

**BEFORE THE
TENNESSEE REGULATORY AUTHORITY**

In The Matter of ATMOS ENERGY CORPORATION)
For approval of Adjustments to its Rates and Revised) Docket No.07-00105
Tariff.)

**DIRECT TESTIMONY OF
CHARLES W. KING

CONCERNING
DEPRECIATION AND COST OF REMOVAL**

**On behalf of
Office of the Attorney General
Consumer Affairs and Protection Division**

July 21, 2007

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**DIRECT TESTIMONY OF
CHARLES W. KING**

INTRODUCTION

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Charles W. King. I am President of the economic consulting firm of Snavelly King Majoros O'Connor & Lee, Inc. ("Snavelly King"). My business address is 1220 L Street, N.W., Suite 410, Washington, D.C. 20005.

Q. PLEASE DESCRIBE SNAVELLY KING.

A. Snavelly King, formerly Snavelly, King & Associates, Inc., was founded in 1970 to conduct research on a consulting basis into the rates, revenues, costs and economic performance of regulated firms and industries. The firm has a professional staff of 12 economists, accountants, engineers and cost analysts. Most of its work involves the development, preparation and presentation of expert witness testimony before federal and state regulatory agencies. Over the course of its 37-year history, members of the firm have participated in over a thousand proceedings before almost all of the state commissions and all Federal commissions that regulate utilities or transportation industries.

Q. HAVE YOU PREPARED A SUMMARY OF YOUR QUALIFICATIONS AND EXPERIENCE?

A. Yes. Attachment A is a summary of my qualifications and experience.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN REGULATORY PROCEEDINGS?

1 A. Yes. Attachment B is a tabulation of my appearances as an expert witness before
2 state and federal regulatory agencies.
3

4 **Q. FOR WHOM ARE YOU APPEARING IN THIS PROCEEDING?**
5

6 A. I am appearing on behalf of the Office of the Attorney General.
7

8 **Q. WHAT IS THE OBJECTIVE OF YOUR TESTIMONY?**
9

10 A. The objective of my testimony is to recommend depreciation rates for the
11 Tennessee gas properties and the shared services plant of Atmos Energy
12 (“Atmos” or “the Company”). In the process, I will review and critique the
13 depreciation study submitted by Donald S. Roff on behalf of Atmos.
14

15 **Q. PLEASE DESCRIBE THE PROCESS YOU USED IN PREPARING THIS**
16 **TESTIMONY.**
17

18 A. I began by requesting the Company to provide me with the same data that it had
19 provided its consultant, Mr. Roff. Having reviewed the data, I then input it into
20 our Company’s depreciation analysis software to test the validity of Mr. Roff’s
21 results. I also prepared a number of data requests and carefully read the
22 Company’s responses. Independently, I evaluated the approach used by Mr. Roff
23 to the treatment of salvage and retirement costs, and I developed the alternatives
24 that I shall discuss in my testimony. I then prepared the schedules found in my
25 Exhibits CWK-1 and CWK-2. The calculations underlying these schedules are
26 found in my workpapers. The workpapers were prepared and the calculations
27 performed either by me or under my direction.

SUMMARY OF RECOMMENDATIONS**Q. WHAT DEPRECIATION RATES DO YOU RECOMMEND?**

A. My recommended depreciation rates are set forth in Schedules 1 of my two exhibits, CWK-1 which pertains to Tennessee plant, and CWK-2 which covers shared services plant. A comparison of my accruals with the existing accruals and the Company's proposed accruals is as follows

Table 1
Category Depreciation Accruals based on 9/30/06 Plant

| | At Existing Rates | At Company Proposed Rates | At AG Recommended Rates |
|-----------------|----------------------|---------------------------------|-------------------------------|
| TN Transmission | \$ 408,068 | \$ 391,526 | \$ 292,767 |
| TN Distribution | 10,007,392 | 7,795,985 | 5,084,420 |
| TN General | <u>212,878</u> | <u>439,074</u> | <u>428,978</u> |
| Tennessee Plant | \$ 10,628,338 | \$ 8,626,585 | \$ 5,806,165 |
| Shared Services | \$ 19,615,241 | \$ 22,277,742 | \$ 21,414,931 |

Q. HOW DO YOUR RECOMMENDED DEPRECIATION RATES DIFFER FROM THOSE PROPOSED BY MR. ROFF?

A. My recommended depreciation rates differ from those proposed by Mr. Roff in the following respects:

- I recommend separate rates, accruals and reserves for depreciation and for future cost of removal.
- I recommend Average Life Group depreciation, while Mr. Roff recommends Equal Life Group depreciation.
- I recommend accrual for net removal costs based on the present value of those costs, while Mr. Roff proposes to charge ratepayers for future removal costs at their undiscounted nominal value.

- 1
- 2 ▪ Finally, I recommend a change in Atmos's accounting treatment of third
- 3 party reimbursements. Such reimbursements should be credited to the
- 4 depreciation reserve rather than subtracted from plant in service. They
- 5 would then be treated as positive salvage, thereby reducing the Company's
- 6 requirement for removal cost allowances.
- 7
- 8

9 **DEPRECIATION- GENERAL**

10

11 **Q. WHAT IS DEPRECIATION?**

12

13 A. In 1958, the National Association of Railroad and Utility Commissioners

14 sanctioned the following definition of depreciation:

15

16 "Depreciation," as applied to depreciable utility plant, means the loss in service

17 value not restored by current maintenance, incurred in connection with the

18 consumption or prospective retirement of utility plant in the course of service

19 from causes which are known to be in current operation and against which the

20 utility is not protected by insurance. Among the causes to be given consideration

21 are wear and tear, decay, action of elements, inadequacy, obsolescence, changes

22 in the art, changes in demand, and requirements of public authorities.¹

23

24

25 The second commonly cited definition of depreciation is that of the American

26 Institute of Certified Public Accountants:

27

28 Depreciation accounting is a system of accounting which aims to distribute the

29 cost or other basic value of tangible capital assets, less salvage (if any) over the

30 estimated useful life of the unit (which may be a group of assets) in a systematic

31 and rational manner. It is a process of allocation, not of valuation. Depreciation

32 for the year is the portion of the total charge under such a system that is allocated

33 to the year. Although the allocation may properly take into account occurrences

34 during the year, it is not intended to be a measurement of the effect of all such

35 occurrences.²

36

¹ *Uniform System of Accounts for Class A and Class B Electric Utilities*, 1958, rev. 1962.

² American Institute of Certified Public Accountants, *Accounting Research and Terminology Bulletin #1*.

1 If depreciation can be defined in a single sentence, I would say that it is the
2 process of recovering the initial investment in tangible capital assets, adjusted for
3 salvage, in a systematic fashion over the useful service life of the plant,
4 recognizing that utility plant is typically a group of investments.

5

6 **Q. CAN DEPRECIATION BE CALCULATED WITH PRECISION?**

7

8 A. No. Depreciation can no more be calculated with precision than can the required
9 rate of return to equity investors. Both are developed from analyses that while
10 based on quantitative values, require considerable application of judgment. In the
11 case of rate of return, that judgment pertains to the earnings expectations of
12 investors as indicated by the stock market and corporate financial data. In the
13 case of depreciation, the judgment pertains to the estimation of the future
14 surviving life of plant as indicated by past patterns of retirements.

15

16 **Q. HOW DOES THIS JUDGEMENTAL CHARACTERISTIC OF**
17 **DEPRECIATION INFLUENCE THE AUTHORITY'S APPROACH TO**
18 **THE SUBJECT?**

19

20 A. The Authority must recognize that the development of depreciation rates is not a
21 refined science subject to mathematical precision. Because depreciation analysts
22 use judgment in their estimation of depreciation, the Authority must necessarily
23 exercise its own judgment in assessing the rationale and data that underlie
24 alternative depreciation rates. This is why, in this proceeding, the Authority must
25 choose among depreciation rates that yield widely differing annual depreciation
26 accruals.

27

28 **Q. WHAT ARE THE BASIC PARAMETERS REQUIRED TO DEVELOP A**
29 **DEPRECIATION RATE?**

30

1 A. At its simplest level, the only parameter that is absolutely required is an estimate
2 of the service life of the plant. The reciprocal of that number can be used as the
3 depreciation rate.

4
5 However, because most utility depreciation is applied to accounts that are
6 multiple units of plant, it is usually necessary to estimate the dispersion of
7 retirements around an average service life. In the gas and electric utility
8 industries, this dispersion is usually described in terms of "Iowa Curves," so
9 named because they were developed at Iowa State University. These curves
10 describe how closely the retirements are grouped around the average service life
11 and whether they tend to occur more rapidly before, after or coincident with the
12 average service life.

13
14 Another parameter that is typically included in the calculation of a depreciation
15 rate is net salvage. Net salvage is the difference between the positive scrap value
16 of the asset's material and the cost of dismantling and removing the asset when it
17 is retired. As traditionally applied, it is expressed as a ratio to the cost of the asset
18 and included as a subtraction (when salvage value exceeds removal cost) or an
19 addition (when removal cost exceeds salvage) to the amount to be recovered.
20 With a few exceptions (e.g. vehicles, work equipment) most gas utility plant has a
21 higher removal cost than its salvage value, so that recognition of net salvage in
22 adds to the amount to be recovered. I must emphasize at this point that I
23 recommend separating the accrual of net salvage from "pure" depreciation, i.e.
24 capital recovery. This topic will be discussed in some detail later in my
25 testimony.

26
27 Finally, virtually all major utilities, including Atmos, employ what is known as
28 "remaining life depreciation." This procedure computes the depreciation rate by
29 dividing the unrecovered net investment, adjusted for net salvage, by the
30 estimated remaining years of the asset (or group of assets). It effectively ensures

1 that any past under- or over-accruals of depreciation are recovered during the
2 remaining life of the asset.

3

4 **Q. PLEASE ILLUSTRATE HOW THE PARAMETERS YOU HAVE JUST**
5 **DESCRIBED ARE USED TO DEVELOP DEPRECIATION RATES?**

6

7 A. Beginning with the simplest example, assume a single asset with a 20 year life.
8 Its depreciation rate is the reciprocal of 20:

9

10
$$1/20 = 5\%$$

11

12 Now, let us assume that the asset is expected to have salvage value equivalent to 5
13 percent of its investment value. The depreciation rate declines:

14
$$\frac{1-.05}{20} = \frac{.95}{20} = 4.75\%$$

15

16 Assume next that the cost of removing this asset amounts to 15 percent of its
17 value. The depreciation rate increases:

18

19
$$\frac{1-.05+.15}{20} = \frac{1.10}{20} = 5.55\%$$

20

21 This is called a “whole life” rate because it is based on the whole life of 20 years.
22 To develop the remaining life rate, we must identify some additional items of
23 data: the original investment, the depreciation reserve (the amount of depreciation
24 that has already been recovered), and the remaining life of the asset.

25

26 In this illustration, let us assume that the asset originally cost \$1 million and that
27 past depreciation charges have recovered \$400,000. This means that we have yet
28 to recover \$600,000 in original cost, plus a negative net salvage (i.e. net cost of
29 removal) amounting to 10% of the original cost, or \$100,000. The total amount
30 yet to be recovered is thus \$700,000. Let us further assume that the asset is 10
31
32

1 years old, leaving 10 years of remaining life. In remaining life depreciation, the
2 unrecovered amount is divided by the remaining life years:

3
4
$$\frac{\$700,000}{10 \text{ years}} = \$70,000 \text{ required annual accrual}$$

5
6

7 The depreciation rate is then calculated by dividing the annual amount to be
8 recovered by the gross investment, in this case:

9
10
$$\frac{\$70,000}{\$1,000,000} = 7.0\%$$

11
12

13 The foregoing illustrates the traditional formulation of depreciation rates. As I
14 shall discuss later in this testimony, I am recommending that depreciation be
15 separated from negative net salvage recovery.

16

17 **SERVICE LIFE ESTIMATION**

18

19 **Q. WHAT INFORMATION DID YOU RECEIVE FROM ATMOS TO ASSIST**
20 **YOU IN YOUR STUDY OF PLANT ACCOUNT SERVICE LIVES?**

21

22 A. I received the record of plant additions, retirements, transfers, adjustments, and
23 balances for each account each year as far back as 1950. This information I refer
24 to as "vintage data." For most of the major shared services accounts, I also
25 received a record of plant retirements by year of placement. I refer to this
26 information as "actuarial data."

27

28 **Q. WERE THERE ANY PROBLEMS WITH THESE DATA?**

29

30 Yes. For many of the smaller accounts there was insufficient plant activity, that
31 is, additions and retirements, to perform reliable statistical studies.

32

33 **Q. WHAT LIFE STUDIES DID YOU PERFORM?**

1

2 A. I performed three types of life studies for each account for which there were
3 sufficient data, Simulated Plant Record (“SPR”) studies, actuarial studies and
4 Geometric Mean Turnover (“GMT”) analyses.

5

6 **Q. PLEASE DESCRIBE THE SPR STUDIES.**

7

8 The SPR study procedure is a trial and error mechanism whereby a computer
9 program fits alternative Iowa Curves and average service life combinations to the
10 record of plant additions, retirements and balances.

11

12 The SPR – Balances program measures the degree to which various combinations
13 of Iowa curves and service lives applied to the plant additions each year yield the
14 plant balances in subsequent years. The degree of fit is measured by sum of the
15 squared differences between the predicted plant balances and the actual balances.
16 When the square root of those differences is divided into the average of the actual
17 balances, the result is a “conformance index.” The reciprocal of the conformance
18 index is called the “index of variation.” The lower that index, the better the fit.

19

20 Another test of SPR results is the “retirements experience index,” which measures
21 the maturity of the account under each curve-life combination. A retirements
22 experience index of 100 indicates that the account has experienced a full life
23 cycle, that is, all of the plant placed in the oldest vintage is now retired. An index
24 of 50 suggests that the account is only half way through its life cycle. In general,
25 SPR results with retirements experience indexes less than 50 are considered to
26 have little value, while those over 75 are considered of significant value.

27

28 **Q. PLEASE DESCRIBE THE ACTUARIAL STUDIES.**

29

30 A. Actuarial studies are far more precise than SPRs, but they require considerably
31 more data and, to be effective, the data must be fairly “thick,” that is, they must

1 reflect a fairly large number of retirements. Actuarial studies use the record of
2 retirements by date of placement, which means that the age of each retirement
3 must be known. With this knowledge, it is possible to compute the history of
4 retirements at each age, and from that record, to fit Iowa curve and service life
5 combinations that reproduce that history.

6
7 Unfortunately, the actuarial data are quite thin for Atmos's Tennessee plant. I
8 was able to perform actuarial studies for only two accounts, and even there, the
9 results are not particularly satisfactory. The shared services data are much
10 thicker, and I was able to perform actuarial analyses for all but three of the
11 accounts.

12
13 **Q. PLEASE DESCRIBE THE GEOMETRIC MEAN TURNOVER METHOD.**

14
15 **A.** The Geometric Mean Turnover Method ("GMT") is one of several turnover
16 methods of life analyses. "Turnover" means the period of time that it takes for the
17 plant in an account to retire fully. The advantage of turnover methods is that they
18 study retirements in relation to plant balances irrespective of the age of the
19 property retired.³ The GMT method is based on ratios of annual additions and
20 retirements to plant balances. The life estimate is the reciprocal of the geometric
21 mean of the additions and retirements ratios averaged over a period of years.⁴
22 The GMT method is very useful in detecting service lives and service life trends.
23 Turnover methods assume a uniform retirement dispersion, in other words the
24 results of turnover analyses focus on the fundamental life statistic, unencumbered
25 by 31 possible Iowa curve retirement dispersion estimates.

26
27 **Q. IS THERE A SOURCE WHERE THE AUTHORITY COULD FIND**
28 **DETAILED EXPLANATIONS OF THESE STUDY METHODOLOGIES?**
29

³ National Association of Regulatory Utility Commissioners, Public Utility Depreciation Practices, August 1996 ("NARUC Depreciation Manual"), p. 81.

1 A. Yes. The National Association of Regulatory Utility Commissioners (“NARUC”)
2 has published a manual titled, “Public Utility Depreciation Practices,” the latest
3 edition of which is dated August 1996. This manual provides a full description of
4 the theories behind depreciation, the procedures for studying it, the application of
5 depreciation, and its effect on a utility’s financial performance.

