

BEFORE THE
TENNESSEE REGULATORY AUTHORITY

IN RE: PETITION OF THE CONSUMER ADVOCATE TO OPEN AN INVESTIGATION TO
DETERMINE WHETHER ATMOS ENERGY CORP. SHOULD BE REQUIRED BY THE
TENNESSEE REGULATORY AUTHORITY TO APPEAR AND SHOW CAUSE THAT
ATMOS ENERGY CORP. IS NOT OVEREARNING IN VIOLATION OF TENNESSEE LAW
AND THAT IT IS CHARGING RATES THAT ARE JUST AND REASONABLE

DOCKET 05-00258

PREFILED DIRECT TESTIMONY

OF

JERRY KETTLES

JULY 17, 2006

1 Q: PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A: My name is Jerry Lamar Kettles. My business address is 460 James Robertson
3 Parkway, Nashville, Tennessee 37243.

4

5 Q: BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?

6 A: I am employed by the Tennessee Regulatory Authority in the position of TRA
7 Economist.

8

9 Q: WHAT IS YOUR EDUCATIONAL BACKGROUND?

10 A: I have a B.A. in Mathematics from Berea College in Berea, Kentucky. I have
11 completed all requirements for a Ph.D. in Economics from the University of Tennessee –
12 Knoxville, save completing my dissertation.

13

14 Q: PLEASE DESCRIBE YOUR PROFESSIONAL BACKGROUND.

15 A: During my time in graduate school, I served in various research and teaching
16 assistant positions. I was an Instructor of Economics at Carson Newman College in
17 Jefferson City, Tennessee during the 1999-2000 school year. I joined the TRA in June
18 2000. I have held the position of TRA Economist since 2002.

19

20 Q: HAVE YOU PREVIOUSLY TESTIFIED BEFORE OR BEEN AN EXPERT
21 WITNESS IN PROCEEDINGS BEFORE REGULATORY BODIES?

22 A: No. This is my first opportunity to provide testimony.

23

1 Q: WHAT IS THE NATURE OF YOUR TESTIMONY IN THIS CASE?

2 A: My testimony is a recommendation on the fair rate of return for Atmos Energy
3 Corporation based upon its capital structure, debt cost, equity cost and prevailing
4 economic conditions.

5

6 Q: WHAT DATE DID YOU CHOOSE TO FORECAST ATMOS' CAPITAL
7 STRUCTURE, DEBT COST AND EQUITY COST?

8 A: I chose September 30, 2006 as the end-point of my forecast. September 30, 2006
9 is appropriate since it lies approximately one year after the filing of the petition that
10 initiated this proceeding. Further, Atmos' fiscal year closes on September 30th. By using
11 September 30, 2006 as the forecast date, I am able to utilize company information from
12 audited 10-K filing as of September 30, 2005, and forecast out a single year.

13

14 Q: ARE YOU SPONSORING ANY EXHIBITS WITH YOUR TESTIMONY?

15 A: Yes. I am providing one exhibit consisting of 9 schedules marked JLK-1 through
16 JLK-9 as an attachment to my testimony.

17

18 **General Discussion of Ratemaking Principles**

19 Q: WHAT OBJECTIVE SHOULD BE MET IN SETTING RATES IN THIS
20 PROCEEDING?

21 A: The goal of regulatory rate setting is to ensure a fair rate of return on the
22 company's investments while ensuring that safety and reliability of the service provided.

23

1 Q: WHAT DO YOU MEAN BY FAIR RATE OF RETURN?

2 A: The fair rate of return standard descends from court decisions in the *Hope* and
3 *Bluefield* cases.¹ A fair rate of return is achieved when (1) the return is comparable to
4 other businesses that bear similar risks; (2) the allowed return is sufficient to ensure
5 financial integrity; and (3) the company can attract, at reasonable cost, credit to meet its
6 capital requirements. Each of these three requirement is conditioned on the continued
7 ability to meets its service and safety obligations to its customers.

8

9 Q: WHAT IS THE IMPACT ON THE COMPANY AND CONSUMERS IF IT IS
10 NOT ALLOWED TO EARN A FAIR RATE OF RETURN ON ITS INVESTMENTS?

11 A: If a utility is not provided with the opportunity to earn a fair rate of return it will
12 be unable to attract sufficient capital required to meet its responsibilities over time.
13 Ultimately consumers are harmed by the inability of the firm to attract sufficient capital
14 to finance facility improvements, safety upgrades and expand service to new areas.

15

16 **Capital Structure**

17 Q: WHAT IS YOUR GENERAL APPROACH TO DETERMINING THE
18 COMPONENTS OF ATMOS' CAPITAL STRUCTURE?

19 A: My general approach is to rely primarily on the information presented in Atmos'
20 2005 10-K filing which details company information as of September 30, 2005. Using
21 the information from the 2005 10-K, I will make projections up to September 30, 2006.
22 The basis for adjustments of the 2005 numbers to reach the September 30, 2006

¹ *Bluefield Water Works & Improvement Co. v. P.S.C. of West Virginia*, 262 U.S. 679 (1923) and *F.P.C. v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

1 projections are derived again from the 10-K filing and discovery provided by the
2 company.

3

4 Q: WHAT ADVANTAGES ARISE FROM RELYING ON INFORMATION FROM
5 ATMOS' 10-K FILING?

6 A: The information is audited and represents an agreed upon starting point to make
7 projections for elements of the capital structure.

