

Exhibit No.:
Issue: Cash Working Capital
Witness: Thomas H. Petersen
Type of Exhibit: Direct Testimony
Sponsoring Party: Atmos Energy Corporation
Case No.: GR-2006-____
Date Testimony Prepared: April 3, 2006

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. GR-2006-____

DIRECT TESTIMONY

OF

THOMAS H. PETERSEN

ON BEHALF OF

ATMOS ENERGY CORPORATION

April 2006

In the Matter of Atmos Energy Corporation's Tariff)
Revision Designed to Consolidate Rates and)
Implement a General Rate Increase for Natural Gas) Case No.
Service in the Missouri Service Area of the Company.)

STATE OF TEXAS)
) ss
COUNTY OF)

1. My name is Thomas H. Petersen. I work in Dallas, Texas, and I am employed by Atmos Energy Corporation, as the Director of Rates for Atmos Energy Corporation.

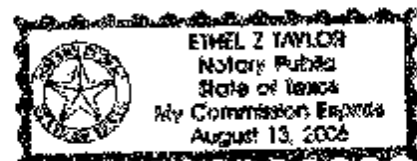
3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Thomas H. Petersen

Subscribed and sworn before me this 3 day of April 2006.

Notary Public

My commission expires: August 17, 2006



**BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION
CASE NO. _____
PREPARED DIRECT TESTIMONY
OF
THOMAS H. PETERSEN**

**On Behalf of
ATMOS ENERGY CORPORATION**

1 **Q. Please state your name, position and business address.**

2 A. My name is Thomas H. Petersen. I am Director of Rates for Atmos Energy
3 Corporation (“Atmos” or “Corporation”), 5430 LBJ Freeway, Dallas, Texas
4 75240. I am responsible for rate studies of the Corporation’s gas utility
5 operations in 12 states including Missouri.

6 **Q. What is your educational background and professional experience?**

7 A. I received a Bachelor of Science degree in accounting from the University of
8 Nebraska at Omaha and a Master of Arts degree with a major in finance from the
9 University of Iowa. I am a Chartered Financial Analyst. From July 1980 through
10 March 1989, I was employed in Rates and Tariffs Division of the Kentucky
11 Public Service Commission. I was Manager of Rates and Revenue Requirements
12 for Atmos from April 1989 through September 1997. I was Director of Price
13 Policy and Administration from October 1997 through September 1998. I have
14 been in my current position since October 1998.

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2 **Q. Have you previously testified before this Commission?**

3 A. No. However, I have testified before the Regulatory Agencies in Texas,
4 Colorado, Kansas, Louisiana, Mississippi, Virginia, Georgia and Kentucky in
5 numerous proceedings.

6 **Q. What is the purpose of your testimony in this proceeding?**

7 A. My testimony presents the Company's lead-lag analysis of cash working capital
8 requirements to be included in rate base. The results of this lead-lag analysis are
9 summarized on the attached Schedule THP-1. Schedules THP-2 through THP-9
10 present supporting calculations. All of the schedules attached to my testimony
11 were prepared by me or under my supervision.

12 **Q. What is the purpose of the lead-lag analysis?**

13 A. Rate base is the value of invested capital, including all items used to provide
14 utility service. Cash working capital is the capital investment in addition to other
15 rate base items that is required to bridge the gap from when cash is paid for
16 expenses necessary to provide service and when cash is received from customers
17 for that service. As stated above, this amount is included in rate base. A lead-lag
18 analysis is a method of measuring the amount of cash working capital used to
19 provide utility service. This analysis compares the lag from the provision of
20 service to customers to the collection of cash from customers to the lags from the
21 incurring of expenses to the payment of cash by the company for those expenses.