6
7 **Q. DID THESE STUDIES YIELD PRECISE INDICATIONS OF SERVICE**
8 **LIFE?**

9
10 A. No. In many cases, the best fits were associated with curve and life combinations
11 that had inadequate retirement experience indices.

12
13 **Q. WHAT WERE THE RESULTS OF YOUR SERVICE LIFE ANALYSES OF**
14 **ATMOS’S TENNESSEE PLANT?**

15
16 A. The results of my service life analyses of Atmos’s Tennessee plant are set forth on
17 Schedule 2 of Exhibit CWK-1. In this schedule, I have presented the Atmos study
18 life and curve shape parameters which can be compared with my results.

19
20 Schedule 2 shows that there are insufficient data to conduct meaningful analyses
21 of the transmission accounts. My SPR life indication for the largest distribution
22 account, Mains, is 58 years, as compared with 55 years recommended by Mr.
23 Roff. My SPR and GMT indications for the second largest account, Services,
24 bracket Mr. Roff’s 48 years. The life indications for the meters and meter
25 installation accounts suggest that meter installations have a much longer life than
26 meters, a counter-intuitive conclusion.

27
28 With the exception of the Structures account, all of my general plant life
29 indications are longer than Mr. Roff’s selected life parameters. However, general

⁴ Id., p. 91.

1 plant data are often misleading owing to the difficulty in maintaining accurate
2 records for accounts that consist of many small pieces of equipment.

3

4 **Q. WHAT LIFE ESTIMATES DO YOU RECOMMEND FOR ATMOS'S**
5 **TENNESSEE PLANT?**

6

7 A. Given the limitations of Atmos's data and my desire to limit the areas of
8 controversy, I recommend accepting Mr. Roff's life and curve shape parameters
9 for Atmos's Tennessee properties.

10

11 **Q. WHAT WERE THE RESULTS OF YOUR STUDIES OF SHARED**
12 **SERVICES PLANT?**

13

14 A. The shared services data are much thicker and therefore more suitable for analysis
15 than the Tennessee data. As a consequence, I was able to perform actuarial
16 studies for all but three of the accounts. With one exception, my analyses confirm
17 the life parameters proposed by Mr. Roff. That exception is Account 399.03,
18 Network Hardware, where my study indicates a totally counter-intuitive 73 years.
19 This result stems from the thinness of the retirements data for this account.

20

21 **Q. WHAT LIFE ESTIMATES DO YOU RECOMMEND FOR ATMOS'S**
22 **SHARED SERVICES PLANT?**

23

24 A. I recommend accepting Mr. Roff's parameters for the shared services accounts.

25

26 **EQUAL LIFE GROUP DEPRECIATION**

27

28 **Q. WHY ARE YOU DISCUSSING EQUAL LIFE GROUP DEPRECIATION?**

29

1 A. I am discussing Equal Life Group depreciation because that is the procedure that
2 Mr. Roff has used in developing his proposed depreciation rates for Atmos's
3 plant, both the Tennessee property and the shared services plant.
4

5 **Q. WHAT IS EQUAL LIFE GROUP DEPRECIATION?**
6

7 A. Equal Life Group ("ELG") depreciation is based on the concept that the units of
8 plant within a "mass property" account do not retire at once, but rather in a
9 dispersed manner over a period of many years. ELG attempts to depreciate the
10 short-lived units within each vintage of plant over their expected life span and the
11 long-lived units over their much longer life. This is done by applying an assumed
12 retirement dispersion pattern and average service life onto the plant balance of
13 each vintage. These retirement dispersions are described by a series of "Iowa
14 Curves."
15

16 Equal life groups are not maintained as sub-accounts, nor are they even identified
17 as discrete quantities. Rather, ELG is applied by weighting the accrual rate of
18 each vintage by the hypothetical dispersion of units among equal life groups. No
19 record is kept of the actual retirements from each of these hypothetical ELGs.
20

21 **Q. WHAT IS THE ALTERNATIVE TREATMENT TO ELG?**
22

23 A. The alternative treatment is the Average Life Group ("ALG") procedure, also
24 called the Vintage Group procedure. This method of computing depreciation
25 rates is currently employed by Atmos,⁵ as well as almost all other major gas or
26 electric utilities. The ALG procedure assumes that all units of plant in a given
27 vintage have a common retirement date and therefore a common remaining life.
28

29 **Q. WHAT IS THE EFFECT OF IMPLEMENTING ELG DEPRECIATION IN**

1 **LIEU OF ALG DEPRECIATION?**

2

3 A. ELG has the effect of charging higher depreciation rates in the early years of a
4 vintage's life than ALG and lower depreciation rates in the later years. If every
5 vintage of plant throughout history contained the same amount of investment as
6 every other vintage, there would be no difference between ELG and ALG
7 accruals. That is because the accelerated depreciation on short-lived ELGs
8 would be offset by the decelerated depreciation on long-lived ELGs.

9

10 But vintages of plant are not the same size. Generally, each new vintage is larger
11 than its predecessor. This is because the system is growing, but even if there were
12 no system growth, inflation would cause the recent vintages to contain more
13 dollars than the older vintages. As a consequence, the average dollar in any plant
14 category is typically somewhat newer than the midpoint of the life span of the
15 overall plant. As a result, ELG virtually always increases depreciation rates and
16 accruals.

17

18 Q. **WHAT IS YOUR ASSESSMENT OF ELG DEPRECIATION?**

19

20 A. In theory, ELG more precisely reflects the pattern of retirements from "mass
21 property" accounts in which many units retire according to a predictable pattern
22 that can be described by an Iowa curve. For most of Atmos' plant accounts,
23 however, this procedure represents "specious precision" because the units of plant
24 within each vintage do not retire in a continuous flow consistent with an Iowa
25 curve. Certainly, this is the case with the Structures and Improvements account,
26 but it also applies to accounts that appear to reflect "mass property"
27 characteristics.

28

⁵ Atmos's current depreciation rates are based on a study of plant date December 31, 1990 and approved by the TRA in 1992. That study made no mention of ELG. In Docket No. 05-000258 Atmos submitted an SSU study that used ELG, but the TRA adopted Staff's calculation, which used ALG.

1 To illustrate, let us consider the Distribution Mains account (A/C 376), which is
2 Atmos' largest single account and the one that should show the most even
3 retirements pattern over time. In 2003, there were \$59,997 in retirements from
4 this account. In the next year, 2004, there were \$939,083 in retirements, 15 times
5 the 2003 number. Then, in 2005 retirements were \$39,288, less than a twentieth
6 the previous year. In 2006, retirements jumped again, this time to \$311,798. To
7 treat this account with the ELG procedure is improper because retirements clearly
8 do not follow the predicted pattern of the Iowa curves. Most of the other
9 accounts, being much smaller, show even greater variability to the pattern of
10 retirements.

11
12 **Q. IS ELG TYPICALLY USED TO DEPRECIATE GAS PLANT?**

13
14 A. No. ELG is generally not used by gas distribution companies in depreciating their
15 plant.

16
17 **Q. HAS ELG BEEN USED BY ANY OTHER UTILITY INDUSTRY?**

18
19 A. Yes. It has been used by the telephone industry since 1981.

20
21 **Q. HOW WAS ELG IMPLEMENTED BY THE TELEPHONE INDUSTRY?**

22
23 A. The Federal Communications Commission ("FCC") authorized telephone
24 companies to employ ELG in its Order of December 5, 1980 strictly on a going-
25 forward basis beginning with 1981 vintages of plant.⁶ All existing vintages would
26 continue to be depreciated throughout their remaining lives on an ALG basis.
27 This going-forward approach was necessitated by the absence of depreciation
28 reserve records on an account and vintage basis and on the impropriety of
29 introducing a new depreciation procedure "mid-stream" during the life of a
30 vintage. The FCC also required that all depreciation rates be re-prescribed every

⁶ Report and Order, FCC Docket No. 20188, December 5, 1980.

1 three years to reflect changed parameters and the fact that the ELG depreciation
2 rate for each vintage of plant declines each year throughout its life. The FCC also
3 allowed telephone companies to submit “technical updates” to these ELG rates
4 between the triennial re-prescriptions so long as they did not change the basic life,
5 salvage and survivor curve parameters.
6

7 **Q. IF THE TRA WERE TO AUTHORIZE THE USE OF ELG FOR ATMOS,**
8 **WOULD THE SAME IMPLEMENTATION PROCEDURES BE**
9 **APPROPRIATE?**
10

11 A. Yes, although I do not recommend ELG. Like AT&T (which in 1981 included all
12 Bell local telephone companies), Atmos has no record of book depreciation
13 accruals by vintage of plant. It is no more appropriate now to change depreciation
14 procedures in mid-stream than it was in 1980. Depreciation is a process of
15 allocating the recovery of original investment rationally over the life of the plant.
16 It is altogether inappropriate to use one method, ALG, for the first part of a
17 vintage’s life and then change to a more accelerated procedure, ELG, for the latter
18 portion of its life. This practice would not be a “rational” allocation of recovery
19 over the plant’s life, and it would result in a severe intergenerational inequity.
20 Through the application of the remaining life technique, it would require the
21 generation of ratepayers immediately following the implementation of ELG to
22 recover the shortfall in depreciation reserve that ELG creates when superimposed
23 on a pre-existing ALG depreciation program.
24

25 **Q. WOULD THERE BE ANY FURTHER PROBLEMS ASSOCIATED WITH**
26 **IMPLEMENTING ELG?**
27

28 A. Yes. Under ELG, the depreciation rate for each vintage declines each year as the
29 short-lived life groups retire. This means that the each year’s depreciation rate is
30 no longer appropriate for the next year. The FCC solved this problem by
31 conducting full-scale reviews of depreciation rates every three years and by

1 allowing the companies to file for annual technical updates. The TRA would
2 have to do the same thing. If the TRA were to allow ELG, it could spend
3 considerably more time on depreciation matters than it does now.
4

5 **Q. WHAT IS YOUR RECOMMENDATION WITH RESPECT TO ELG**
6 **DEPRECIATION?**
7

8 A. I recommend that the TRA reject Atmos' application for ELG depreciation and
9 retain the existing ALG procedure.
10

11 **SEPARATION OF DEPRECIATION FROM REMOVAL COST ACCRUAL**
12

13 **Q. WHY ARE YOU RECOMMENDING THAT ATMOS'S DEPRECIATION**
14 **RATES AND ACCRUALS BE SEPARATED BETWEEN PLANT-ONLY**
15 **DEPRECIATION AND REMOVAL COSTS?**
16

17 A. This separation is a necessary first step towards rationalizing the processes for
18 recovering capital investment, i.e. depreciation, and for accruing the cost of
19 removing plant. As I shall discuss, Atmos has already adopted this separation for
20 financial reporting purposes. I propose that this separation be adopted for
21 regulatory purposes as well. Depreciation serves a totally different function than
22 removal cost allowances. Depreciation recovers past investment, while removal
23 cost allowances seek to build a reserve against future costs.
24

25 **Q. WHAT HAS BEEN THE RELATIONSHIP BETWEEN DEPRECIATION**
26 **AND REMOVAL COSTS IN THE PAST?**
27

28 A. All Tennessee utilities, including Atmos, have employed a procedure that
29 combines depreciation, salvage and removal costs. This procedure adjusts
30 depreciation rates to capture an estimate of future "net salvage" costs. Net
31 salvage is the difference between positive salvage and removal costs. In a gas

utility, there is very little positive salvage, so most “net salvage” is negative, which means that the depreciation rate is increased to capture future removal costs.

The procedure begins with a “net salvage ratio,” which is the ratio of net salvage to plant in service. This ratio is used to inflate (or deflate in the case of positive salvage) the amount to be recovered through depreciation. The “whole life” depreciation rate is calculated as follows:

$$\frac{\text{Plant investment} \times (1 - \text{net salvage ratio})}{\text{Average service life}} = \text{Depreciation rate}$$

Most utilities use the remaining life technique, but the effect of the net salvage ratio is the same:

$$\frac{(\text{Plant investment} \times (1 - \text{net salvage ratio})) - \text{Depreciation reserve}}{\text{Remaining life}} = \text{Annual accrual}$$

$$\frac{\text{Annual accrual}}{\text{Plant investment}} = \text{Depreciation rate}$$

Q. WHY IS IT APPROPRIATE TO CHANGE THIS PROCEDURE NOW?

A. Recent pronouncements from the Financial Accounting Standards Board (“FASB”), the Federal Energy Regulatory Commission (“FERC”) and the Securities and Exchange Commission (“SEC”) cast considerable doubt on the traditional practice of capturing net removal costs through adjustments in the depreciation rates. Furthermore, there are serious problems with the traditional method of calculating net salvage allowances, which I will discuss later in this testimony.

1. FINANCIAL ACCOUNTING STANDARDS BOARD

1
2 **Q. WHAT PRONOUNCEMENTS FROM FASB CAST DOUBT ON THE**
3 **TRADITIONAL PRACTICE OF CAPTURING NET REMOVAL COSTS**
4 **THROUGH ADJUSTMENTS IN DEPRECIATION?**

5
6 A. In June 2001, FASB promulgated Statement of Financial Accounting Standards
7 No. 143 (“SFAS 143”), *Accounting for Asset Retirement Obligations*. In March
8 2005, it issued FASB Interpretation No. 47, *Accounting for Conditional Asset*
9 *Retirement Obligations – an Interpretation of FASB Statement No. 143*.

10
11 **Q PLEASE DESCRIBE SFAS 143.**

12
13 A. SFAS 143 addresses long-lived assets for which there are legal obligations to
14 incur retirement costs. A legal obligation is defined as “an obligation that a party
15 is required to settle as a result of an existing or enacted law, statute, ordinance, or
16 written or oral contract or by legal construction of a contract under the doctrine of
17 promissory estoppel.”⁷ A good example of such an obligation is the requirement
18 to dismantle, entomb or decontaminate a nuclear generating plant.

19
20 When a company finds that it has a legal obligation that fits this description, it
21 must declare the retirement cost as a liability on its balance sheet. That liability is
22 not the ultimate cost of the retirement, but the “fair value” of that cost, defined as
23 the cost of a contract with an independent party to retire the asset, negotiated
24 when the asset is installed. In effect, this fair value is the present value of the
25 future cost, using as the discount factor the risk-adjusted interest rate when the
26 liability was recognized. The company also adds a value corresponding to that
27 liability to the asset being booked. The initial fair value estimate is considered to
28 be part of the original cost of the asset, which in turn is depreciated over the
29 asset’s life.
30

⁷ SFAS 143, ¶2

1 The annual expense associated with this liability consists of two parts. One is the
2 depreciation of the liability, which is the present value of the liability divided by
3 the life of the asset. The second expense is the annual accretion in the present
4 value of the liability, similar to interest expense.

5

6 **Q. CAN YOU DESCRIBE HOW THIS PROCESS WORKS?**

7

8 A. Assume that Atmos installs a section of main that it expects to last for 40 years.
9 Assume further that Atmos is legally obligated to remove that main when it
10 retires. The estimated removal cost at the time of removal is \$1 million. Atmos
11 would record an asset and book a liability for this retirement cost, not at \$1
12 million, but at \$1 million discounted at the risk-adjusted interest rate. If the risk-
13 adjusted interest rate over 40 years is 5 percent, then the asset and the liability
14 would be booked as \$142,046 ($\$1 \text{ mil} / 1.05^{40}$)

15

16 Each year, Atmos would show two items of expense. The first would be the
17 depreciation of the asset, $\$142,046 / 40 \text{ years} = \$3,551$. The second expense would
18 be the annual accretion in the present value of the liability. In this instance, it
19 would be \$1 million times $1/1.05^{39} - 1/1.05^{40}$. This is \$1 million x $(0.149148 -$
20 $0.142046 = .00710)$ or \$7,100. Total expense in the first year of operation would
21 be $\$3,551 + \$7,100 = \$10,651$.

22

23 The first expense item, the depreciation of the initial Asset Retirement Obligation
24 (“ARO”), stays the same each year throughout the asset’s life. The second item,
25 the annual accretion in the liability, increases as the present value factors increase.