8

9 Q: HOW DID YOU DETERMINE THE LEVEL OF LONG-TERM DEBT?

10 A: I projected the September 30, 2006 long-term debt level by using the outstanding
11 debt at September 30, 2005 adjusted for debt maturing in 2006 as detailed in Atmos'
12 2005 10-K filing.

13

14 Q: HOW DID YOU DETERMINE THE LEVEL OF SHORT-TERM DEBT?

15 A: Reviewing Atmos' 2005 10-K filing reveals that Atmos does not project
16 outstanding short-term debt balances after September 30, 2006. Given this information, I
17 chose to exclude short-term debt from the capital structure.

18

19 Q: TRADITIONALLY THE AUTHORITY HAS INCLUDED SHORT-TERM
20 DEBT IN CAPITAL STRUCTURE: ON WHAT BASIS, OTHER THAN FINANCIAL
21 PROJECTIONS, DO YOU RECOMMEND EXCLUDING SHORT TERM DEBT
22 FROM ATMOS' CAPITAL STRUCTURE?

1 A: As detailed in Schedule JLK-1, Atmos showed no short-term debt in 2004. Given
2 that Atmos does not project short-term debt obligations past September 30, 2006, short-
3 term debt does not appear to be a permanent fixture in the capital structure of Atmos. As
4 a general rule, only permanent financing elements should be included in the capital
5 structure. Given Atmos' history with respect to short-term debt, it is appropriate to
6 exclude short-term debt from the company's capital structure.

7

8 Q: HOW DID YOU DETERMINE THE LEVEL OF COMMON EQUITY?

9 A: Starting with the September 30, 2005 calculation of common equity, I adjusted
10 the figure upward to reflect the value of new stock issues projected by the company in
11 2006.

12

13 Q: WHAT DO YOU THINK IS THE APPROPRIATE CAPITAL STRUCTURE
14 FOR THE COMPANY IN THIS PROCEEDING?

15 A: As detailed in Schedule 1, I project a capital structure consisting of 56.91% equity
16 and 43.09% long-term debt as of September 30, 2006.

17

18 Q: HOW DOES YOUR PROPOSED CAPITAL STRUCTURE RELATE TO
19 PROJECTIONS MADE BY THE COMPANY?

20 A: Atmos has made representations that it plans to increase its equity ratio. Atmos'
21 2005 10-K report reads "within three to five years from the closing of the TXU Gas

1 acquisition, we intend to reduce our capitalization ratio to a target range of 50 to 55
2 percent.”²

3

4 Q: IS YOUR FORECASTED CAPITAL STRUCTURE CONSISTENT WITH THE
5 COMPANY’S DESIRED CAPITALIZATION RATIO?

6 A: Yes. My analysis suggests that Atmos is making steps towards reaching a
7 minimum equity ratio of 45%. However, information provided by the company suggests
8 that it will at least several years into the future before they reach their desired capital
9 structure. In discovery, the company provided projections of its equity ratio showing that
10 it would achieve 43% equity in 2008 and reach 45% equity by 2010.

11

12 **Cost of Debt**

13 Q: WHAT WAS ATMOS’ REPORTED LONG TERM DEBT COST AS
14 REPORTED ON SEPTEMBER 30, 2005?

15 A: Atmos reported an effective cost of long-term debt of 5.58%.

16

17 Q: ARE THERE TERMS AND CONDITIONS ASSOCIATED WITH SOME OF
18 THE LONG-TERM DEBT INSTRUMENTS THAT MATERIALLY IMPACTED THE
19 LONG-TERM DEBT COST OF ATMOS?

20 A: Yes. The \$300 million dollar Senior Notes due 2007 bear a floating rate. The
21 interest rate is equal to the three month LIBOR rate plus 0.375 percent. Per the 10-K
22 filing, the interest rate on the floating rate note was 3.974% at September 30, 2005. Since
23 September 2005, the LIBOR has increased significantly.

² Page 49.

1

2 Q: HOW DID YOU FORECAST THE INTEREST RATE ON THE \$300 MILLION
3 SENIOR NOTES?

4 A: To account for the increase in the LIBOR rate, I averaged the closing rates from
5 January 3, 2006 to July 5, 2006. I found the average LIBOR rate of 4.998% which set the
6 floating rate for the Senior Notes at 5.373%.

7

8 Q: WHAT DID YOU DETERMINE IS THE EMBEDDED COST OF LONG-
9 TERM DEBT FOR USE IN CALCULATING THE COST OF CAPITAL OF THE
10 COMPANY IN THIS PROCEEDING?

11 A: After determining the interest rate for the floating rate notes, I calculated a debt
12 cost of 5.77%. The calculation of long-term debt cost is found on Schedule JLK-2.

13

14 Q: WHAT IS THE COST OF SHORT TERM DEBT THAT IS RELEVANT FOR
15 THIS PROCEEDING?

16 A: I do not propose the inclusion of short-term debt in the company's capital
17 structure, so I am not proposing a short-term debt cost at this time.

18

19 **Cost of Equity**

20 Q: WHAT IS YOUR GENERAL APPROACH TO DETERMINING A FAIR
21 EQUITY RETURN FOR ATMOS?

1 A: I will employ two economic models commonly used for asset valuation in
2 regulatory proceedings. I will estimate equity returns for Atmos using the Capital Asset
3 Pricing Model ("CAPM") and the Discounted Cash Flow model ("DCF").