22 **Q. Please describe Schedule THP-1 of the lead-lag analysis.**

1 A. Schedule THP-1 summarizes the results of the lead-lag analysis. It shows the
2 calculation of the cash working capital requirement based on expense amounts
3 included in the proposed revenue requirement and revenue and expense lag days.
4 The expense items in the lead-lag analysis include sales tax as well as expenses in
5 the proposed revenue requirement. Rate base related items such as the return on
6 rate base, depreciation expense and interest on customer deposits are excluded.
7 The individual expense categories analyzed are listed in column (a). These are gas
8 cost, operating and maintenance expenses, taxes other than income, income tax
9 and sales tax.
10 Operating and maintenance ("O&M") expenses are divided into labor, benefits
11 and other O&M costs.
12 The amounts in column (b) are per books with adjustments taken from Ms.
13 Buchanan's schedules and workpapers. The gas cost amount is per books. An
14 estimate of sales taxes based on test year actual sales tax and the requested
15 revenue requirement is included. The amounts in column (c) are calculated by
16 dividing column (b) by 365 days. The revenue and expense lag days in columns
17 (d) and (e) are calculated on Schedules THP-2 through THP-9. Net lead/lag days
18 in column (f) are calculated by subtracting column (e) from column (d). The cash
19 working capital requirement in column (g) is calculated by multiplying the
20 average daily amount in column (c) times the net lead/lag days in column (f). The
21 result of \$174,379 of cash working capital appears at the bottom of column (g).
22 **Q. Please describe Schedule THP-2.**

1 A. The average revenue lag is calculated on Schedule THP-2. The revenue lag is the
2 average number of days from the time service is provided by the company until
3 revenue related to that service is available to pay bills. It consists of four
4 subparts:

- 5 • the service lag,
- 6 • the meter lag,
- 7 • the collection lag and
- 8 • the bank lag.

9 **Q. What is the service lag?**

10 A. The service lag is the average number of days from the time service is provided
11 until the meter is read. Since service is provided daily and meters are read
12 monthly, the service lag is one-half month or 15.17 days.

13 **Q. What is the meter lag?.**

14 A. The meter lag is the time the lag from meter reading to bill issuance. An analysis
15 of this lag produced an average period of 4.28 days.

16 **Q. What is the collection lag?**

17 A. The collection lag is the average number of days between issuing a bill and
18 receiving payment. This was calculated by dividing the average daily accounts
19 receivable balance by the average daily revenue. The collection lag was
20 calculated for the year ended September 2005. It resulted in a lag period of 20.16
21 days

22 **Q. What is the bank lag?**

1 A. The bank lag is the one-day lag between receiving payment and having funds
2 available to draw on at the bank.

3 **Q. What is the total average lag?**

4 A. The resulting total average lag is 40.60 days, as shown on the last line of Schedule
5 THP-2.

6 **Q. Please describe Schedule THP-3.**

7 A. Schedule THP-3 shows the calculation of the purchased gas cost payment lag of
8 41.62 days. Gas cost lag days consist of three parts, a service lag of 15.17 days
9 from the mid-point of the month to the end of the month, an invoice lag of 9.92
10 days and a payment lag of 16.97 days.

11 **Q. Please describe Schedule THP-4.**

12 A. Schedule THP-4 shows the calculation of the average payroll lag days which is
13 the average number of days from the time service is provided until payroll related
14 to that service is paid. The payroll lag days consists of three subparts:

- 15 • the service lag,
- 16 • the payment lag and
- 17 • the check clearing lag.

18 **Q. What is the service lag?**

19 A. The service lag is the average number of days from the time service is provided
20 until the end of the pay period. With the Company's two-week pay period the
21 service lag is seven days

22 **Q. What is the payment lag?**

1 A. Payment lag is the average number of days between the end of the pay period and
2 payment date. With the Company's practice of paying on Friday for a pay period
3 that ended the previous Friday, the payment lag is seven days. Since most
4 employees use direct deposit, the average check clearing lag is 0.38 days.