26

27 **Q. WHAT IS FASB INTERPRETATION NO. 47?**

28

29 A. FASB Interpretation 47 was issued in March 2005 to clarify “that the term
30 *conditional asset retirement obligation* as used in FASB Statement 143...refers to
31 a legal obligation to perform an asset retirement activity in which the timing and

1 (or) method of settlement are conditional on a future event that may or may not be
2 within the control of the entity.” The Interpretation clarifies that an entity is
3 required to recognize a liability for the fair value of a conditional asset retirement
4 obligation when incurred if the liability’s fair value can reasonably be estimated.
5

6 **Q. DOES FASB INTERPRETATION NO. 47 SIGNIFICANTLY CHANGE**
7 **THE UTILITIES’ INTERPRETATION OF SFAS 143?**
8

9 A. It should cause the utilities to reconsider their evident dismissal of what appear to
10 be legal obligations whose specific date of retirement is indeterminate. The
11 Interpretation emphasizes that if there is any doubt about the date of the
12 retirement, that doubt should be reflected in the discount factor. It should not
13 become an excuse for disregarding the obligation for purposes of SFAS 143.
14

15 **Q. DOES SFAS 143 DEAL ONLY WITH LEGAL RETIREMENT**
16 **OBLIGATIONS?**
17

18 A. Most of SFAS 143 deals with legal retirement obligations. However, in the
19 “Background Information and Basis for Conclusions” section of the document is
20 found a paragraph that address non-legal obligations, and specifically non-legal
21 obligations of rate-regulated entities. Paragraph B73 of that section states as
22 follows:
23

24 Many rate-regulated entities currently provide for the costs related to
25 asset retirement obligations in their financial statements and recover
26 those amounts in rates charged to their customers. Some of those
27 costs related to asset retirement obligations are within the scope of
28 this Statement; others are not with in the scope of this Statement
29 and, therefore, cannot be recognized as liabilities under its
30 provisions. The objective of including those amounts in rates
31 currently charged to customers is to allocate costs to customers over
32 the lives of those assets. The amount charged to customers is
33 adjusted periodically to reflect the excess or deficiency of the
34 amounts charged over the amounts incurred for the retirement of
35 long-lived assets. The Board concluded that if asset retirement costs

1 are charged to customers of rate-regulated entities but no liability is
2 recognized, a regulatory liability should be recognized if the
3 requirements of Statement 71 are met. (emphasis added)
4

5 Thus, the FASB states quite clearly that a separate regulatory liability should be
6 recognized for non-legal asset retirement obligations if the costs of those
7 obligations are being recovered in rates.
8

9 **Q. WHAT IS THE RELEVANCE OF SFAS 143 TO THE ISSUES IN THIS**
10 **PROCEEDING?**

11
12 A. There are three ways in which SFAS 143 is relevant to this proceeding. First,
13 with respect to legal AROs, SFAS 143 establishes a clear-cut procedure for
14 recording these obligations on Atmos's balance sheet and a procedure for
15 recognizing them in income statements. This Authority does not necessarily have
16 to adopt these procedures for ratemaking purposes. However, I believe there
17 should be a clear and demonstrable reason for overriding SFAS 143 if the
18 Authority decides not to use these accounting practices for regulation. I will
19 discuss this issue in more detail later in this testimony.
20

21 The second way in which SFAS 143 is relevant relates to paragraph B73, quoted
22 above. It is clear that the accounting community has determined that even non-
23 legal retirement obligations should be separately identified as regulatory
24 liabilities.
25

26 Finally, SFAS 143 sets forth the principles that might govern the recognition and
27 accrual of reserves for future retirement obligations, that is, future removal and
28 dismantlement costs. Specifically, SFAS 143 establishes that future costs should
29 not be recognized in the current period at their future value, but rather at their
30 present value.
31

32 **2. FEDERAL ENERGY REGULATORY COMMISSION**

1
2 **Q. WHAT PRONOUNCEMENTS OF THE FERC CAST DOUBT ON THE**
3 **CONTINUED RECOVERY OF REMOVAL COSTS THROUGH**
4 **DEPRECIATION CHARGES?**

5
6 A. On April 9, 2003, FERC issued Order No. 631. It relates to accounting, financial
7 reporting, and rate filing requirements for asset retirement obligations.
8

9 **Q. PLEASE DESCRIBE FERC ORDER 631.**

10
11 A. Most of FERC Order 631 deals with the effects of SFAS 143, which prescribes
12 the treatment of future costs associated with legal obligations to retire assets. As
13 noted, that standard requires entities to declare those future obligations as
14 liabilities on their balance sheets, and it establishes procedures for recognizing
15 those obligations on income statements.
16

17 FERC declined to apply the SFAS 143 standards to removal costs that were not
18 legal obligations. It did, however, require all jurisdictional entities to maintain
19 separate records of costs of removal for non-legal retirement obligations when
20 allowances for these costs could be identified. Accordingly, the FERC added a
21 new paragraph 2C to its instructions with regard to Account 108 – “Accumulated
22 Provision for Depreciation of Electric Utility Plant:”

23 Separate subsidiary records shall be maintained for the amount of
24 accrued cost of removal other than legal obligations for the
25 retirement of plant recorded in account 108, Accumulated
26 provision for depreciation of electric utility plant.
27

28 This new provision necessarily requires utilities to identify separately annual
29 additions and deletions from this account. Each utility must show the annual
30 accrual for removal costs and the annual amount of removal costs incurred.
31

1 This requirement is a major change from the previous treatment of removal costs.
2 In the past, removal costs have usually been incorporated into depreciation.
3 Removal cost allowances were recorded as part of depreciation expense, and plant
4 removal expenditures were charged to depreciation reserves. Only through
5 careful analysis has it been possible to identify how many dollars of annual
6 depreciation went to recover past capital expenditures – true depreciation – and
7 how many dollars were accrued to offset future removal costs.

8

9 **Q. WHAT IS THE RELEVANCE OF FERC ORDER 631 TO THE ISSUES IN**
10 **THIS PROCEEDING?**

11

12 A. FERC Order 631 builds into the regulatory accounting system the requirements of
13 SFAS 143, setting the stage for regulators to apply SFAS 143 for ratemaking
14 purposes. Additionally, FERC Order 631 establishes a requirement to account
15 separately for non-legal retirement obligations, specifically to separate
16 depreciation reserves between capital recovery and reserves for future removal
17 costs.

18

19 Several qualifiers are appropriate, however. First, FERC's accounting
20 pronouncements are not binding on the TRA. The TRA can prescribe its own
21 accounting standards. Additionally, it must be acknowledged that FERC has not
22 yet decoupled removal costs accounting from depreciation. While it requires
23 utilities to maintain subsidiary records of removal cost accruals, those accruals are
24 still captured in the depreciation reserve.

25

26 **3. SECURITIES AND EXCHANGE COMMISSION**

27

28 **Q. WHAT DIRECTIVES FROM THE SEC ARE RELEVANT TO THE**
29 **ISSUES IN THIS PROCEEDING?**

30

1 A. The accounting profession was apparently uncertain as to the interpretation of
2 paragraph B73 of SFAS 143, and the firm of Deloitte and Touche took the lead in
3 soliciting an interpretation from the SEC. The SEC then issued directives that all
4 rate-regulated utilities must report as “regulatory liabilities” the accrual of
5 reserves against future removal costs.

6
7 **Q. PLEASE DEFINE THE TERM “LIABILITIES.”**

8
9 A. Liabilities are defined by FASB as “probable future sacrifices of economic
10 benefits arising from present obligations of a particular entity to transfer assets or
11 provide services to other entities in the future as a result of past transactions or
12 events.”⁸

13
14 **Q. PLEASE DEFINE “REGULATORY LIABILITIES.”**

15
16 A. Paragraph 11 of Statement of Financial Accounting Standards No. 71 describes
17 regulatory liabilities as follows:

18 Rate actions of a regulator can impose a liability on a regulated
19 enterprise. Such liabilities are usually obligations to the
20 enterprise’s customers. The following are the usual ways in which
21 liabilities can be imposed and the resulting accounting:

- 22
23 a. A regulator may require refunds to customers. Refunds that meet
24 the criteria of paragraph 8 (accrual of loss contingencies) of FASB
25 Statement No. 5, *Accounting for contingencies*, shall be recorded
26 as liabilities and as reductions of revenue or as expenses of the
27 regulated enterprise.
28
29 b. A regulator can provide current rates intended to recover costs that
30 are expected to be incurred in the future with the understanding
31 that if those costs are not incurred future rates will be reduced by
32 corresponding amounts. If current rates are intended to recover
33 such costs and the regulator requires the enterprise to remain
34 accountable for any amounts charged pursuant to such rates and
35 not yet expended for the intended purpose, the enterprise shall not
36 recognize as revenues amounts charged pursuant to such rates.

⁸ FASB Concepts Statement No. 6, *Elements of Financial Statements*.

Those amounts shall be recognized as liabilities and taken to income only when the associated costs are incurred.

- c. A regulator can require that a gain or other reduction of net allowable costs be given to customers over future periods. That would be accomplished, for rate-making purposes, by amortizing the gain or other reduction of net allowable costs over those future periods and reducing rates to reduce revenues in approximately the amount of the amortization. If a gain or other reduction of net allowable costs is to be amortized over future periods for rate-making purposes, the regulated enterprise shall not recognize that gain or other reduction of net allowable costs in income of the current period. Instead, it shall record it as a liability for future reductions of charges to customers that are expected to result.

Q. HOW WOULD YOU DEFINE THE REGULATORY LIABILITY FOR REMOVAL COSTS?

- A. This liability represents funds collected from ratepayers that the utility is expected to spend in the future to remove or dismantle plant. If it appears that the utility will not spend these funds for their intended purpose, then it should refund them to ratepayers by means of amortization that is recognized in rates.

Q. DOES ATMOS RECOGNIZE ITS REMOVAL COST RESERVE AS A REGULATORY OBLIGATION IN ITS FINANCIAL REPORTS?

- A. Yes. Atmos's reports that as of September 30, 2006, it recognized \$291.6 million on a company-wide basis as a regulatory liability for removal costs.⁹

Q. WHAT DO YOU CONCLUDE FROM THE FOREGOING SURVEY OF ACCOUNTING PRONOUNCEMENTS?

- A. I conclude that the utilities in general, and Atmos in particular, are now being required to separate their accounting for removal costs from their accounting for

⁹ Response to AG Data Request 2-57.

1 depreciation, and that they must record the outstanding removal cost reserve as a
2 regulatory liability on their financial books.

3

4 **Q. WHAT RECOMMENDATION DO YOU DRAW FROM THIS**
5 **CONCLUSION?**

6

7 A. I recommend that the TRA require Atmos to separate the accounting for removal
8 costs from the accounting for depreciation and to recognize accrued removal cost
9 reserves as regulatory liabilities for ratemaking purposes.

10

11 First, Atmos is already performing this separate accounting by reason of SFAS
12 143, FERC Order 631 and the SEC directives.

13

14 Second, the separation of removal cost accounting from depreciation will provide
15 a much needed improvement in the transparency of Atmos's accounting reports.
16 Heretofore, the incorporation of net salvage into depreciation rates has obscured
17 its impact on accrual rates. Except through careful and detailed analysis it has
18 been difficult to determine how much of the annual depreciation charge was
19 related to recovery of capital – pure depreciation – and how much was accrued
20 against future removal cost. It was virtually impossible to determine how much
21 of the depreciation reserve related to removal costs and how much was recovered
22 capital. With the total separation of removal cost accounting from depreciation,
23 the Authority will have a very clear idea of the relative impact of these two very
24 different functions.

25

26 Third, the greater transparency of the regulatory liability treatment of removal
27 cost accrual will enhance the ability of the Authority to monitor these accruals so
28 that if the money collected from ratepayers is not spent, it can be refunded, or
29 alternatively, if the costs exceed the funds collected, adjustments can be made in
30 the accruals to compensate the utility.

31

1 Fourth, the function of depreciation is very different from the function of removal
2 cost accrual. Depreciation recovers costs that have already been incurred.
3 Removal cost accrual is intended to build reserves for costs that have yet to be
4 incurred. More importantly, depreciation deals with historical costs that are
5 known and certain, while removal cost accrual deals with future costs that are
6 unknown and estimated. Given these very disparate characteristics, it is
7 altogether appropriate that these two accounting activities be separated entirely.

8

9 **Q. HAVE YOU CALCULATED SEPARATE DEPRECIATION AND**
10 **REMOVAL COST RATES?**

11

12 A. Yes. Those rates are presented in Schedule 1 of Exhibit CWK-1. In order to
13 calculate those rates, it is necessary to separate the removal cost reserves from the
14 true depreciation reserves. I show this separation on Schedule 3 of Exhibit CWK-
15 1. In response to a data request, Atmos provided the calculation of the removal
16 cost reserve that it presents in its financial reports. That calculation showed the
17 proportion of each Tennessee account's depreciation reserve that should be
18 allocated to the removal cost reserve. Those proportions are presented on column
19 C of Schedule 3. When applied to all of the relevant accounts, the Tennessee
20 removal cost reserve comes to \$18,773,453.

21

22 **CALCULATION OF REMOVAL COST ALLOWANCES**

23

24 **Q. WHAT DO YOU MEAN BY "REMOVAL COSTS?"**

25

26 A. Removal costs are any costs that are required to retire a unit of plant. They
27 include dismantlement, physical removal and restoration of the site to a
28 permanent, stable condition.

29

30 **Q. DOES ATMOS INCUR REMOVAL COSTS?**

31

1 A. Yes. On a company-wide basis, it incurs removal costs for most of its
2 transmission and distribution plant accounts other than land and rights of way. It
3 has reported Tennessee-specific removal costs for four of its distribution plant
4 accounts.

5

6 **Q. HOW DOES ATMOS'S DEPRECIATION WITNESS, MR. ROFF, TREAT**
7 **REMOVAL COSTS?**

8

9 A. Mr. Roff produces a ratio of future removal costs to the plant balance for each
10 account that incurs these costs. He then inflates the amount to be recovered by
11 that ratio. If the removal cost ratio is, for example, 50 percent, Mr. Roff increases
12 the amount to be recovered by 50 percent. In this manner, he produces
13 depreciation rates that recover both the original investment and the expected cost
14 to remove that investment.

15

16 **Q. DO YOU AGREE WITH THIS TREATMENT?**

17

18 A. No. As I have discussed, recent accounting changes have mandated that the
19 accrual of reserves for removal costs be separated from the recovery of original
20 investment. This calls for separate depreciation and removal cost rates. The
21 appropriate accrual for removal costs is through expense items separate from
22 depreciation. The appropriate treatment of accrued removal cost reserves is to
23 recognize them as regulatory liabilities on the Company's books for purposes of
24 regulation.

25

26 **Q. HOW LARGE ARE THE REMOVAL COST RATIOS RECOMMENDED**
27 **BY MR. ROFF?**

28

29 A. They are very large. Mr. Roff's removal cost ratios are presented in column 9 of
30 his Schedule 2 in his Exhibit DSR-3. These ratios are characterized as "net
31 salvage." When the removal cost is higher than the expected salvage value, the

1 net of the two is negative, which is why all these ratios are presented as negative
2 values. As can be seen, these ratios range as high as negative 55 percent for the
3 meters and meter installation accounts. A negative 55 percent net salvage ratio
4 means that for every dollar of depreciation recovered, another 55 cents is accrued
5 against future removal costs.

6

7 **Q. WHAT IS THE AGGREGATE AMOUNT OF ANNUAL REMOVAL COST**
8 **ACCRUALS THAT WOULD RESULT FROM MR. ROFF'S PROPOSED**
9 **DEPRECIATION RATES?**

10

11 A. Schedule 4 in Exhibit CWK-1 shows the accruals that Mr. Roff proposes based on
12 September 30, 2006 plant in service. The accrual rates in column D are taken
13 from Schedule 2 in Mr. Roff's Exhibit DSR-3. The accruals are presented in
14 column E. In total, they come to an annual expense to ratepayers of \$1,786,097.