4
5 Q: WHY IS IT NECESSARY TO USE TWO DIFFERENT MODELS TO
6 DETERMINE THE COST OF EQUITY?

7 A: Each model provides useful information that the analyst can incorporate into the
8 final recommendation of equity return. Further, each model has its own unique strengths
9 and weaknesses. Using several distinct models has the advantage of being able to check
10 the results of one model against another.

11
12 Q: IS IT USEFUL TO LOOK AT THE PERFORMANCE OF FIRMS OPERATING
13 IN THE SAME LINE OF BUSINESS AS ATMOS AS A COMPARISON?

14 A: Yes. The financial results of other firms are useful to frame the financial position
15 of the company under examination. Further, application of the CAPM and DCF models
16 to the comparison group provides another way to assess the degree of risk, and thus
17 required equity return, for the subject company.

18
19 Q: WHAT COMPANIES DID YOU SELECT AS A COMPARISON GROUP?

20 A: I choose to use the companies listed by Value Line as part of the Natural Gas
21 Distribution industry.

1 Q: DID YOU EXCLUDE ANY COMPANIES IN THE VALUE LINE NATURAL
2 GAS DISTRIBUTION INDUSTRY GROUP?

3 A: Yes. I removed SEMCO Energy and Southern Union because they have an
4 inconsistent history of dividend payments. Although I can still compute equity costs
5 using the CAPM model for these two companies, the lack of dividend data precluded
6 calculations under the DCF model.

7
8 Q: PLEASE DESCRIBE THE CAPITAL ASSET PRICING MODEL.

9 A: The fundamental idea underlying the Capital Asset Pricing Model is that investors
10 demand higher returns for assuming additional risk. The CAPM produces a quantitative
11 measure of the additional return required for bearing additional risk. The additional
12 return needed to induce an investor to engage in a riskier investment is known as the risk
13 premium. The formal representation of the CAPM is:

14
$$K = R_f + \beta(R_m - R_f)$$

15 Where: K = expected return

16 R_f = risk free return

17 R_m = overall market return

18 β = measure of asset risk relative to market risk.

19
20 Q: WHAT IS THE SIGNIFICANCE OF BETA IN THE CONTEXT OF THE
21 CAPITAL ASSET PRICING MODEL?

22 A: β is a measure of the sensitivity of asset returns to market returns. Stated
23 differently, β identifies the non-diversifiable risk of an individual security and measures

1 the sensitivity of rates of return on a particular security with general market movements.
2 Practically, if a security that has a β of 1.0, it should theoretically provide a return
3 equivalent to prevailing market return. If β is less than one, then the asset is considered
4 less risky than the market while a β greater than one indicates a security that is riskier
5 than the market as a whole.

6

7 Q: AS A PRACTICAL MATTER, WHAT INFORMATION IS REQUIRED TO
8 IMPLEMENT THE CAPITAL ASSET PRICING MODEL?

9 A: To implement the CAPM, the analyst needs three measurements of β , the risk-free
10 market return and the overall market return.

11

12 Q: HOW DID YOU SELECT THE BETAS FOR YOUR CAPITAL ASSET
13 PRICING MODEL CALCULATIONS?

14 A: I used β calculations taken from Value Line Investment Survey. Value Line β
15 measures have been utilized by several witnesses in rate proceedings held by the TRA.

16

17 Q: HOW DID YOU DETERMINE THE RISK FREE RATE OF RETURN FOR
18 USE IN YOUR CAPM CALCULATIONS?

19 A: I choose 5.5% for the risk free return based upon the prevailing rates for long-
20 term treasury bills and analyst forecasts of rates. T-Bill returns are often used to proxy
21 risk free investment returns. Schedule JLK-3 shows the trend in returns on treasury bills
22 maturing from 90 days to 30 years. As the graphic Schedule JLK-4 shows, long-term
23 rates are converging to 5.35% for the 20 year T-Bill and 5.2% for the 30 year bill as of

1 May 2005. Looking at analyst reports and statements released by the Federal Reserve
2 after recent meetings suggest a further increase in rates is anticipated early this fall.
3 Assuming a quarter point increase in rates this fall and the May 2005 twenty and thirty
4 year T-Bill returns places the risk free return at approximately 5.5%.

5

6 Q: WHAT DID YOU DETERMINE TO BE THE PREVAILING MARKET
7 RETURN FOR USE IN THE CAPM?

8 A: I determined that a risk premium of 7% is appropriate based upon a prevailing
9 market return of 12.5%.

10

11 Q: GIVEN YOUR DETERMINATIONS OF β , THE RISK FREE RETURN AND
12 THE PREVAILING MARKET RETURN, WHAT DID YOU DETERMINE TO THE
13 CAPM COST OF EQUITY?

14 A: My calculation of the Capital Asset Pricing Model for Atmos indicates an equity
15 cost of 10.75%. My calculations for Atmos and other gas distribution companies are
16 detailed on Schedule JLK-5.

17

18 Q: PLEASE DESCRIBE THE DISCOUNTED CASH FLOW MODEL.

19 A: The Discounted Cash Flow ("DCF") model explains the value of an asset as the
20 present value of the cash flow the asset is expected to generate adjusted for the risk
21 associated with asset. The cost of equity as determined by the DCF model is based on a
22 combination dividend yield and expected dividend growth of these two components and

1 represents the total return that investors can expect with regard to an equity investment.

