	7.02%	7.00%	5.28%				
10	Boardwalk Pipeline Partners	BWP	6.43%	6.00%	5.28%				
11	Enbridge Energy Partners	EOP	8.27%	4.50%	5.28%				
12	OneOK Partners	OKS	7.60%	5.00%	5.28%				
13			6.35%	7.42%	5.28%				5.28%
14			7.11%	6.50%	5.28%				
15			8.27%	15.00%	5.28%				
16			1.60%	4.50%	5.28%				

Source: IBES Report of 9/8/06
GDP Growth Forecast from Social Security Administration of 5/2006, EIA of 2/2006, and Blue Chip of 3/10/2006