15

16

17 **Q. HOW LARGE ARE THE ACTUAL REMOVAL COSTS THAT ATMOS**
18 **HAS EXPERIENCED?**

19

20 A. The actual annual removal cost expenditures, net of salvage, for the years 2002
21 through 2006 are shown in Schedule 5 of Exhibit CWK-1. The average removal
22 cost expenditure for these five years has been \$250,647.

23

24 **Q. HOW DO MR. ROFF'S PROPOSED REMOVAL COST ACCRUALS**
25 **COMPARE WITH THE ACTUAL REMOVAL COST EXPERIENCE?**

26

27 A. In the last column of Schedule 4, I show that the excess of Mr. Roff's proposed
28 removal cost accruals over average removal cost expenditures is \$1,535,450. Mr.
29 Roff would collect removal cost accruals that are seven times actual removal cost
30 expenditures.

31

1 **Q. HOW DOES MR. ROFF DERIVE SUCH LARGE REMOVAL COST**
2 **ACCRUALS WHEN THE ACTUAL EXPERIENCED REMOVAL COSTS**
3 **ARE SO MUCH LESS?**

4
5 A. Mr. Roff uses a procedure that I call the Traditional Inflated Future Cost
6 Approach (“TIFCA”). For each major category of plant, he compares the original
7 cost of retirements during recent years with the experienced costs of removal
8 during those same years. The ratio of the removal costs to plant retirements
9 becomes the removal cost ratio. As Mr. Roff’s report indicates, this ratio can be
10 as high as 55 percent. These ratios are used to develop annual removal cost rates.
11 When those rates are applied to all plant in service as of the September 30, 2006,
12 the result is an annual accrual of almost \$1.89 million.

13
14 The reason for these very high removal cost ratios is that Mr. Roff is comparing
15 dollars of very different value. The numerator of the removal cost ratio is
16 recently incurred removal costs covering the years since about 2001. The
17 denominator of the removal cost ratio is the original cost of the plant retired.
18 Those costs can be quite old. The average service life of a main, for example, is
19 55 years. If a 55 year-old main is retired, its original cost is expressed in 1951
20 dollars. In 1951, the dollar was worth many times its present value.

21
22 With many low-valued dollars in the numerator and a few high-valued dollars in
23 the denominator, the removal cost ratio is very high. Overall, these high ratios
24 result in proposed removal cost accruals seven times actual removal cost
25 expenditures.

26
27 **Q. WHAT IS THE RATIONALE BEHIND TIFCA?**

28
29 A. The rationale underlying TIFCA is set forth on page 157 of Public Utility
30 Depreciation Practices, published by the National Association of Regulatory
31 Utility Commissioners in August 1996:

Historically, most regulatory commissions have required that both gross salvage and cost of removal be reflected in depreciation rates. The theory behind this requirement is that, since most physical plant placed in service will have some residual value at the time of its retirement, the original cost recovered through depreciation should be reduced by that amount. Closely associated with this reasoning are the accounting principle that revenues be matched with costs and the regulatory principle that utility customers who benefit from the consumption of plant pay for the cost of that plant, no more, no less. The application of the latter principle also requires that the estimated cost of removal of plant be recovered over its life. (emphasis supplied.)

The TIFCA procedure purports to forecast the future cost of removal associated with plant currently in service, and it charges that cost to the ratepayers that use that plant.

Q. IS THIS RATIONALE VALID?

A. The rationale is arguably valid for large, single units of plant, such as power plants, and then only when the future costs are discounted to the present. It is highly questionable for “mass property” accounts, such as ATMOS’s electric and gas distribution accounts, for two reasons:

- The procedure charges present ratepayers with the undiscounted cost of future removal activities, and
- When applied to mass property accounts, the TIFCA procedure results in a permanent and growing advance of funds from ratepayers to the utility.

Q. WHY DO YOU SAY THAT TIFCA FAILS TO RECOGNIZE THE PRESENT VALUE OF FUTURE COSTS?

A. The TIFCA procedure charges ratepayers now for the projected cost of removal that presumably will be incurred at the time of plant’s retirement. Under Mr. Roff’s proposal, when Atmos installs a meter in 2007, it would add a removal cost allowance of 55 cents to each dollar of construction cost recovered. Yet that 55

1 cents will not be spent, on average, for another 36 years, or until the year 2043. A
2 dollar spent in 2043 is worth far less than a dollar collected in 2007. Not only
3 will inflation erode the value of the 2043 dollar, but the holder of the dollar has
4 the benefit of its earning (or spending) value in the intervening 35 years.

5

6 The TIFCA procedure simply ignores this relationship between present and future
7 dollars. It assumes that a dollar collected now has exactly the same value as a
8 dollar spent 36 years from now. Through the mechanism of composite
9 depreciation rates, Mr. Roff would have Atmos collect these 2043 dollars from
10 ratepayers starting next year.

11

12 **Q. WHY DO YOU SAY THAT TIFCA RESULTS IN A PERMANENT AND**
13 **GROWING ADVANCE OF FUNDS FROM RATEPAYERS TO THE**
14 **UTILITY?**

15

16 A. Two arguments are advanced in defense of TIFCA. The first and most
17 conventional argument focuses on the individual assets. When an individual asset
18 is placed in service, it carries with it an obligation to remove it, and with it an
19 expected future cost. According to this argument, the “matching principle”
20 requires that the future removal cost be recovered over the life of the asset.

21

22 The second argument in support of TIFCA is that removal cost allowances build
23 up the reserve, which in turn reduces the net investment rate base. The reduced
24 rate base lowers the requirement for return and income taxes. The argument holds
25 that over time, this reduction cancels out the increase in revenue requirement
26 represented by the excessive depreciation expenses and thereby conveys to
27 ratepayers the present value effect of their contributions to the removal cost
28 reserve.

29

30 Neither of these arguments recognizes that removal cost accruals are flows of
31 money generated by the installation and retirement of large numbers of individual

1 items in mass property accounts. The flows do not – and never will -- match. The
2 inflow of newly installed plant always exceeds the outflow of retired plant, and
3 there is always more new plant than old plant. The dollar value of Atmos's plant
4 is always expanding. Atmos's plant is growing, but even if it were not, inflation
5 will cause the dollars added each year to exceed the dollars retired. As a result,
6 there is always more new plant generating higher removal cost charges than old
7 plant that has accumulated removal cost reserve. Ratepayers never catch up.

8
9 The result is an ever-expanding advance from ratepayers to the utility for "future
10 costs" that, when incurred, will by then be overwhelmed by further accruals for
11 yet greater costs farther into the future. The effect is a permanent and ever-
12 growing loan from ratepayers to the utility. As of the September 30, 2006, that
13 loan was \$18.77 million, but this amount is certain to grow as long as the TIFCA
14 approach to accruing removal cost reserves is retained.

15
16 **Q. BUT ISN'T THE ACCRUAL OF REMOVAL COST RESERVE**
17 **ANALOGOUS TO THE ACCRUAL OF DEPRECIATION RESERVES?**

18
19 A. No. Depreciation is the process of restoring capital that investors effectively
20 loaned to ratepayers for costs that have already been incurred. Removal cost
21 accruals are advances from ratepayers to the company and its investors for costs
22 that have not been incurred.

23
24 **Q. WHAT IS THE SOLUTION TO THE FIRST WEAKNESS OF TIFCA, ITS**
25 **FAILURE TO RECOGNIZE THE PRESENT VALUE OF FUTURE**
26 **COSTS?**

27
28 A. The solution to the failure of TIFCA to recognize the present value of future costs
29 is to apply the SFAS 143 procedures to the Company's estimates of future
30 removal costs. This requires forecasting the value of future removal costs, then
31 discounting those costs back to the time the plant was installed, depreciating those

1 discounted values, and incorporating a factor for the annual increment in the
2 current present value of the discounted removal costs.

3

4 **Q. HAVE YOU APPLIED THIS APPROACH TO ATMOS'S TENNESSEE**
5 **PLANT?**

6

7 A. Yes. Schedule 6 in Exhibit CWK-1 develops annual SFAS 143 expenses based on
8 the simplifying assumption that each account is treated as though it were a single
9 asset. Column B duplicates Mr. Roff's proposed net salvage factors, and column
10 C shows the total amount of future net salvage that must be recovered. Column
11 D presents Mr. Roff's average service lives for each account, which then become
12 the basis for discounting the total removal cost values back to the average date of
13 placement of the plant. That discounted value is presented in column E using
14 7.96 percent, the capital cost approved for Atmos Docket No. 05-0258, as the
15 discount factor.

16

17 Columns F and I present the expense elements under the SFAS 143 methodology.
18 Column F is a straight-line depreciation of the discounted removal cost in column
19 E using Mr. Roff's average service lives. Column I is the current year's
20 increment in the discount factor times the total undiscounted value of the removal
21 cost to be recovered. Column J presents the sum of the two SFAS 143 expense
22 elements. Finally, column K shows the accrual rates that result from this
23 procedure.

24

25 **Q. WHAT IS THE SOLUTION TO THIS PROBLEM OF AN EVER-**
26 **GROWING LOAN FROM RATEPAYERS TO THE UTILITY?**

27

28 A. The solution to this problem is to use a rolling average of the last five years'
29 actual removal costs as the basis for quantifying annual removal cost allowances.
30 This average, computed for each account, is ratioed to the account balance to
31 derive the annual removal cost rates for each account.

1

2 This procedure preserves the practice of accruing removal cost reserves by means
3 of rates applied to plant balances, but it effectively halts any further increase in
4 the reserves already accumulated.

5

6 **Q. HAVE YOU CALCULATED THE ACCRUAL RATES THAT WOULD BE**
7 **APPROPRIATE UNDER THIS APPROACH?**

8

9 A. Yes. Schedule 5 in Exhibit CWK-1 shows the rates and accruals using the five
10 year average approach for the four Atmos distribution plant accounts for which I
11 have removal cost data. Columns B through F present the net removal costs for
12 each account each year during the five years 2002 through 2006. Column G sums
13 these annual removal costs, and column H converts these totals to average annual
14 amounts, and the final column presents the ratios of these amounts to the plant
15 balances.

16

17 Schedule 5 in Exhibit CWK-1 shows that total accruals under this procedure come
18 to approximately \$250,647 annually, based on September 30, 2006 plant balances.

19

20 **Q. ARE THERE ANY OTHER JURISDICTIONS THAT USE THE TWO**
21 **APPROACHES YOU HAVE PROPOSED FOR TREATING REMOVAL**
22 **COSTS?**

23

24 A. Yes. Within the last month, the Maryland Public Service Commission adopted
25 the present value approach in two decisions involving the Potomac Electric Power
26 Company¹⁰ and the Delmarva Light & Power Company.¹¹

27

28 The five year average approach was adopted last year by the Delaware Public
29 Service Commission for the Delmarva Light & Power Company.¹² This

¹⁰ Maryland P.S.C. Order No. 81517, Case No. 9092, July 19, 2007.

¹¹ Maryland P.S.C. Order No. 81518, Case No. 9093, July 19, 2007.

1 approach is used for all utilities in Pennsylvania. It has been adopted by the New
2 Jersey Board of Public Utilities for Rockland Electric Company,¹³ Atlantic City
3 Electric Company,¹⁴ Jersey Central Power & Light Company¹⁵ and Public Service
4 Electric & Gas Company.¹⁶ A slight modification of it has been approved for the
5 past 16 years by the Georgia Public Service Commission for the Georgia Power
6 Company.¹⁷

7
8 **Q. WHAT ARE THE RELATIVE MERITS OF THESE TWO**
9 **APPROACHES?**

10
11 A. The present value approach is conceptually more appropriate because it conforms
12 with generally accepted account principles and because it allocates the cost of
13 removal to the plant over its life in “real” rather than “nominal” dollars. It suffers
14 from the continued requirement to forecast future removal costs and, because
15 plant is always growing, it perpetuates the buildup of a permanent and growing
16 loan from ratepayers to the utility.

17
18 The five-year-average approach accrues removal cost reserves only at the rate that
19 removal costs are experienced, and it has the advantage of being rooted in real
20 cost data, not somewhat conjectural estimates of future costs. Its weakness is
21 conceptual. It charges current ratepayers only for the cost of current removal
22 activities and builds no reserve for the future.

23
24 **Q. WHICH APPROACH DO YOU RECOMMEND?**

¹² Delaware P.S.C. Order No. 6930, Case No. 05-304, signed June 6, 2006, ¶ 174.

¹³ I/M/O Rockland Electric Company, BPU Docket Nos. ER02080614 and ER02100724, Initial Decision, June 10, 2003 and Summary Order, July 31, 2003.

¹⁴ I/M/O Atlantic City Electric Company, BPU Docket Nos. ER03020110, ER04060423, EO03020091 and EM02090633, Decision and Order Adopting Initial Decision and Stipulation of Settlement, May 26, 2005.

¹⁵ I/M/O Jersey Central Power & Light Company, BPU Docket Nos. ER0208056, ER0208057, EO02070417 and ER02030173, Summary Order, August 1, 2003.

¹⁶ I/M/O Public Service Electric and Gas Company, BPU Docket No. GR05100845, Decision and Order Adopting Initial Decision and Stipulation of Settlement, November 11, 2006, p. 4.

¹⁷ Georgia PSC Docket No. 4007-U, 1991

1
2 A. Normally, I would recommend the five-year average approach because I believe it
3 is fairer to ratepayers. In this case, however, I cannot make that recommendation
4 because of the inadequacies of Atmos's removal cost data. The Company has
5 reported no removal costs for transmission plant even though such costs
6 presumably will be incurred when the plant is retired. It reports removal costs for
7 only four of the distribution plant accounts even though the Company apparently
8 expects to incur removal costs for seven accounts.

9
10 For these reasons, I recommend the present value approach to removal costs
11 accrual. I have replicated the removal cost allowances developed in Schedule 6 of
12 Exhibit CWK-1 in Schedule 1, which shows my recommended rates and accruals.

13
14 **THIRD PARTY REIMBURSEMENTS**

15
16 **Q. WHAT ARE THIRD PARTY REIMBURSEMENTS?**

17
18 A. Third party reimbursements are moneys paid to Atmos, usually by government
19 agencies such as the highway department, for the cost of moving facilities for
20 purposes of public convenience and necessity. A prime example is a highway
21 relocation, where Atmos must move a main from one location to another. When
22 that happens, Atmos bills the highway department for the cost of moving the main
23 and for the cost of installing the new main.

24
25 **Q. ARE THIRD PARTY REIMBURSEMENTS A SIGNIFICANT AMOUNT**
26 **OF MONEY?**

27
28 A. Yes. In fiscal year 2006, Atmos received \$892,265 in third party reimbursements
29 for its Tennessee operations. In fiscal year 2005, these reimbursements came to
30 \$916,651.¹⁸

¹⁸ Response to AG Data Request 2-5, Part E.

1

2 **Q. CAN YOU PROVIDE A HYPOTHETICAL EXAMPLE OF A THIRD**
3 **PARTY REIMBURSEMENT?**

4

5 A. Yes. A Highway Department requires Atmos to move a section of main. The
6 original of the old section of main was \$2,000, the cost to cap off the old section
7 of main is \$1,000, and the cost to install the new section of main is \$5,000.
8 Atmos would probably not bill the Highway Department for the old section
9 because it would assume that it is fully depreciated, but it would bill for the cost
10 to retire the old main and the cost of the new main. The bill to the Highway
11 Department would be \$1,000 for retirement costs and \$5,000 for the installation
12 of the new main, a total of \$6,000.

13

14 **Q. HOW WOULD ATMOS BOOK THESE COSTS?**

15

16 A. The \$2,000 original cost of the old main plus the \$1,000 removal cost of that main
17 would be deducted from plant in service and from the depreciation reserve. The
18 \$5,000 for the new main would be added to plant in service.

19

20 **Q. HOW WOULD ATMOS BOOK THE REIMBURSEMENT FROM THE**
21 **HIGHWAY DEPARTMENT?**

22

23 A. The entire \$6,000 reimbursement from the Highway Department would be
24 credited to plant in service.¹⁹ That is, plant in service would be reduced by
25 \$6,000.

26

27 **Q. IS THIS TREATMENT OF THE HIGHWAY DEPARTMENT'S**
28 **REIMBURSEMENT APPROPRIATE?**

29

¹⁹ Response to AG Data Request 2-22.