2 A more formal statement of the DCF model is:

3 $K = D/P + g$

4 Where: K = cost of equity

5 D = dividend per share

6 P = price per share

7 g = growth rate

8 The expression D/P is the dividend yield. The measurement of growth rate, g, is
9 measured as dividend growth, but often other measures like earnings per share growth are
10 used.

11

12 Q: AS A PRACTICAL MATTER, WHAT INFORMATION IS REQUIRED TO
13 IMPLEMENT THE DISCOUNTED CASH FLOW MODEL?

14 A: To implement the DCF model, data on stock price and dividends are necessary to
15 calculate the dividend yield component of the DCF model. Additional information to
16 quantify the growth of dividends or earnings per share are required to complete the DCF
17 calculations.

18

19 Q: HOW DID YOU CALCULATE DIVIDEND YIELD?

20 A: I compiled information detailing the highest and lowest price at which Atmos'
21 stock has traded during the previous 52 weeks. The dividend amount of \$1.25 was for
22 the year 2005 as reported by Value Line.

23

1 Q: WHAT MEASURES DID YOU USE FOR THE GROWTH RATE IN THE DCF
2 MODEL CALCULATIONS?

3 A: I utilized two measures of growth in my DCF calculations. I used long-term
4 forecasts of growth in earnings per share and dividends in my calculations. Both
5 measures are for the time frame 2003-2005 until 2009-2011 and provided by Value Line.
6 The DCF calculations associated with earnings per share growth and dividend growth
7 measures are provided on Schedules JLK-6 and JLK-7, respectively.

8

9 Q: WHAT EQUITY RETURNS ARE PRODUCED BY YOUR DCF
10 CALCULATIONS?

11 A: The DCF calculation using the long-term forecast of earnings per share supports
12 an equity return between 11.17% and 12% based upon the lowest and highest dividend
13 yield in the past 52 weeks. The DCF calculation using dividend growth provided much
14 lower equity returns of 6.17% to 7% per the low and high ranges of dividend yields.

15

16 Q: CAN YOU EXPLAIN THE LOW EQUITY RETURNS GENERATED BY THE
17 DCF MODEL WHEN USING DIVIDEND GROWTH PROJECTIONS FOR ATMOS?

18 A: Atmos has been increasing its dividend payments by \$0.02 per year since 2000
19 and per its discovery responses plans to maintain the \$0.02 yearly increase until 2010.
20 Given that dividends are increasing by only \$0.02 per year, dividend growth calculations
21 will show only modest increases.

22

1 Q: GIVEN THE RESULTS OF THE CAPM AND DCF ANALYSES, WHAT DO
2 YOU RECOMMEND FOR ATMOS' RETURN IN THIS PROCEEDING?

3 A: The results of my CAPM and DCF analysis are found in schedule JLK-8. The
4 results of the CAPM and the DCF analysis using forecasted earnings per share are very
5 similar. However, the DCF results using forecast dividends yields a substantially lower
6 equity return. I chose the CAPM result of 10.75% equity return as it represents a loose
7 midpoint between the DCF estimates.

8
9 The DCF model, due to its theoretical construction, approximates the marginal cost of
10 equity for a firm. That is, it represents the minimum equity return required to attract
11 investment in common stock. Based on Atmos' historically low growth in yearly
12 dividends, it is impossible to ignore the low valuation results given by the DCF when
13 using dividend growth factors. Tempered by the DCF results with dividend growth
14 factors, the returns generated by using the DCF with earnings growth projections likely
15 overestimates the equity return required to attract investment. Using the CAPM estimates
16 provides weight to the low equity returns generated from the DCF model with dividend
17 growth by representing a downward adjustment from the equity return suggested by the
18 DCF with earnings growth results. The CAPM estimates also alleviates concern that
19 setting equity returns at the level suggested by the DCF model with dividend growth level
20 endangers the opportunity to earn a fair return as it accounts for only the marginal cost of
21 investment and not other relevant factors. The CAPM estimate is higher the dividend
22 growth DCF calculations while still relatively close to the other DCF figures.

23

1 **Overall Rate of Return**

2 Q: WHAT IS YOUR RECOMMENDATION FOR THE OVERALL FAIR RATE
3 OF RETURN FOR ATMOS?

4 A: Based upon the proposed capital structure comprised of 56.91% long term debt
5 and 43.09% equity with respective costs of 5.77% and 10.75%, the overall fair rate of
6 return is 7.916%. The calculation of the fair rate of return is documented in Schedule
7 JLK-9.

8

9 Q: DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

10 A: Yes, it does.

Exhibit 1
Schedule JLK-1

Atmos Energy Company
Capital Structure
Historic and Projected Months Ended September 30

Item	<u>2004</u>		<u>2005</u>		<u>2006</u>	
	Capital	Ratio	Capital	Ratio	Capital	Ratio
Long Term Debt	\$868,549,846	43.38%	\$2,186,367,572	55.58%	\$ 2,183,547,704	56.91%
Short Term Debt	\$0	0.00%	\$144,809,035	3.68%	\$0	0.00%
Common Equity	\$1,133,458,775	56.62%	\$1,602,421,868	40.74%	\$1,653,521,868	43.09%
Total	\$2,002,008,621	100.00%	\$3,933,598,474	100.00%	\$3,837,069,571	100.00%