5 **Q. What is the total average payroll lag?**

6 A. The total average payroll lag is 14.38 days.

7 **Q. Please describe Schedule THP-5.**

8 A. Schedule THP-5 shows the calculations of the lag days associated with employee
9 benefits expense. Approximately 69 percent of benefits expense is associated
10 with medical costs for employees and retirees. Approximately 20 percent of
11 benefits expense is associated with the FAS 87 pension plan. Miscellaneous other
12 benefits make up the remaining 11 percent. Medical expense consists of claims
13 and administrative fees. The payment lags for each of these parts of benefits
14 expense are calculated separately and then used to calculate a weighted average.
15 Medical claims are paid weekly on the Tuesday following the week the claims
16 were submitted to the company for an average lag of 5.5 days. Medical
17 administrative fees are paid monthly on the first Tuesday after the end of the
18 month for an average lag from the mid-point of the month to the payment date of
19 18.5 days. The pension plan is fully funded. As of July 1, 2005, 103.5 percent of
20 the present value of accumulated benefits was funded. Therefore, a zero days lag
21 is imputed for benefits. The lag calculated for other O&M expense is used for the
22 remaining portion of benefits expense. The weighted average lag calculated for
23 benefits expense is 7.79 days.

1 **Q. Please describe Schedule THP-6.**

2 A. Schedule THP-6 shows the calculation of the average lag days for other O&M
3 expenses. The calculation is based on an analysis of payments for the twelve
4 months ended September 30, 2005. A sample of 227 invoices is used to
5 determine the lag between the date services were provided to the company and the
6 date the bill was paid. If no information is available regarding the date service
7 was provided the date of the invoice is used. The resulting payment lags
8 weighted by the amount of the invoice are used to calculate a weighted average
9 payment lag of 27.75 days. Over 3,900 checks are used to determine the lag
10 between the date that checks were written and the date that the checks cleared.
11 The resulting weighted average check clearing lag is 1.59 days. Therefore, the
12 total average lag for the other O&M expenses is 29.34 days.

13 **Q. Please describe Schedule THP-7.**

14 A. Schedule THP-7 shows the calculation of the average payment lag days for other
15 taxes. The calculation of the lag is shown separately for each type of tax and an
16 average lag is calculated weighted by the amount of each type of tax. FICA taxes
17 are paid by wire on the first banking day after each payday. Therefore, FICA lag
18 days are equal to the payroll lag days for direct deposit employees plus one day
19 for a total lag of 15 days. Unemployment taxes are paid quarterly at the end of
20 the month following each quarter. Therefore, for unemployment taxes, the lag
21 day as calculated from the mid-point of the quarter to the payment date at the end
22 of the following month are 76 days. Ad valorem taxes for the calendar year are
23 paid on December 10. The ad valorem tax lag days as calculated from the mid-

1 point of the calendar year to the payment date are 161.5 days. The annual PSC
2 assessment is paid in four quarterly payments in the first month of each quarter.
3 The average date of the four quarterly payments is 32 days before the midpoint of
4 the year. Therefore, the PSC assessment is paid on a 32 day lead as opposed to a
5 lag. The DOT lag of 241.5 days is calculated from the midpoint of the calendar
6 year to the payment on the following February 28th. The Franchise lag of 45.17
7 days is calculated from the midpoint of the month to the date of payment at the
8 end of the following month. The weighted average lag calculated for other taxes
9 is 112.17 days.

10 **Q. Please describe Schedule THP-8.**

11 A. Schedule THP-8 shows the calculation of the income tax lag days. Income taxes
12 for a fiscal year are paid in four quarterly payments during the year. Two
13 payments are before the mid-point of the tax year and two are after the midpoint.
14 The average lag from the midpoint of the tax year to the payment dates is 37.75
15 days.

16 **Q. How much is the Company's cash working capital requirement?**

17 A. The Company has a cash working capital requirement of \$174,379 based upon my
18 lead-lag study. That amount should be included in the rate base that is used to set
19 rates in this proceeding.

20 **Q. Does that conclude your testimony?**

21 A. Yes.

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