1 A. No. The treatment of the removal cost is inconsistent with the treatment of the
2 reimbursement. The cost is deducted from the depreciation reserve, while the
3 reimbursement is credited to plant in service.
4

5 **Q. WHAT IS THE EFFECT OF THIS ASYMMETRICAL TREATMENT OF**
6 **REMOVAL COSTS?**
7

8 A. The effect on net plant – the rate base – is a wash. Reducing plant in service by
9 \$6,000 has the same effect on net plant as increasing the depreciation reserve by
10 \$6,000. However, since the \$1,000 in removal costs were deducted from the
11 depreciation reserve but the \$1,000 in removal cost reimbursement was not
12 credited to that reserve, the effect is to overstate removal costs by \$1,000.
13

14 **Q. WHAT IS THE SOLUTION TO THIS PROBLEM?**
15

16 A. The solution is to credit third party reimbursements to the depreciation reserve.
17 As noted, this procedure would not affect net plant. In our example, net plant
18 would be reduced by \$6,000 in both cases. But this treatment would result in
19 reimbursements for removal costs being treated as positive salvage. That
20 treatment would prevent the overstatement of removal costs that is now embedded
21 in the current accounting system. That overstatement shows up in depreciation
22 studies when the Company's analyst – Mr. Roff in this case – computes his
23 removal cost ratios.
24

25 **Q. DO YOU HAVE ANY SUPPORT FOR THIS CHANGE IN ATMOS'S**
26 **ACCOUNTING PRACTICES?**
27

28 A. Yes. The National Association of Regulatory Commissioners ("NARUC")
29 occasionally issues interpretations of the FERC's Uniform System of Accounts.
30 Such an interpretation was issued in 1988. Question and Answer No. 65 are as
31 follows:

1 Question:

2
3 Under arrangements with another party, sometimes the United
4 States Government, a utility company agrees, or is obligated, to
5 remove, relocate, rearrange, reroute, or otherwise make changes in
6 utility property, other than for the purposes of rendering utility
7 service to the other party, for which the utility is reimbursed for all
8 or a portion of the costs incurred. What is the proper accounting
9 for such property changes and the reimbursements received from
10 the other parties?

11
12 Answer:

13
14 The cost of plant retirements should be accounted for in
15 accordance with the rules applicable thereto. The cost of new plant
16 should be included in the appropriate plant accounts at actual cost
17 of construction. The reimbursement received shall be accounted
18 for (a) by crediting operation and maintenance expenses to the
19 extent of the actual expenses occasioned by the plant changes and
20 (b) **crediting the remainder to the reserve for depreciation,**
21 unless contractual terms definitely characterize residual or specific
22 amounts as applicable to the cost of replacement. In the latter
23 event, appropriate credits should be entered in the plant accounts.
24 (emphasis supplied)²⁰

25
26 As noted, Atmos does not credit any of the reimbursements to the reserve for
27 depreciation.

28
29 **Q. WHAT IS YOUR RECOMMENDATION?**

30
31 A. I recommend that Atmos be directed to credit all future third party
32 reimbursements to the depreciation reserve.

33
34 **Q. DOES THIS COMPLETE YOUR TESTIMONY?**

35
36 A. Yes, it does.

²⁰ Question and Answer No. 65 in the NARUC publication "interpretations of Uniform System of Accounts for Electric and Gas Utilities," dated September 1988; Question and Answer No. 67 in the NARUC "Interpretations of Uniform System of Accounts for Electric Gas and Water Utilities as Revised February 27, 1981."

Experience

Snively King Majoros O'Connor & Lee, Inc. Washington, DC

President (1989 to Present)

Vice President (1970 - 1989)

Mr. King, a founder of the firm and acknowledged authority on regulatory economics, brings over thirty years of experience in economic consulting to his direction of the firm's work in transportation, utility and telecommunications economics.

Mr. King has appeared as an expert witness on over 300 separate occasions before more than thirty state and nine U.S. and Canadian federal regulatory agencies, presenting testimony on rate base calculations, rate of return, rate design, costing methodology, depreciation market forecasting, and ratemaking principles. Mr. King has also testified before House and Senate Committees on energy and telecommunications legislation pending before the U.S. Congress.

In telecommunications, Mr. King has testified before the Federal Communications Commission on a number of policy issues, service authorization, competitive impacts, video dialtone, and prescription of interstate depreciation rates. Before state regulatory bodies, he has presented testimony in proceedings on intrastate rates, costs earnings and depreciation.

Mr. King has testified in electric, gas and water utility cases on virtually every aspect of regulation, including cost of capital, revenue requirements, depreciation, cost allocation and rate design. Mr. King is one of the nation's leading authorities on utility depreciation practices, having testified on this subject in several dozen cases before state regulatory bodies.

In addition to his appearances as a witness in judicial and administrative proceedings, Mr. King has negotiated settlements among private parties and between private parties and regulatory offices. Mr. King also has directed depreciation studies, investment cost benefit analyses, demand forecasts, cost allocation studies and antitrust damage calculations. Mr. King directed analyses of the prices of services under Federal Government's FTS2000 long distance system.

In Canada, Mr. King designed and directed an extended inquiry into the principles and procedures for regulating the telecommunication carriers subject to the jurisdiction of the Canadian Transport Commission. He also was the principal investigator in the Canadian Transport Commission's comprehensive review of rail costing procedures.

EBS Management Consultants, Inc., Washington, DC

***Director, Economic Development Department
(1968-1970)***

Mr. King organized and directed a five-person staff of economists performing research, evaluation, and planning relating to economic development of depressed areas and communities within the U.S. Most of this work was on behalf of federal, state, and municipal agencies responsible for community or regional economic development.

Principal Consultant (1966-1968)

Mr. King conducted research on a broad range of economic topics, including transportation, regional economic development, communications, and physical distribution.

W.B. Saunders & Company, Inc., Washington, DC

Staff Economist (1962-1966)

For this economic consulting firm, which later merged with EBS Management Consultants, Inc., Mr. King engaged in numerous research efforts relating primarily to economic development and transportation.

U.S. Bureau of the Budget, Office of Statistical Standards

Analytical Statistician (1961-1962)

Mr. King was responsible for the review of all federal statistical and data-gathering programs relating to transportation.

Education

Washington & Lee University, B.A. in Economics

*The George Washington University, M.A. in
Government Economic Policy*

ATMOS ENERGY CORPORATION - TENNESSEE PROPERTIES
Gas Plant
AG Recommended Depreciation and Cost of Removal Rates and Accruals
Based on December 21, 2005 Plant Balances

| Account Description | A | B | C | D | E | F | G | H | Re |
|---------------------------------------|--------------------|--------------------------------|---------------------------|---------------------------|----------------|------------------|---------------|----------------|----------------|
| | Plant Investment | Plant Only w/o Cost of Removal | | | | Cost of Removal | | | |
| | 30-Sep-06 | Depreciation Reserve | Remaining to Be Recovered | ALG Remaining <u>Life</u> | Annual Accrual | Accrual Rate | Accrual Rate | Annual Accrual | |
| | DSR-3, Sch1 | Schedule 2 | A-B | Roff Workpapers | C/D | E/A | Sch 6 | A*G | |
| <u>TRANSMISSION PLANT</u> | | | | | | | | | |
| 365.2Rights of Way | 348,971 | 48,879 | 300,092 | | 58.48 | 5,132 | 1.47% | | |
| 366.0Structures and Improvements | 2,679 | 1,255 | 1,424 | | 21.50 | 66 | 2.47% | | |
| 367.0Mains | 11,671,967 | 2,171,669 | 9,500,298 | | 41.64 | 228,153 | 1.95% | 0.12% | 14,499 |
| 369.0M&R Station Equipment | 1,629,191 | 415,084 | 1,214,107 | | 27.57 | 44,037 | 2.70% | 0.05% | 880 |
| Total Transmission Plant | 13,652,808 | 2,636,887 | 11,015,921 | | | 277,388 | 2.03% | 0.11% | 15,379 |
| <u>DISTRIBUTION PLANT</u> | | | | | | | | | |
| 374.2Rights of Way | 641,460 | 458,208 | 183,252 | | 59.56 | 3,077 | 0.48% | | |
| 375.0Structures and Improvements | 614,964 | 254,553 | 360,411 | | 37.86 | 9,520 | 1.55% | | |
| 376.0Mains | 151,083,809 | 59,541,024 | 91,542,785 | | 39.81 | 2,299,492 | 1.52% | 0.14% | 213,767 |
| 378.0M&R Station Equipment | 6,248,657 | 3,473,290 | 2,775,367 | | 26.04 | 106,581 | 1.71% | 0.06% | 3,749 |
| 379.0City Gate Equipment | 2,381,748 | 752,315 | 1,629,433 | | 30.26 | 53,848 | 2.26% | 0.05% | 1,073 |
| 380.0Services | 82,529,059 | 21,399,698 | 61,129,361 | | 41.80 | 1,462,425 | 1.77% | 0.08% | 62,182 |
| 381.0Meters | 11,069,083 | 6,343,604 | 4,725,479 | | 20.91 | 225,991 | 2.04% | 0.98% | 108,425 |
| 382.0Meter Installations | 21,126,176 | 8,081,388 | 13,044,788 | | 33.91 | 384,689 | 1.82% | 0.39% | 82,460 |
| 383.0House Regulators | 3,088,762 | 1,642,189 | 1,446,573 | | 24.39 | 59,310 | 1.92% | | |
| 385.0Industrial M&R Equipment | 323,828 | 41,024 | 282,804 | | 36.56 | 7,735 | 2.39% | 0.03% | 97 |
| Total Distribution Plant | 279,107,546 | 101,987,294 | 177,120,252 | | | 4,612,667 | 1.65% | 0.17% | 471,753 |
| <u>GENERAL PLANT</u> | | | | | | | | | |
| 390.0Structures and Improvements | 1,014,374 | 375,526 | 638,848 | | 33.28 | 19,196 | 1.89% | | |
| 391.0Office Furniture and Equipment | 569,786 | (27,715) | 597,501 | | 16.50 | 36,212 | 6.36% | | |
| 393.0Stores Equipment | 25,154 | 18,401 | 6,753 | | 16.89 | 400 | 1.59% | | |
| 394.0Tools, Shop and Garage Equipment | 720,715 | (214,340) | 935,055 | | 13.39 | 69,832 | 9.69% | | |
| 396.0Power Operated Equipment | 397,306 | (273,990) | 671,296 | | 4.51 | 148,846 | 37.46% | | |
| 397.0Communication Equipment | 503,915 | 356,041 | 147,874 | | 3.00 | 49,291 | 9.78% | | |
| 398.0Miscellaneous Equipment | 882,304 | 78,877 | 803,427 | | 7.81 | 102,872 | 11.66% | | |
| 399.0Other Tangible Property* | 18,299 | 13,573 | 4,726 | | 2.03 | 2,328 | 12.72% | | |
| Total General Plant | 4,131,853 | 326,374 | 3,805,479 | | | 428,978 | 10.38% | | |
| Total Depreciable Plant | 296,892,207 | 104,950,555 | 191,941,652 | | | 5,319,033 | 1.79% | | |

ATMOS ENERGY CORPORATION - TENNESSEE PROPERTIES
Study Parameters

| | | Atmos Study | | | Actuarial | | | Snavely King | | |
|----------------------------------|----------------------------------|--------------------|------------|--------------|------------|--------------|-------------|--------------|------------------|-------------------|
| Account | | 9/30/06 | | Iowa | | Iowa | | | GMT | |
| <u>Number</u> | <u>Description</u> | <u>Balance</u> | <u>ASL</u> | <u>Curve</u> | <u>ASL</u> | <u>Curve</u> | <u>Band</u> | <u>SPR</u> | <u>Full Band</u> | <u>Comments</u> |
| <u>TRANSMISSION PLANT</u> | | | | | | | | | | |
| 365.2 | Rights of Way | 348,971 | 65.0 | R5 | | | | | | No Retirement |
| 366.0 | Structures and Improvements | 2,679 | 30.0 | SQ | | | | | | No Retirement |
| 367.0 | Mains | 11,671,967 | 55.0 | S4 | | | | | 321.74 | One minor re |
| 369.0 | M&R Station Equipment | 1,629,191 | 40.0 | R2 | | | | | 127.22 | One minor re |
| Total Transmission Plant | | <u>13,652,808</u> | | | | | | | | |
| <u>DISTRIBUTION PLANT</u> | | | | | | | | | | |
| 374.2 | Rights of Way | 641,460 | 65.0 | R5 | | | | | | No Retirement |
| 375.0 | Structures and Improvements | 614,964 | 45.0 | R5 | | | | | | No Retirement |
| 376.0 | Mains | 151,083,809 | 55.0 | S4 | | | | 58 S4 | 89.08 | SPR Data |
| 378.0 | M&R Station Equipment | 6,248,657 | 40.0 | R2 | | | | 50 L4 | 50.91 | SPR Data |
| 379.0 | City Gate Equipment | 2,381,748 | 40.0 | R2 | 53 | R5 | 1991-2006 | | | 216.32 Retirement |
| 380.0 | Services | 82,529,059 | 48.0 | R0.5 | | | | 34 S6 | 50.91 | SPR Data |
| 381.0 | Meters | 11,069,083 | 36.0 | R2.5 | | | | 60 S4 | 127.33 | SPR Data |
| 382.0 | Meter Installations | 21,126,176 | 40.0 | R1 | | | | 33 L5 | 53.27 | SPR Data |
| 383.0 | House Regulators | 3,088,762 | 40.0 | R3 | | | | 60 S5 | 180.14 | SPR Data |
| 385.0 | Industrial M&R Equipment | 323,828 | 40.0 | R2 | | | | | | No Retirement |
| Total Distribution Plant | | <u>279,107,546</u> | | | | | | | | |
| <u>GENERAL PLANT</u> | | | | | | | | | | |
| 390.0 | Structures and Improvements | 1,014,374 | 40.0 | R3 | | | | 34 SQ | 39.7 | SPR Data |
| 391.0 | Office Furniture and Equipment | 569,786 | 20.0 | S6 | | | | 27 SQ | 20.91 | SPR Data |
| 393.0 | Stores Equipment | 25,154 | 35.0 | R1 | | | | 50 R5 | 59.75 | SPR Data |
| 394.0 | Tools, Shop and Garage Equipment | 720,715 | 20.0 | L1 | | | | 43 SQ | 46.01 | SPR Data |
| 396.0 | Power Operated Equipment | 397,306 | 10.0 | S5 | | | | 25 H3.5 | 45.66 | SPR Data |
| 397.0 | Communication Equipment | 503,915 | 15.0 | S6 | | | | 40 SQ | 49.67 | SPR Data |
| 398.0 | Miscellaneous Equipment | 882,304 | 10.0 | S3 | | | | 9 R4 | 21.36 | SPR Data |
| 399.0 | Other Tangible Property* | 18,299 | 6.0 | S6 | 84 | L3 | 1998-2006 | | | |
| Total General Plant | | <u>4,131,853</u> | | | | | | | | |
| Total Depreciable Plant | | <u>296,892,207</u> | | | | | | | | |
| | Fully Depreciated | 1,852,336 | | | | | | | | |
| | Intangible Plant | 241,284 | | | | | | | | |
| | Land | 921,227 | | | | | | | | |
| Total Gas Plant | | <u>299,907,054</u> | | | | | | | | |

* - Composite Existing Depreciation Rate.