Exhibit 1
Schedule JLK-2

Atmos Energy Company
Long Term Debt - Embedded Cost
September 30, 2006 Projection

<u>Debt Series</u>	<u>Outstanding 9/30/2006</u>	<u>End Int Rate</u>	<u>Annual Int at 9/30/2006</u>
10% Senior Notes due Dec 2011	2,303,308	10.00%	230,331
7.38% Senior Notes due May 2011	350,000,000	7.38%	25,812,500
6.75% Debentures Unsecured due July 2028	150,000,000	6.75%	10,125,000
5.125% Senior Notes due Feb 2013	250,000,000	5.13%	12,812,500
10.43% First Mortgage Bond P due 2017 (eff 2012)	10,000,000	10.43%	1,043,000
6.67% MTN A1 due Dec 2025	10,000,000	6.67%	667,000
6.27% MTN A2 due Dec 2010	10,000,000	6.27%	627,000
2.465% Sr Note 3Yr Floating due 10/15/2007	300,000,000	5.37%	16,119,000
4.00% Sr Note due 10/15/2009	400,000,000	4.00%	16,000,000
4.95% Sr Note due 10/15/2014	500,000,000	4.95%	24,750,000
5.95% Sr Note due 10/15/2034	200,000,000	5.95%	<u>11,900,000</u>
Subtotal -- Utility Long-Term Debt	\$ 2,182,303,308		\$ 120,086,331
United Cities Propane Gas, Inc.			
Evansville, TN -- E-Con due 06/08	168,125	7.00%	11,769
Pulaski -- Ingas, Ingram & Carvell 06/08	<u>300,000</u>	6.00%	18,000
Total Propane	\$468,125		\$29,769
Atmos Leasing, Inc.			
Industrial Develop Revenue Bond 07/13	1,047,618	7.90%	82,762
Atmos Power Sys - Wells Fargo 05/08	2,608,546	5.65%	147,383
US Bancorp - 04/09	<u>3,714,602</u>	5.29%	<u>196,502</u>
Total Leasing	7,370,766		426,647
Total Long-Term Debt	\$ 2,190,142,199		\$ 120,542,747
Less Maturity Adjustment	\$ 3,264,000		
Less Unamortized Debt Discount	\$ 3,330,496		
Annualized Amortization of Debt Exp. & Debt Dsct.			\$ 5,552,087
	<u>\$ 2,183,547,704</u>		<u>\$ 126,094,834</u>
Effective Avg Cost of Consol Debt		<u>5.77%</u>	end of period

Exhibit 1
Schedule JLK-3

Selected Interest Rates - Percent

Time	GS3M	GS6M	GS1	GS3	GS5	GS7	GS10	GS20	GS30	AAA
2004-05-01	1.04	1.33	1.78	3.10	3.85	4.31	4.72	5.46	#N/A	6.04
2004-06-01	1.29	1.64	2.12	3.26	3.93	4.35	4.73	5.45	#N/A	6.01
2004-07-01	1.36	1.70	2.10	3.05	3.69	4.11	4.50	5.24	#N/A	5.82
2004-08-01	1.50	1.76	2.02	2.88	3.47	3.90	4.28	5.07	#N/A	5.65
2004-09-01	1.68	1.91	2.12	2.83	3.36	3.75	4.13	4.89	#N/A	5.46
2004-10-01	1.79	2.05	2.23	2.85	3.35	3.75	4.10	4.85	#N/A	5.47
2004-11-01	2.11	2.32	2.50	3.09	3.53	3.88	4.19	4.89	#N/A	5.52
2004-12-01	2.22	2.50	2.67	3.21	3.60	3.93	4.23	4.88	#N/A	5.47
2005-01-01	2.37	2.68	2.86	3.39	3.71	3.97	4.22	4.77	#N/A	5.36
2005-02-01	2.58	2.85	3.03	3.54	3.77	3.97	4.17	4.61	#N/A	5.20
2005-03-01	2.80	3.09	3.30	3.91	4.17	4.33	4.50	4.89	#N/A	5.40
2005-04-01	2.84	3.14	3.32	3.79	4.00	4.16	4.34	4.75	#N/A	5.33
2005-05-01	2.90	3.17	3.33	3.72	3.85	3.94	4.14	4.56	#N/A	5.15
2005-06-01	3.04	3.22	3.36	3.69	3.77	3.86	4.00	4.35	#N/A	4.96
2005-07-01	3.29	3.53	3.64	3.91	3.98	4.06	4.18	4.48	#N/A	5.06
2005-08-01	3.52	3.78	3.87	4.08	4.12	4.18	4.26	4.53	#N/A	5.09
2005-09-01	3.49	3.79	3.85	3.96	4.01	4.08	4.20	4.51	#N/A	5.13
2005-10-01	3.79	4.13	4.18	4.29	4.33	4.38	4.46	4.74	#N/A	5.35
2005-11-01	3.97	4.30	4.33	4.43	4.45	4.48	4.54	4.83	#N/A	5.42
2005-12-01	3.97	4.33	4.35	4.39	4.39	4.41	4.47	4.73	#N/A	5.37
2006-01-01	4.34	4.47	4.45	4.35	4.35	4.37	4.42	4.65	#N/A	5.29
2006-02-01	4.54	4.69	4.68	4.64	4.57	4.56	4.57	4.73	4.54	5.35
2006-03-01	4.63	4.79	4.77	4.74	4.72	4.71	4.72	4.91	4.73	5.53
2006-04-01	4.72	4.90	4.90	4.89	4.90	4.94	4.99	5.22	5.06	5.84
2006-05-01	4.84	5.01	5.00	4.97	5.00	5.03	5.11	5.35	5.20	5.95

Source: Board of Governors of the Federal Reserve System

GS3M: 3-Month Treasury Constant Maturity Rate

GS6M: 6-Month Treasury Constant Maturity Rate

GS1: 1-Year Treasury Constant Maturity Rate

GS3: 3-Year Treasury Constant Maturity Rate

GS5: 5-Year Treasury Constant Maturity Rate

GS7: 7-Year Treasury Constant Maturity Rate

GS10: 10-Year Treasury Constant Maturity Rate

GS20: 20-Year Treasury Constant Maturity Rate

GS30: 30-Year Treasury Constant Maturity Rate

AAA: Moody's Seasoned Aaa Corporate Bond Yield

Schedule JLK-4: Selected Interest Rates

The graph displays the interest rates for various maturities over a two-year period. The y-axis represents the interest rate percentage, ranging from 0.00 to 7.00. The x-axis represents time, with major ticks every two months from May 2004 to May 2006. The legend identifies the following series: GS3M (diamond), GS6M (square), GS1 (plus), GS3 (asterisk), GS5 (x), GS7 (dot), GS10 (dash), GS20 (long dash), GS30 (short dash), and AAA (solid line). The AAA rate starts at approximately 6.5% in May 2004 and declines to about 4.5% by May 2006. The GS3M rate starts at approximately 1.5% and declines to about 0.5% by May 2006. The GS10 rate starts at approximately 3.5% and declines to about 2.5% by May 2006. The GS30 rate starts at approximately 2.5% and declines to about 1.5% by May 2006. The GS7 rate starts at approximately 2.0% and declines to about 1.0% by May 2006. The GS5 rate starts at approximately 1.5% and declines to about 0.5% by May 2006. The GS3 rate starts at approximately 1.0% and declines to about 0.5% by May 2006. The GS1 rate starts at approximately 0.5% and declines to about 0.5% by May 2006. The GS6M rate starts at approximately 0.5% and declines to about 0.5% by May 2006.

Date	GS3M	GS6M	GS1	GS3	GS5	GS7	GS10	GS20	GS30	AAA
2004-05-01	1.5	0.5	0.5	1.0	1.5	2.0	2.5	3.0	3.5	6.5
2004-07-01	1.4	0.4	0.4	0.9	1.4	1.9	2.4	2.9	3.4	6.4
2004-09-01	1.3	0.3	0.3	0.8	1.3	1.8	2.3	2.8	3.3	6.3
2004-11-01	1.2	0.2	0.2	0.7	1.2	1.7	2.2	2.7	3.2	6.2
2005-01-01	1.1	0.1	0.1	0.6	1.1	1.6	2.1	2.6	3.1	6.1
2005-03-01	1.0	0.0	0.0	0.5	1.0	1.5	2.0	2.5	3.0	6.0
2005-05-01	0.9	0.0	0.0	0.4	0.9	1.4	1.9	2.4	2.9	5.9
2005-07-01	0.8	0.0	0.0	0.3	0.8	1.3	1.8	2.3	2.8	5.8
2005-09-01	0.7	0.0	0.0	0.2	0.7	1.2	1.7	2.2	2.7	5.7
2005-11-01	0.6	0.0	0.0	0.1	0.6	1.1	1.6	2.1	2.6	5.6
2006-01-01	0.5	0.0	0.0	0.0	0.5	1.0	1.5	2.0	2.5	5.5
2006-03-01	0.5	0.0	0.0	0.0	0.5	1.0	1.5	2.0	2.5	5.5
2006-05-01	0.5	0.0	0.0	0.0	0.5	1.0	1.5	2.0	2.5	5.5