EWxhibit CWK-1
Schedule 3

ATMOS ENERGY CORPORATION - TENNESSEE PROPERTIES
Depreciation and Cost of Removal Reserves as of September 30, 2006

| | | A |
|----------------------------------|----------------------------------|--------------------|
| <u>Account</u> | | 9/30/06 |
| <u>Number</u> | <u>Description</u> | <u>Balance</u> |
| | | \$ |
| <u>TRANSMISSION PLANT</u> | | |
| 365.2 | Rights of Way | 348,971 |
| 366.0 | Structures and Improvements | 2,679 |
| 367.0 | Mains | 11,671,967 |
| 369.0 | M&R Station Equipment | 1,629,191 |
| | Total Transmission Plant | <u>13,652,808</u> |
| <u>DISTRIBUTION PLANT</u> | | |
| 374.2 | Rights of Way | 641,460 |
| 375.0 | Structures and Improvements | 614,964 |
| 376.0 | Mains | 151,083,809 |
| 378.0 | M&R Station Equipment | 6,248,657 |
| 379.0 | City Gate Equipment | 2,381,748 |
| 380.0 | Services | 82,529,059 |
| 381.0 | Meters | 11,069,083 |
| 382.0 | Meter Installations | 21,126,176 |
| 383.0 | House Regulators | 3,088,762 |
| 385.0 | Industrial M&R Equipment | 323,828 |
| | Total Distribution Plant | <u>279,107,546</u> |
| <u>GENERAL PLANT</u> | | |
| 390.0 | Structures and Improvements | 1,014,374 |
| 391.0 | Office Furniture and Equipment | 569,786 |
| 393.0 | Stores Equipment | 25,154 |
| 394.0 | Tools, Shop and Garage Equipment | 720,715 |
| 396.0 | Power Operated Equipment | 397,306 |
| 397.0 | Communication Equipment | 503,915 |
| 398.0 | Miscellaneous Equipment | 882,304 |
| 399.0 | Other Tangible Property* | 18,299 |
| | Total General Plant | <u>4,131,853</u> |
| | Total Depreciable Plant | <u>296,892,207</u> |

Sources:

ATMOS ENERGY CORPORATION - TENNESSEE PROPERTIES
Gas Distribution Plant
Comparison of Accruals for Cost of Removal with
Actual Average Experience For the Years 2002-2006

| A | B | C | D | E | F | G |
|------------|---------------------------------|--------------------|-------------|------------------|---------------------|-----------------|
| Account | | Original | Net COR | Net COR | Annual | |
| <u>No.</u> | <u>Description</u> | Cost | Accrual | <u>Accruals</u> | Net COR | <u>Differen</u> |
| | | <u>9/30/06</u> | <u>Rate</u> | | <u>Expenditures</u> | <u>K-L</u> |
| | | Roff Sch 1 | Roff Sch 2 | C*J | Att DR 2-4 | K-L |
| 374.2 | Rights of Way | 641,460 | | | | |
| 375.0 | Structures and Improvements | 614,964 | | | | |
| 376.0 | Mains | 151,083,809 | 0.64% | 966,936 | 111,090 | 855 |
| 378.0 | M&R Station Equipment | 6,248,657 | 0.13% | 8,123 | - | 8 |
| 379.0 | City Gate Equipment | 2,381,748 | 0.13% | 3,096 | - | 3 |
| 380.0 | Services | 82,529,059 | 0.42% | 346,622 | 57,751 | 288 |
| 381.0 | Meters | 11,069,083 | 1.53% | 169,357 | 42,741 | 126 |
| 382.0 | Meter Installations | 21,126,176 | 1.38% | 291,541 | 39,065 | 252 |
| 383.0 | House Regulators | 3,088,762 | | - | | |
| 385.0 | Industrial M&R Equipment | 323,828 | 0.13% | 421 | | |
| | Total Distribution Plant | <u>279,107,546</u> | | <u>1,786,097</u> | <u>250,647</u> | <u>1,535</u> |

ATMOS ENERGY CORPORATION - TENNESSEE PROPERTIES
Net Gas Plant Removal Costs

| Acct. | Description | A 9/30/06 Balance | B 2002 | E 2003 | D 2004 | E 2005 | F 2006 | G Total Removal Cost 2002-2006 | H Average Annual Cost | I Removal Cost Allowance |
|-------|----------------------------------|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------------------------------------|--------------------------------|-----------------------------------|
| | | | | | | | | Sum B - F | G/5 | H/A |
| | <u>DISTRIBUTION PLANT</u> | | | | | | | | | |
| 374.2 | Rights of Way | 641,460 | | | | | | | | |
| 375.0 | Structures and Improvements | 614,964 | | | | | | | | |
| 376.0 | Mains | 151,083,809 | 26,557 | \$56,581 | \$72,696 | \$18,289 | \$381,325 | 555,448 | 111,090 | 0.07% |
| 378.0 | M&R Station Equipment | 6,248,657 | | | | | | | | |
| 379.0 | City Gate Equipment | 2,381,748 | | | | | | | | |
| 380.0 | Services | 82,529,059 | 85,954 | 77,128 | 42,696 | 19,179 | 63,798 | 288,755 | 57,751 | 0.07% |
| 381.0 | Meters | 11,069,083 | 68,631 | 69,130 | 29,238 | 12,501 | 34,207 | 213,707 | 42,741 | 0.39% |
| 382.0 | Meter Installations | 21,126,176 | 68,631 | 60,408 | 19,578 | 12,501 | 34,207 | 195,325 | 39,065 | 0.18% |
| 383.0 | House Regulators | 3,088,762 | | | | | | | | |
| 385.0 | Industrial M&R Equipment | 323,828 | | | | | | | | |
| | Total Distribution Plant | <u>279,107,546</u> | | | | | | | 250,647 | |

Source: Attrmt to DR 2-4

ATMOS ENERGY CORPORATION - TENNESSEE PROPERTIES

Gas Plant

SFAS 143 Removal Cost Allowances Using Roff Proposed Cost of Removal Factors

| Account | | A | B | C | D | E | F | G | H | |
|----------------------------------|---------------------------------|--------------------|--------------|------------|--------------|-----------------------|--------------|-----------------|------------|-------|
| <u>No.</u> | <u>Description</u> | Original | Proposed | Removal | Average | Discounted | Depreciation | Average | Increment | Incre |
| (a) | (b) | Cost | Net Salvage | Cost to Be | Service | Removal | of Removal | Remaining | Factor in | in Re |
| | | <u>Sept 30, 06</u> | Ratio | Recovered | Life | Cost @ 7.96% | Cost | Life | 2005 | Cost |
| | | (c) | | | | | | | | |
| | | DSR-3, Sch 1 | DSR-3, Sch 2 | A x B | DSR-3, Sch 2 | C/1.0796 ⁹ | E/D | Roff worppapers | PVG-1 -PVG | H |
| <u>TRANSMISSION PLANT</u> | | | | | | | | | | |
| 367.0 | Mains | 11,671,967 | -35% | 4,085,188 | 55.0 | 60,500 | 1,100 | 41.64 | 0.003280 | |
| 369.0 | M&R Station Equipment | 1,629,191 | -5% | 81,460 | 40.0 | 3,806 | 95 | 27.57 | 0.009635 | |
| | Total Transmission Plant | <u>13,301,158</u> | | | | | | | | |
| <u>DISTRIBUTION PLANT</u> | | | | | | | | | | |
| 376.0 | Mains | 151,083,809 | -35% | 52,879,333 | 55.0 | 783,119 | 14,239 | 39.81 | 0.003773 | 1 |
| 378.0 | M&R Station Equipment | 6,248,657 | -5% | 312,433 | 40.0 | 14,596 | 365 | 26.04 | 0.010833 | |
| 379.0 | City Gate Equipment | 2,381,748 | -5% | 119,087 | 40.0 | 5,564 | 139 | 30.26 | 0.007841 | |
| 380.0 | Services | 82,529,059 | -20% | 16,505,812 | 48.0 | 417,848 | 8,705 | 41.80 | 0.003240 | |
| 381.0 | Meters | 11,069,083 | -55% | 6,087,996 | 36.0 | 386,377 | 10,733 | 20.91 | 0.016047 | |
| 382.0 | Meter Installations | 21,126,176 | -55% | 11,619,397 | 40.0 | 542,836 | 13,571 | 33.91 | 0.005929 | |
| 385.0 | Industrial M&R Equipment | 323,828 | -5% | 16,191 | 40.0 | 756 | 19 | 36.56 | 0.004840 | |
| | Total Distribution Plant | <u>274,762,360</u> | | | | | | | | |

ATMOS ENERGY CORPORATION - SHARED SERVICES
Book Depreciation Study as of September 30, 2006
Comparison of Depreciation Rates and Annual Amounts

| Account Number | Description | A | B | C | D | E |
|-----------------------------------------|---------------------------------|---------------------------|------------------|-------------------|-------------------------|-------------------|
| | | 9/30/06 Balance | Present Rates | Annual Amount | Atmos Proposed Rates | Annual Amount |
| | | \$ | % | \$ | % | \$ |
| <u>GENERAL PLANT</u> | | | | | | |
| 390.09 | Improvements to Leased Premises | 9,949,143 | 7.43 | 739,221 | 9.10 | 905,372 |
| 391.00 | Office Furniture and Equipment | 9,074,352 | 4.89 | 443,736 | 2.13 | 193,284 |
| 397.00 | Communication Equipment | 25,311,861 | 7.12 | 1,802,205 | 8.45 | 2,138,852 |
| 398.00 | Miscellaneous Equipment | 633,466 | 5.36 | 33,954 | 8.15 | 51,627 |
| 399.00 | Other Tangible Property | 224,866 | 15.75 | 35,416 | 4.66 | 10,479 |
| 399.01 | Servers Hardware | 14,567,322 | 14.29 | 2,081,670 | 6.95 | 1,012,429 |
| 399.02 | Servers Software | 8,647,580 | 14.29 | 1,235,739 | 4.00 | 345,903 |
| 399.03 | Network Hardware | 2,377,029 | 14.29 | 339,677 | 9.30 | 221,064 |
| 399.06 | PC Hardware | 6,691,156 | 16.83 | 1,126,122 | 14.86 | 994,306 |
| 399.07 | PC Software | 3,928,199 | 17.73 | 696,470 | 9.02 | 354,324 |
| 399.08 | Application Software | 111,323,312 | 8.22 | 9,150,776 | 11.11 | 12,368,020 |
| 399.24 | General Startup Cost | 23,172,326 | 8.33 | 1,930,255 | 15.89 | 3,682,083 |
| Total Depreciable General Plant | | <u>215,900,612</u> | <u>9.09</u> | <u>19,615,241</u> | <u>10.32</u> | <u>22,277,742</u> |
| Fully Depreciated | | 5,331,910 | | | | |
| Late Retirements | | <u>4,363,383</u> | | | | |
| Total Shared Services Facilities | | <u><u>225,595,905</u></u> | | | | |

| F | G |
|----------------|---------------|
| AG Recommended | |
| <u>Rates</u> | <u>Annual</u> |
| % | \$ |
| 8.82 | 877,514 |
| 1.98 | 179,672 |
| 8.28 | 2,095,822 |
| 7.78 | 49,284 |
| 4.51 | 10,141 |
| 6.95 | 1,012,429 |
| 4.00 | 345,903 |
| 9.30 | 221,064 |
| 13.00 | 869,850 |
| 8.88 | 348,824 |
| 10.53 | 11,722,345 |
| 15.89 | 3,682,083 |
| 9.92 | 21,414,931 |

ATMOS ENERGY CORPORATION - SSU

| Account | | 9/30/06 | Atmos Study | | Snively King | | | | |
|-----------------------------------------|---------------------------------|----------------|-------------|-------------|--------------|--------------|-------------|------------|------------------------------|
| <u>Number</u> | <u>Description</u> | <u>Balance</u> | <u>ASL</u> | <u>Iowa</u> | | <u>Iowa</u> | | | |
| | | \$ | yrs. | Curve | <u>ASL</u> | <u>Curve</u> | <u>Band</u> | <u>GMT</u> | <u>Comments</u> |
| <u>GENERAL PLANT</u> | | | | | | | | | |
| 390.09 | Improvements to Leased Premises | 9,949,143 | 12.0 | S4 | 12 | L4 | 1987-2006 | 19.36 | Actuarial |
| 391.00 | Office Furniture and Equipment | 9,074,352 | 25.0 | R4 | 19 | S6 | 1987-2006 | 24.4 | Actuarial |
| 397.00 | Communication Equipment | 25,311,861 | 12.0 | S5 | 12 | S5 | 2002-2006 | 21.31 | Actuarial |
| 398.00 | Miscellaneous Equipment | 633,466 | 15.0 | S3 | 15 | R4 | 1987-2006 | 23.61 | Actuarial |
| 399.00 | Other Tangible Property | 224,866 | 7.0 | R5 | 8 | L3 | 1992-2006 | 8.53 | Actuarial |
| 399.01 | Servers Hardware | 14,567,322 | 10.0 | SQ | | | | | No Retirements, No Curve Fit |
| 399.02 | Servers Software | 8,647,580 | 10.0 | SQ | | | | | No Retirements, No Curve Fit |
| 399.03 | Network Hardware | 2,377,029 | 10.0 | SQ | 73 | L3 | 1999-2006 | 23.19 | Actuarial |
| 399.06 | PC Hardware | 6,691,156 | 7.0 | S1 | 7 | L1 | 1987-2006 | 6.42 | Actuarial |
| 399.07 | PC Software | 3,928,199 | 8.5 | R5 | 10 | L3 | 1994-2006 | 9.92 | Actuarial |
| 399.08 | Application Software | 111,323,312 | 10.0 | S3 | 10 | S3 | 1986-2006 | 15.05 | Actuarial |
| 399.24 | General Startup Cost | 23,172,326 | 10.0 | SQ | | | | | No Retirements, No Curve Fit |
| Total Depreciable General Plant | | 215,900,612 | | | | | | | |
| Fully Depreciated | | 5,331,910 | | | | | | | |
| Late Retirements | | 4,363,383 | | | | | | | |
| Total Shared Services Facilities | | 225,595,905 | | | | | | | |

CHARLES W. KING
Snively King Majoros O'Connor & Lee, Inc.
1220 L Street, N.W., Suite 410
Washington, D.C. 20005
(202) 371-1111
Appearances before State Regulatory Agencies

| State | Electric, Gas, Water Utility Cases | | | Date of Cross-Examination |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Client | Case | | |
| | | Case Number | Utility | |
| AK | Exxon USA | P-89-1,2 | Trans Alaska Pipeline System | October 18, 1990 |
| AZ | Arizona Corporation Commission Arizona Retailers Association | U-1345-I U-1345-II | Arizona Public Service Co. Arizona Public Service Co. | December 16, 1980 January 15, 1981 |
| CA | California Retailers Association California Retailers Association California Retailers Association California Retailers & California Manufacturers California Retailers Association | 57666 57602 59351 59351 61138 | Pacific Gas & Electric Co. Southern California Edison Pacific Gas & Electric Co. Southern California Edison Southern California Edison | March 6, 1978 April 25, 1978 June 12, 1981 May 20, 1982 May 28, 1982 |
| CO | U. S. Department of Defense J.C. Penney Company U.S. Department of Defense U. S. Department of Defense U.S. Department of Defense U.S. Department of Defense U.S. Department of Defense U.S. Department of Defense | I&S 1100 5693 I&S 1339 I&S 1540 C. Council C. Council C. Council C. Council | Colorado Springs (Elec) All Electric Utilities Colorado Springs DPU (Gas) Colorado Springs DPU (Gas) Colorado Springs DPU (Gas) Colorado Springs DPU (Elec) Colorado Springs DPU (Elec) Colorado Springs DPU (Elec) | June 14, 1977 March 8, 1978 October 18, 1979 February 9, 1982 September 30, 1984 June 6, 1985 May 19, 1986 June 30, 1987 |
| CT | Retailers Merchants Association Division of Consumer Counsel Public Utilities Control Auto Division of Consumer Counsel Division of Consumer Counsel Division of Consumer Counsel Division of Consumer Counsel Coalition of Hotels, Alloys & Retailers Coalition of Hotels, Alloys & Retailers | 72-0204 76-0604,5 78-0303 80-0403,4 81-0413 81-0602,4 82-0701 85-10-22 87-07-01 | Various Electric Utilities CL&P and HELCO Bridgeport Hydraulic Co. CL&P and HELCO United Illuminating Company CL&P and HELCO CL&P CL&P CL&P | July 22, 1976 November 10, 1977 (none) August 11, 1980 July 20, 1981 October 5, 1981 September 28, 1982 (none) April 25, 1988 |

CHARLES W. KING
Appearances before State Regulatory Agencies

| State | Electric, Gas, Water Utility Cases | | | Date of Cross-Exam |
|-------|-----------------------------------------|-------------|-----------------------------------|----------------------|
| | Client | Case | | |
| | | Case Number | Utility | |
| DC | D.C. People's Counsel | 685 | Potomac Electric Power Company | March 6, 1978 |
| | D.C. People's Counsel | 715 | Potomac Electric Power Company | (none) |
| | D.C. People's Counsel | 725 | Potomac Electric Power Company | April 4, 1980 |
| | D.C. People's Counsel | 737 | Potomac Electric Power Company | January 1, 1981 |
| | Washington Metro Area Transit Authority | 748 | Potomac Electric Power Company | June 26, 1981 |
| | Washington Metro Area Transit Authority | 758 | Potomac Electric Power Company | December 15, 1981 |
| | D.C. People's Counsel | 785 | Potomac Electric Power Company | September 21, 1982 |
| | Washington Metro Area Transit Authority | 759 | Potomac Electric Power Company | March 29, 1984 |
| | D.C. People's Counsel | 685 Remand | Potomac Electric Power Company | June 10, 1985 |
| | D.C. People's Counsel | 905 | Potomac Electric Power Company | August 20, 1991 |
| | D.C. People's Counsel | 912 | Potomac Electric Power Company | May 7, 1992 |
| | D.C. People's Counsel | 834, III | Potomac Electric Power Company | May 22, 1992 |
| | D.C. People's Counsel | 917 | Potomac Electric Power Company | September 24, 1992 |
| | D.C. People's Counsel | 922 | Washington Gas Light Company | June 15, 1993 |
| | D.C. People's Counsel | 929 | Potomac Electric Power Company | December 16, 1993 |
| | D.C. People's Counsel | 934 | Washington Gas Light Company | Filed April 22, 1994 |
| | D.C. People's Counsel | 939 | Potomac Electric Power Company | March 16, 1995 |
| | D.C. People's Counsel | 917 | Potomac Electric Power Company | April 16, 1995 |
| | D.C. People's Counsel | 951 | Potomac Electric Power Company | February 20, 1997 |
| | D.C. People's Counsel | 945 | Potomac Electric Power Company | September 29, 1999 |
| | D.C. People's Counsel | 847 | Washington Gas Light Company | June 27, 2001 |
| | D.C. People's Counsel | 989 | Washington Gas Light Company | May 22, 2002 |
| | D.C. People's Counsel | 1016 | Washington Gas Light Company | September 23, 2003 |
| DE | Delaware PSC Staff | 94-164 | Artesian Water Company | Filed March 10, 1995 |
| | Delaware PSC Staff | 94-149 | Wilmington Suburban Water Company | March 10, 1995 |
| | Delaware PSC Staff | 04-152 | Tidewater Utilities Company | Filed July 26, 2004 |
| FL | Florida Retail Federation | 790593-EU | All Electric Utilities | March 5, 1981 |
| | Florida Retail Federation | 810002-EU | Florida Power and Light Company | July 23, 1981 |
| | Florida Retail Federation | 820097-EU | Florida Power and Light Company | September 22, 1982 |
| | Florida Retail Federation | 820097-EU | Florida Power and Light Company | April 11, 1983 |
| | Florida Retail Federation | 830012-EU | Tampa Electric Company | August 19, 1983 |
| | Florida Retail Federation | 830465-EI | Florida Power and Light Company | April 19, 1984 |
| | Florida Retail Federation | 830465-EI | Tampa Electric Company | (none) |

CHARLES W. KING
Appearances before State Regulatory Agencies

| State | Electric, Gas, Water Utility Cases | | | Date of Cross-Examination |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Client | Case | | |
| | | Case Number | Utility | |
| GA | Georgia Retail Federation Georgia Public Service Commission Georgia Public Service Commission Georgia Public Service Commission Georgia Public Service Commission Georgia Public Service Commission Georgia Public Service Commission Georgia Public Service Commission Georgia Public Service Commission Georgia Public Service Commission Georgia Public Service Commission Georgia Public Service Commission Georgia Public Service Commission Georgia Public Service Commission Georgia Public Service Commission | 3270-U 4007-U 4384-U 4755-U 4697-U 9355-U 14000-U 14618-U 14311-U 17066-U 18300-U 18638-U 19758-U 20298-U | Georgia Power Company Georgia Power Company All Electric Utilities Georgia Power Company All Utilities Georgia Power Company Georgia Power Company Savannah Electric & Power Company Atlanta Gas Light Company Georgia Power Company Georgia Power Company Atlanta Gas Light Company Savannah Electric & Power Company Atmos Energy Corp. | September 3, 1981 August 21, 1991 August 1, 1993 January 25, 1994 May 10, 1994 November 4, 1998 October 23, 2001 March 27, 2002 April 8, 2002 July 31, 2003 October 26, 2004 March 14, 2005 March 29, 2005 October 11, 2005 |
| HI | Public Utilities Department Hawaii Consumer Advocate | 2793 4536 | All Electric Utilities Hawaiian Electric Company | February 14, 1978 February 1, 1983 |
| IL | Illinois Retail Merchants Association ("IRMA"/ Chicago Bldg. Mgrs. Association ("CBMA") IRMA/CBMA IRMA/CBMA IRMA/CBMA IRMA/CBMA IRMA/CBMA IRMA/CBMA City of O'Fallon, IL | 76-0698 76-0568 80-0546 82-0026 83-0537 87-0427 90-0169 02-0690 | Commonwealth Edison All Electric Utilities Commonwealth Edison Commonwealth Edison Commonwealth Edison Commonwealth Edison Commonwealth Edison Illinois-American Water Company | June 22, 1977 (none) March 5, 1981 July 22, 1982 March 19, 1984 March/April 22, 1988 October 29, 1990 Filed Feb.5, Apr.11,2003 |
| IN | Indiana Retail Council Indiana Retail Council Indiana Retail Council | 35780-S2 35780-S1 36318 | N. Ind. Public Service co. Public Service of Indiana Public Service of Indiana | June 1, 1980 October 15, 1980 May 4, 1982 |
| KS | J.C. Penney Company | 115,379-U | All Kansas Utilities | January 22, 1981 |
| KY | Seven Kentucky Retailers Attorney General of Kentucky Attorney General of Kentucky Attorney General of Kentucky | 7310 2002-145 2003-252 2004-67 | Louisville Gas & Electric Co. Columbia Gas of Kentucky Union Heat Light & Power Co. Delta Gas Company | April 25, 1979 Filed August 8, 2002 September 30, 2003 August 18, 2004 |

CHARLES W. KING
Appearances before State Regulatory Agencies

| State | Electric, Gas, Water Utility Cases | | | Date of Cross-Examination |
|-------|------------------------------------|-------------|----------------------------------|---------------------------------|
| | Client | Case | | |
| | | Case Number | Utility | |
| MA | Coalition of Municipalities | 20279 | Western Massachusetts Electric | March 19, 1980 |
| | Coalition of Municipalities | 557/558 | Western Massachusetts Electric | May 14, 1981 |
| | Coalition of Municipalities | 957 | Western Massachusetts Electric | March 9, 1982 |
| | Coalition of Municipalities | 1300 | Western Massachusetts Electric | January 1, 1983 |
| | Coalition of Municipalities | 85-270 | Western Massachusetts Electric | March 26, 1986 |
| MD | Maryland People's Counsel | 6977 | Washington Gas & Light Company | September 17, 1976 |
| | Maryland People's Counsel | 6814 | Potomac Electric Power Company | |
| | Maryland People's Counsel | 6807 | All Electric Utilities | September 1, 1977 |
| | Maryland People's Counsel | 6882 | Baltimore Gas & Electric Company | (none) |
| | Maryland People's Counsel | 6985 | Baltimore Gas & Electric Company | September 28, 1976 |
| | Maryland People's Counsel | 7070 | Baltimore Gas & Electric Company | December 20, 1976 |
| | Maryland People's Counsel | 7149 | Potomac Electric Power Company | April 18, 1978 |
| | Maryland People's Counsel | 7163 | All Electric Utilities | January 17, 1979 |
| | Maryland People's Counsel | 7236 | Delmarva Power & Light Company | October 23, 1978 |
| | Retail Merchants of Baltimore | 7397 | Baltimore Gas & Electric Company | June 20, 1980 |
| | Maryland People's Counsel | 7427 | Delmarva Power & Light Company | September 8, 1980 |
| | Maryland People's Counsel | 7574 | Baltimore Gas & Electric Company | December 2, 1981 |
| | Maryland People's Counsel | 7597 | Potomac Electric Power Company | February 18, 1982 |
| | Organization of Consumer Justice | 7604 | Potomac Electric Power Company | April 20, 1982 |
| | Maryland People's Counsel | 7588 | Baltimore Gas & Electric Company | October 19, 1982 |
| | Maryland People's Counsel | 7663 | Potomac Electric Power Company | November 22, 1982 |
| | Retail Merchants of Baltimore | 7685 | Baltimore Gas & Electric Company | April 12, 1983 |
| | Genstar Stone Products, et al. | 7878 | Potomac Electric Power Company | December 9, 1985 |
| | Industrial Intervenors | 7878 | Potomac Electric Power Company | June 28/July 1986 |
| | Maryland People's Counsel | 7983 | Baltimore Gas & Electric Company | March 4, 1987 |
| | Giant Foods, Inc. | 8855 | Baltimore Gas & Electric Company | January 8, 2003 |
| | Maryland People's Counsel | 9036 | Baltimore Gas & Electric Company | September 29, 2005 |
| | Maryland People's Counsel | 9092 | Potomac Electric Power Company | April 16, 2007 |
| | Maryland People's Counsel | 9093 | Delmarva Power & Light Company | April 9, 2007 |
| MI | General Services Administration | U-10102 | Detroit Edison Company | March 22, 1993 |
| | Michigan Attorney General | U-11722 | Detroit Edison Company | November 6, 1998 |
| | Michigan Attorney General | U-11772 | Consumers Energy/Detroit Edison | November 16, 1998 |
| | Michigan Attorney General | U-11495 | Detroit Edison Company | December 8, 1999 |
| | Michigan Attorney General | U-11956 | Consumer Energy/Detroit Edison | December 15, 1999 |
| | Michigan Attorney General | U-12505 | Consumers Energy Company | September 7, 2000 |
| | Michigan Attorney General | U-12478 | Detroit Edison Company | October 5, 2000 |
| | Michigan Attorney General | U-12639 | Consumers Energy/Detroit Edison | July 18, 2001 |
| | Michigan Attorney General | U-13000 | Consumers Energy Company | January 29,2002 |
| | Michigan Attorney General | U-13380 | Consumers Energy Company | September 9, 2002 |
| | Michigan Attorney General | U-13715 | Consumers Energy Company | April 24, 2003 |
| | Michigan Attorney General | U-13808 | Detroit Edison Company | Dec 12, 2003; Jan 30, Mar 5, 04 |

CHARLES W. KING
Appearances before State Regulatory Agencies

| State | Electric, Gas, Water Utility Cases | | | Date of Cross-Examination |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Client | Case | | |
| | | Case Number | Utility | |
| MI (Cont'd) | Michigan Attorney General Michigan Attorney General Michigan Attorney General Michigan Attorney General Michigan Attorney General Michigan Attorney General Michigan Attorney General Michigan Attorney General Michigan Attorney General Michigan Attorney General Michigan Attorney General Michigan Attorney General Michigan Attorney General Michigan Attorney General | U-12999 U-13898,9 U-14201 U-14274 U-14148 U-14399 U-14428 U-14292 U-13808-R U-14547 U-14701 U-14526 U-14561 U-15002 | Consumers Energy Company Michigan Consolidated Gas Co. Detroit Edison Company Consumers Energy Company Consumers Energy Company Detroit Edison Company Detroit Edison Company All Michigan Utilities Detroit Edison Company Consumers Energy Company Consumers Energy Company Consumers Energy Company All Gas Distribution Utilities Detroit Edison Company | March 10, 2004 August 23, 2004 Filed December 5, 2004' Filed February 15, 2005 Filed March 2, 25, 2005 July 29, 2005 September 7, 2005 September 27, 2005 November 7, 2005 Nov.7, 2005; Mar. 22, 2006 March 21, 2006 April 11.2006 June 1, 2006 December 8, 2006 |
| MN | Minnesota Retail Federation | EOO2/6R-77-611 | Northern States Power | 1979 |
| MO | Missouri Retailers Association Missouri Public Counsel Missouri Public Counsel Missouri Public Counsel | EO-78-161 ER-2006-0315 GR-2007-0003 ER-2007-0002 | Kansas City Power & Light Company Empire District Electric Company Ameren UE (Gas) Ameren UE (Electric) | February 19, 1981 September 14, 2006 Filed December 15, 2006 March 22, 2007 |
| NC | North Carolina Merchants Association | E-100 | All Electric Utilities | December 18, 1975 |
| ND | North Dakota Public Service Commission North Dakota Public Service Commission North Dakota Public Service Commission North Dakota Public Service Commission North Dakota Public Service Commission North Dakota Public Service Commission | PU-400-00-521 PU-399-01-186 PU-399-02-183 PU-399-02-183 PU-399-03-296 PU-04-97 | Xcel Energy, Inc. Montana-Dakota Utilities (Electric) Montana-Dakota Utilities (Gas) Montana-Dakota Utilities (Gas Depr.) Montana-Dakota Utilities (Electric) Montana-Dakota Utilities (Gas) | April 20, 2001 February 25, 2002 October 7, 2002 Filed April 7, 2003 Filed October 15, 2003 Filed July 6, 2004 |
| NH | Business & Industry Association of N.H. Business & Industry Association of N.H. Business & Industry Association of N.H. | 79-187-II 80-260 82-333 | Public Service of N.H. Public Service of N.H. Public Service of N.H. | February 6, 1981 February 5, 1981 November 2, 1983 |
| NJ | N.J. Retail Merchants Association Department of Public Advocate Resorts International Hotel, Inc. Dept. of Public Advocate Dept. of Public Advocate Dover Township Fire Chiefs | 803-151 815-459 8011-827 822-116 355-87 88-080967 | All New Jersey Utilities N.J. Natural Gas Company Atlantic City Sewerage Co. Atlantic City Electric Co. Elizabethtown Gas Tom's River Water Company | March 31, 1981 (none) (none) August 11, 1982 June 9, 1987 February 22, 1989 |

CHARLES W. KING
Appearances before State Regulatory Agencies

| State | Electric, Gas, Water Utility Cases | | | Date of Cross-Examination |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| | Client | Case | | |
| | | Case Number | Utility | |
| NY | N.Y. Council of Retail Merchants Metropolitan N.Y. Retail Council Metropolitan N.Y. Retail Council N.Y. Metro. Transit Authority | 26806 27029 27136 27353 | All Electric Utilities Consolidated Edison Company Long Island Lighting Company Consolidated Edison Company | February 3, 1976 (none) July 1, 1977 September 5, 1980 |
| OH | Ohio Council of Retail Association Ohio Council of Retail Association | 88-170-EL 83-1529-EL | Cleveland Elec. Illuminating Cincinnati Gas & Electric | (none) February 15, 1992 |
| PA | Pennsylvania Retail Association Southeastern Pa. Transp. Authority Eastern Penn Energy Users Group Eastern Penn Energy Association Penn Business Utility User Group Pennsylvania Office of Consumer Advocate | 76-PRMD-7 R-811626 R-822169 R-842651 R-850152 R-00016339 | All Electric Utilities Philadelphia Electric Company Penn. Power & Light Company Penn. Power & Light Company Philadelphia Electric Company Pennsylvania-American Water Co. | September 7, 1977 December 11, 1981 March/April 1983 December 3, 1984 February 19, 1986 September 19, 2001 |
| TX | Houston Retailers Association Houston Retailers Association Cities for Fair Utility Rates | 5779 6765 8425/8431 | Houston Lighting Company Houston Lighting Company Houston Lighting Company | October 19, 1984 September 25, 1986 April 25, 1989 |
| UT | Div. Of Public Utilities Dept of Commerce Div. Of Public Utilities Dept of Commerce | 98-2035-33 05-057-T01 | Pacific Corp Questar Gas Company | Filed August 16, Sept 22, 1999 May 17, 2006 |
| VA | Consumer Congress of Virginia Consumer Congress of Virginia Va. Business Committee on Energy Virginia Pipe Trades Council | 19426 19960 PUE 7900012 PUE 8900051 | Virginia Electric Power Company Virginia Electric Power Company Virginia Electric Power Company Old Dominion Electric Corp. & | July 1, 1975 September 19, 1978 February 25, 1981 October 31, 1989 |
| WI | Wisconsin Merchants Federation | 6630-ER-2 | Wisconsin Electric Power Company | May 15, 1978 |