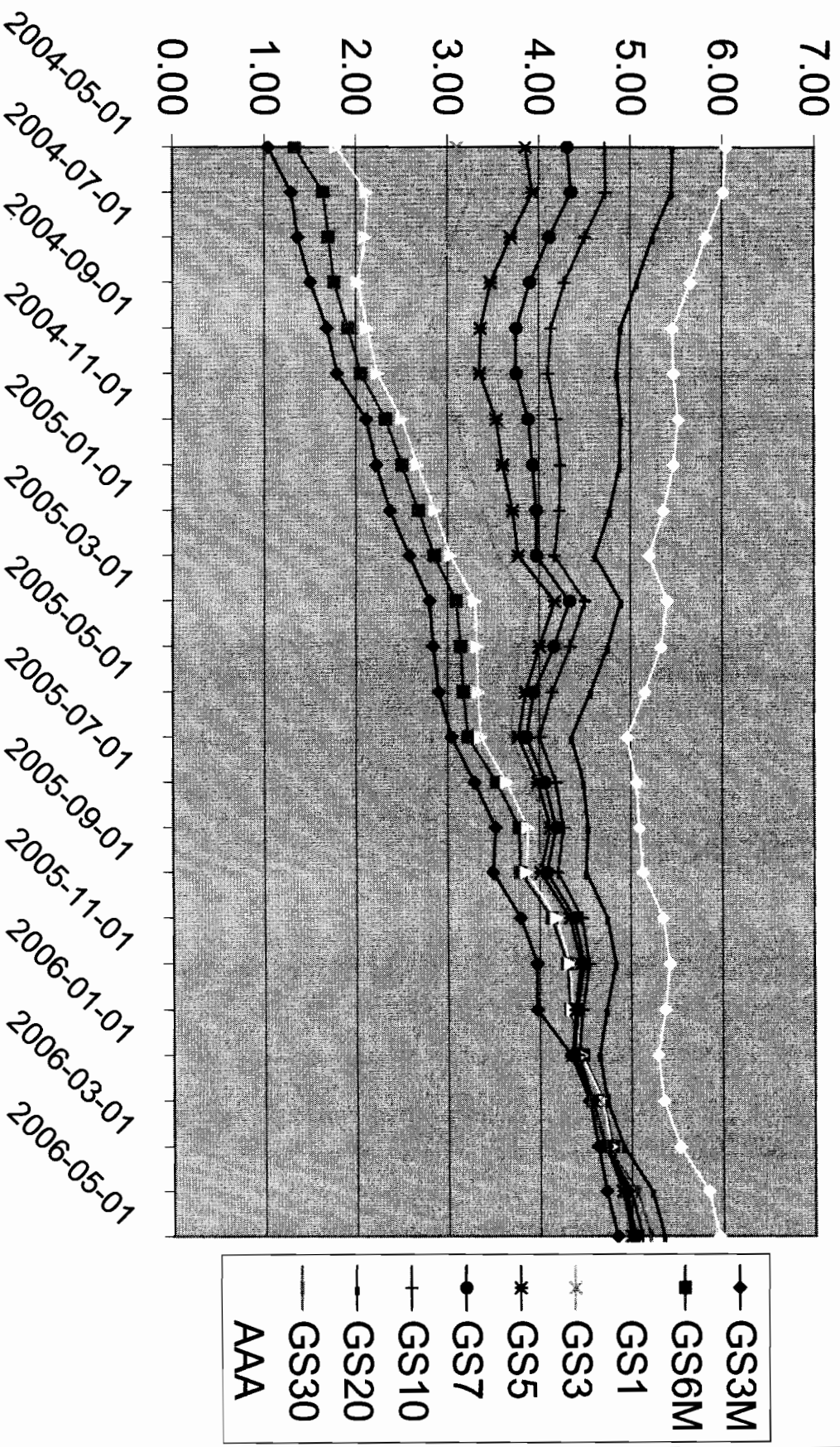


Exhibit 1
Schedule JLK-5

Atmos Energy Company
Comparable Gas Companies
Capital Asset Pricing Model

	Risk Free Return	Beta	Equity Risk Premium	Cost of Equity
Atmos Energy Corp.	5.50%	0.75	7.00%	10.75%
AGL Resources Inc.	5.50%	0.95	7.00%	12.15%
Cascade Natural Gas Corp.	5.50%	0.85	7.00%	11.45%
KeySpan Corp.	5.50%	0.9	7.00%	11.80%
Laclede Group Inc.	5.50%	0.85	7.00%	11.45%
New Jersey Resources Corp.	5.50%	0.8	7.00%	11.10%
Nicor Inc.	5.50%	1.2	7.00%	13.90%
Northwest Natural Gas Co.	5.50%	0.75	7.00%	10.75%
Peoples Energy Corp.	5.50%	0.9	7.00%	11.80%
Piedmont Natural Gas Co. Inc.	5.50%	0.85	7.00%	11.45%
South Jersey Industries Inc.	5.50%	0.7	7.00%	10.40%
Southwest Gas Corp.	5.50%	0.85	7.00%	11.45%
UGI Corp.	5.50%	0.9	7.00%	11.80%
WGL Holdings Inc.	5.50%	0.8	7.00%	11.10%
Comparable Companies' Average	5.50%	0.87	7.00%	11.58%

Atmos Energy Company
Comparable Gas Companies
Discounted Cash Flow using Earnings per Share Growth Rate
52 Week Stock Price Range

	Share Price		2005 Dividend	2005 Yield		Growth Rate	Cost of Capital	
	low	high		low	high		low	high
Atmos Energy Corp.	\$25.00	\$29.97	\$1.25	4.17%	5.00%	7.00%	11.17%	12.00%
AGL Resources Inc.	\$32.23	\$39.09	\$1.30	3.33%	4.03%	4.00%	7.33%	8.03%
Cascade Natural Gas Corp.	\$18.95	\$25.68	\$0.96	3.74%	5.07%	9.00%	12.74%	14.07%
KeySpan Corp.	\$32.66	\$41.52	\$1.82	4.38%	5.57%	1.50%	5.88%	7.07%
Laclede Group Inc.	\$28.60	\$35.55	\$1.38	3.88%	4.83%	6.00%	9.88%	10.83%
New Jersey Resources Corp.	\$40.68	\$48.35	\$1.36	2.81%	3.34%	4.50%	7.31%	7.84%
Nicor Inc.	\$37.42	\$43.12	\$1.86	4.31%	4.97%	4.00%	8.31%	8.97%
Northwest Natural Gas Co.	\$32.83	\$39.63	\$1.32	3.33%	4.02%	7.00%	10.33%	11.02%
Peoples Energy Corp.	\$34.34	\$45.52	\$2.18	4.79%	6.35%	1.50%	6.29%	7.85%
Piedmont Natural Gas Co. Inc.	\$21.26	\$25.80	\$0.91	3.53%	4.28%	6.00%	9.53%	10.28%
South Jersey Industries Inc.	\$25.63	\$30.80	\$0.86	2.79%	3.36%	7.00%	9.79%	10.36%
Southwest Gas Corp.	\$25.12	\$32.41	\$0.82	2.53%	3.26%	9.50%	12.03%	12.76%
UGI Corp.	\$20.21	\$29.98	\$0.65	2.17%	3.22%	5.50%	7.67%	8.72%
WGL Holdings Inc.	\$27.04	\$34.70	\$1.32	3.80%	4.88%	2.00%	5.80%	6.88%
Comparable Companies' Average	\$29.00	\$36.32	\$1.29	3.49%	4.40%	5.19%	8.68%	9.59%

Sources:
Value Line Investment Survey
Wall Street Journal

Atmos Energy Company
Comparable Gas Companies
Discounted Cash Flow using Dividend Growth Rate
52 Week Stock Price Range

	Share Price		2005 Dividend	2005 Yield		Growth Rate	Cost of Capital	
	low	high		low	high		low	high
Atmos Energy Corp.	\$25.00	\$29.97	\$1.25	4.17%	5.00%	2.00%	6.17%	7.00%
AGL Resources Inc.	\$32.23	\$39.09	\$1.30	3.33%	4.03%	6.50%	9.83%	10.53%
Cascade Natural Gas Corp.	\$18.95	\$25.68	\$0.96	3.74%	5.07%	0.50%	4.24%	5.57%
KeySpan Corp.	\$32.66	\$41.52	\$1.82	4.38%	5.57%	2.50%	6.88%	8.07%
Laclede Group Inc.	\$28.60	\$35.55	\$1.38	3.88%	4.83%	2.00%	5.88%	6.83%
New Jersey Resources Corp.	\$40.68	\$48.35	\$1.36	2.81%	3.34%	4.50%	7.31%	7.84%
Nicor Inc.	\$37.42	\$43.12	\$1.86	4.31%	4.97%	1.50%	5.81%	6.47%
Northwest Natural Gas Co.	\$32.83	\$39.63	\$1.32	3.33%	4.02%	4.00%	7.33%	8.02%
Peoples Energy Corp.	\$34.34	\$45.52	\$2.18	4.79%	6.35%	0.50%	5.29%	6.85%
Piedmont Natural Gas Co. Inc.	\$21.26	\$25.80	\$0.91	3.53%	4.28%	5.50%	9.03%	9.78%
South Jersey Industries Inc.	\$25.63	\$30.80	\$0.86	2.79%	3.36%	6.00%	8.79%	9.36%
Southwest Gas Corp.	\$25.12	\$32.41	\$0.82	2.53%	3.26%	0.00%	2.53%	3.26%
UGI Corp.	\$20.21	\$29.98	\$0.65	2.17%	3.22%	5.00%	7.17%	8.22%
WGL Holdings Inc.	\$27.04	\$34.70	\$1.32	3.80%	4.88%	2.00%	5.80%	6.88%
Comparable Companies' Average	\$29.00	\$36.32	\$1.29	3.49%	4.40%	3.12%	6.61%	7.51%

Sources:
Value Line Investment Survey
Wall Street Journal

Exhibit 1
Schedule JLK-8

Atmos Energy Company
Comparable Gas Companies
Comparison of Equity Returns - CAPM versus DCF

	CAPM	DCF with Dividend Growth		DCF with Earnings per share Growth	
		low	high	low	high
Atmos Energy Corp.	10.75%	6.17%	7.00%	11.17%	12.00%
AGL Resources Inc.	12.15%	9.83%	10.53%	7.33%	8.03%
Cascade Natural Gas Corp.	11.45%	4.24%	5.57%	12.74%	14.07%
KeySpan Corp.	11.80%	6.88%	8.07%	5.88%	7.07%
Laclede Group Inc.	11.45%	5.88%	6.83%	9.88%	10.83%
New Jersey Resources Corp.	11.10%	7.31%	7.84%	7.31%	7.84%
Nicor Inc.	13.90%	5.81%	6.47%	8.31%	8.97%
Northwest Natural Gas Co.	10.75%	7.33%	8.02%	10.33%	11.02%
Peoples Energy Corp.	11.80%	5.29%	6.85%	6.29%	7.85%
Piedmont Natural Gas Co. Inc.	11.45%	9.03%	9.78%	9.53%	10.28%
South Jersey Industries Inc.	10.40%	8.79%	9.36%	9.79%	10.36%
Southwest Gas Corp.	11.45%	2.53%	3.26%	12.03%	12.76%
UGI Corp.	11.80%	7.17%	8.22%	7.67%	8.72%
WGL Holdings Inc.	11.10%	5.80%	6.88%	5.80%	6.88%
Comparable Companies' Average	11.58%	6.61%	7.51%	8.68%	9.59%

Sources:

Value Line Investment Survey
Wall Street Journal

Exhibit 1
Schedule JLK-9

Atmos Energy Company
Overall Rate of Return

Item	Capital	Ratio	Cost Rate	Weighted Cost of Capital
Long Term Debt	\$ 2,183,547,704	56.91%	5.77%	3.2835%
Common Equity	\$1,653,521,868	43.09%	10.75%	4.6325%
Total	\$3,837,069,571	100.00%		7.9160%