CHARLES W. KING
Appearances before State Regulatory Agencies

| State | Telecommunications Cases | | | Date of Cross-Examination |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Client | Case | | |
| | | Case Number | Utility | |
| AL | U.S. Department of Defense | 24472 | All Telephone Companies | June 14, 1995 |
| AK | GCI Communications, Inc. GCI Communications, Inc. | U-97-82,U-97-143 U-05-46 | Alaska Communications Systems Matanuska Telephone Association | Filed Feb 25, April 5, 2004 October 28, 2005 |
| AZ | Arizona Burglar & Fire Alarm Association Federal Executive Agencies U.S. Department of Defense | 9981-E- 1051-80-64 E-1051-88-146 T-01051B-99-0105 | Mountain State Telephone Mountain State Telephone US WEST Communications | (none) (none) Filed July 26, Sept 8, 2000 |
| CA | Western Burglar & Fire Alarm Association Western Burglar & Fire Alarm Association Western Burglar & Fire Alarm Association Western Burglar & Fire Alarm Association Western Burglar & Fire Alarm Association Western Burglar & Fire Alarm Association Western Burglar & Fire Alarm Association California Cellular Resellers Federal Executive Agencies California Cellular Resellers Cellular Services, Inc. Federal Executive Agencies | 59849 5984cont. A83-01-22 A83-02-02 A82-11-07 A85-01-034 A87-01-02 A88-07-17019 A.88-11-1040 1.87-11-033 1.88-11-040 1.88-11-040 A92-05-004 | Pacific Telephone & Telegraph Pacific Telephone & Telegraph Pacific Telephone & Telegraph General Telephone of California Pacific Telephone & Telegraph Pacific Telephone & Telegraph General Telephone of California Pac. Bell Tel. & GTE of CA. All Cellular Carriers All Telephone Companies All Cellular Carriers All Cellular Carriers All Cellular Carriers Pacific Telephone & Telegraph | March 25, 1981 June 23, 1982 June 29, 1983 January 17, 1984 Jan. 18, Oct. 31, Nov 28, 1984 June 4, 1985, October 2, 1986 October 22, 1987 January 23, 1989 August 11, 1989 March 6-7, 1991 August 19, 1991 October 3, 1991 June 9, 1993 |
| CO | U.S. Department of Defense U.S. Department of Defense U.S. Department of Defense U.S. Department of Defense Colorado Municipal League U.S. Department of Defense U.S. Department of Defense U.S. Department of Defense U.S. Department of Defense U.S. Department of Defense U.S. Department of Defense AT&T | I&S 717 I&S 1700 Appl. I&S 1766 Appl 36883 I&S 891-O82T 905-544T 90A-665T 92M-039T 92S-229T 90A-665T 96S-331T | Mountain Bell Telephone Company Mountain Bell Telephone Company Mountain Bell Telephone Company Mountain Bell Telephone Company Mountain Bell Telephone Company U.S. West Communications U.S. West Communications U.S. West Communications U.S. West Communications U.S. West Communications U.S. West Communications U.S. West Communications | 1972 (none) September 18, 1986 November 28, 1988 December 13, 1988 February 21, 1990 July 17, 1991 October 23, 1991 February 24-24, 1992 July 30-31, 1992 November 6, 1996 April 17, 1997 |

CHARLES W. KING
Appearances before State Regulatory Agencies

| State | Telecommunications Cases | | | Date of Cross-Examination |
|-------|-----------------------------------|-----------------------|------------------------------------|---------------------------|
| | Client | Case | | |
| | | Case Number | Utility | |
| CT | Connecticut Consumer Counsel | 770526 | Southern New England Telephone Co. | November 10, 1977 |
| | CT Cellular Resellers Assn. | 89-12-05 | Southern New England Telephone Co. | (none) |
| | CT Cellular Resellers Coalition | 94-03-27 | Springwich Cellular/Bell Atlantic | May 16, June, 1994 |
| | AT&T | AT&T/SNET Arbitration | Southern New England Telephone Co. | Filed October 28, 1996 |
| | Connecticut Consumer Counsel | 96-04-07 | Southern New England Telephone Co. | February 10,1998 |
| | Connecticut Consumer Counsel | 00-07-17 | Southern New England Telephone Co. | December 5, 2000 |
| DC | D.C. People's Counsel | 729 | Chesapeake & Potomac Tel. Co. | May 13, 1980 |
| | D.C. People's Counsel | 798 | Chesapeake & Potomac Tel. Co. | July 18, 1983 |
| | General Services Administration | 827 | Chesapeake & Potomac Tel. Co. | May 7, 1985 |
| | General Services Administration | 854 | Chesapeake & Potomac Tel. Co. | April 16, 1987 |
| | General Services Administration | 850 | Chesapeake & Potomac Tel. Co. | October 7, 1991 |
| | General Services Administration | 926 | Chesapeake & Potomac Tel. Co. | October 7, 1993 |
| DE | Public Service Commission | Depr.Repre | Diamond State Telephone Co. | April 1, 1985 |
| | Federal Executive Agencies | 86-20 | Diamond State Telephone Co. | July 31, 1987 |
| | Public Service Commission | Depr.Repre | Diamond State Telephone Co. | March 8, 1988 |
| FL | GTE Sprint Communications Company | 720536-TP | All Telephone Companies | September 12, 1983 |
| | Office of Public Counsel | Depr.Repre | Southern Bell | July 30, 1986 |
| | Federal Executive Agencies | 880069-TL | Southern Bell | July 21, 1988 |
| | Federal Executive Agencies | 880069-TL | Southern Bell | November 30, 1990 |
| | Federal Executive Agencies | 880069-TL | Southern Bell | February 11, 1992 |
| GA | Georgia Attorney General | 3893-U | Southern Bell Telephone Co. | January 8, 1990 |
| | Federal Executive Agencies | 3905-U | Southern Bell Telephone Co. | June 12, 1990 |
| | Federal Executive Agencies | 3987-U | Southern Bell Telephone Co. | February 13, 1992 |
| | Georgia Public Service Commission | 4018-U | Southern Bell Telephone Co. | Jan 14, Feb 10, 1993 |
| HI | Hawaii Public Utility Commission | 1871 | Hawaiian Telephone Company | July 8, 1971 |
| | Four Hawaii Counties | 4588 | Hawaiian Telephone Company | December 15, 1983 |
| | Department of Defense | 7579 | Hawaiian Telephone Company | April 26, 1994 |
| | Department of Defense | 94-0093 | Oceanic Communications | March 13, 1995 |
| | Department of Defense | 7702 | All Communications Carriers | June 2, 1995 |
| | Department of Defense | 94-0298 | GTE Hawaiian Telephone Company | May 7, 1996 |
| | Department of Defense | 7720 | Verizon-Hawaii | November 15, 2000 |

CHARLES W. KING
Appearances before State Regulatory Agencies

| State | Telecommunications Cases | | | Date of Cross-Exam |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| | Client | Case | | |
| | | Case Number | Utility | |
| ID | U.S. Department of Energy U.S. Department of Energy | U-1000-63 U-1000-70 | Mountain Bell Telephone Co. Mountain Bell Telephone Co. | May 16, 1983 March 6, 1984 |
| IL | Illinois Alarm Companies Attorney General of Illinois GTE Sprint Communications Co. Federal Executive Agencies | 79-0143 81-0478 83-0142 89-0033 | Illinois Bell Telephone Illinois Bell Telephone All Telephone Companies Illinois Bell Telephone | September 26, 1979 December 28, 1981 August 4, 1983 June 12, 1989 |
| KS | State Corporation Commission Federal Executive Agencies Federal Executive Agencies | Depr. Repr. 166.856-U 190, 492 | Southwestern Bell Southwestern Bell All Telephone Companies | May 12-14, 1986 November 7, 1989 November 4, 1994 |
| KY | Kentucky Cable Telecommunications Assn. Kentucky Cable Telecommunications Assn. | 2000-414 2000-39 | Blue Grass Energy Cooperative Cumberland Valley Electric, Inc. | January 11, 2001 January 11, 2001 |
| MD | Maryland People's Counsel Maryland People's Counsel Maryland People's Counsel Maryland People's Counsel Federal Executive Agencies Federal Executive Agencies Federal Executive Agencies | 6813 6881 7025 7467 7851 8106 8274 | C&P Telephone Company C&P Telephone Company C&P Telephone Company C&P Telephone Company C&P Telephone Company C&P Telephone Company C&P Telephone Company | 1975 December 17, 1975 March 15, 1975 October 20, 1981 March 20, 1985 May 9, 1988 August 2, 1990 |
| MI | Michigan Attorney General Michigan Attorney General | U-8911 U-9553 | Michigan Bell Telephone Co. AT&T Communications/MCI | November 7, 1988 December 4, 1990 |
| MN | GTE Sprint Communications Co. U.S. Department of Defense | 83-102-HC 87-021-BC | All Telephone Companies Northwest Bell Telephone Co. | August 5, 1983 (none) |

CHARLES W. KING
Appearances before State Regulatory Agencies

| State | Telecommunications Cases | | | Date of Cross-Examination |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| | Client | Case | | |
| | | Case Number | Utility | |
| MO | GTE Sprint Communications Co. Federal Executive Agencies Federal Executive Agencies | TR83-253 TC-89-14 TO-89-56 | Southwestern Bell Tel. Co. Southwestern Bell Tel. Co. Southwestern Bell Tel. Co. | September 5, 1983 (none) November 7, 1990 |
| MS | Federal Executive Agencies | U-5453 | South Central Bell Tel. Co. | May 15, 1990 |
| NJ | Department of Public Advocate Department of Public Advocate Department of Public Advocate Department of Public Advocate Department of Public Advocate Department of Public Advocate | Depr.Repr. 815-458 Depr.Repr. Depr.Repr. T092030358 TMO05080739 | N.J. Bell Telephone Company N.J. Bell Telephone Company N.J. Bell Telephone Company N.J. Bell Telephone Company N.J. Bell Telephone Company United Telephone Co. of New Jersey | Mar-79 October 15, 1981 March 1, 1982 February 1, 1985 September 30, 1992 January 5,2006 |
| NM | New Mexico Corporation Commission New Mexico Corporation Commission | 1032 86-151-TC | Mountain Bell Telephone Co. General Telephone of Southwest | November 14, 1983 February 5, 1987 |
| NV | Prime Cable of Las Vegas Prime Cable of Las Vegas | 95-8034/8035 96-9035 | Central Telephone - NV Sprint/Centel, Nevada Bell | Filed November 22, 1995 June 2, 1997 |
| NY | Holmes Protection, Inc. Holmes Protection, Inc. 5 Alarm Companies GTE Sprint Communications Co. | 27350 27469 27710 28425 | New York Telephone Company New York Telephone Company New York Telephone Company All Telephone Companies | October 17, 1978 May 17, 1979 July 24, 1980 July 8, 1983 |
| PA | City of Philadelphia | R-832316 | Pennsylvania Bell Telephone | September 20, 1983 |
| SC | Office of Consumer Advocate Office of Consumer Advocate Office of Consumer Advocate Office of Consumer Advocate Office of Consumer Advocate | Depr.Repr. 86-511-C 86-541-C Depr.Repr. 89-180-C | Southern Bell Southern Bell General Telephone of South Southern Bell ALLTEL of South Carolina | July 1, 1986 December 11, 1986 April 8, 1987 July 10, 1989 September 26, 1989 |

CHARLES W. KING
Appearances before State Regulatory Agencies

| State | Telecommunications Cases | | | Date of Cross-Examination |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Client | Case | | |
| | | Case Number | Utility | |
| TX | U.S. Department of Defense | 8585/8218 | Southwestern Bell Telephone Co. | (none) |
| VA | U.S. Dept. Of Defense, GSA, et Federal Executive Agencies | 19696 PUC 890014 | C&P Telephone Company All Telephone Companies | October 6, 1976 February 13, 1989 |
| VI | V.I. Department of Commerce V.I. Public Service Commission | 205 341 | Virgin Islands Telephone Co. Virgin Islands Telephone Co. | April 29, 1980 March 20, 1991 |
| WA | U.S. Department of Defense U.S. Department of Defense U.S. Department of Defense U.S. Department of Defense WA Attorney General/TRACER U.S. Department of Defense U.S. Department of Defense WA Attorney General/TRACER WA Attorney General/TRACER U.S. Department of Defense WA Attorney General/WeBTEC/AARP WA Attorney General WA Attorney General | U-72-39 U-87-796-T U-88-20524 U-89-2698-F UT-940641 UT-941464 UT-951425 UT-961632 UT-021120 UT-040788 UT-040520 UT-050814 | Pacific Northwest Bell Pacific Northwest Bell Pacific Northwest Bell US West Communications US West Communications US West Communications US West Communications US West Communications GTE Northwest, Inc Qwest Communications Verizon Northwest, Inc. Verizon Northwest, Inc. Verizon - MCI Merger | 1973 December 20, 1983 November 8, 1988 November 28, 1989 Filed October 14, 1994 June 22, 1995 January 22, 1996 Filed June 23, 1997 July 29, 1997 May 22, 2003 August 12, 2004 February 2, 2005 November 2, 2005 |
| WI | GTE Sprint Wisconsin Consumers Utility Board Wisconsin Consumers Utility Board | 6720-TR-38 2055-TR-102 5846-TR-102 | All Telephone Companies CenturyTel of Central Wisconsin Telephone USA, LCC | October 20, 1983 June 26, 2002 June 26, 2002 |

CHARLES W. KING
Appearances before Federal Regulatory Agencies

| Federal Communications Commission | | | |
|--------------------------------------------|------------------|-------------------------|----------------------------------|
| Client | Docket | Subject | Date of Cross-Examination |
| Department of Defense | 16020 | Consat Rate of Return | 1973 |
| Airline Parties | 16258 | Bell System Rates | July 22, 1968 |
| Airline Parties | 18128 | TELPAC | 3/22, 10/15 1971, Feb. 22, 1972 |
| National Data Corporation | 19989 | WATS | (none) |
| Press Wire Services | 19919 | Private Line Rates | (none) |
| Aeronautical Radio | 20814 | Private Line Rates | October 5, 1978 |
| Department of Defense | 20690 | 1,544 Mbps Service | January 30, 1979 |
| State of Hawaii | 21263 | Interstate Separation | February 7, 1979 |
| International Record Carriers | CC78-97 | Telex/TWX Rates | March 6, 1980 |
| ITT World Communications | CC84-633 | Rate of Return | (none) |
| Aeronautical Radio | CC78-72 | Access Line Charges | (none) |
| MCI | CC84-800 | Rate of Return | (none) |
| Ind. Data Com. Mfg. Assn. | CC85-26 | AT&T Accounting Plan | (none) |
| Tymnet, Inc. | ENF84-22 | Packet Switching Costs | (none) |
| Adelphia Jones Intercable, et. al. | Bell Atlantic | Video Dialtone | Filed 7/29/94 |
| Adelphia Jones Intercable, et. al. | Bell Atlantic | Video Dialtone | Filed 8/23/94 |
| Adelphia Jones Intercable, et. al. | Bell Atlantic | Video Dialtone | Filed 2/21/95 |
| Nuclear Regulatory Commission | | | |
| Fauquier League for Environment Protection | 50-328 50-329 | Va. Electric Power Co. | 1976 |
| Postal Rate Commission | | | |
| Association of Third Class Mail Users | R71-1 | Rates | 1970 |
| Dow Jones & Company | R72-1 | Rates | 1972 |
| Dow Jones & Company | R74-1 | Rates | September 13, 1974 |
| Dow Jones & Company | MC76-2 | Rate Structure | January 6, 1979 |
| Dow Jones & Company | MC79-3 | Rate Structure | September 12, 1979 |
| Dow Jones & Company | R80-1 | Rates | November 25, 1980 |
| Warshawsky & Company | C82-1 | Rate Structure | (none) |
| Dow Jones & Company | R84-1 | Postal Costs | June 14, 1984 |
| Dow Jones & Company | R87-1 | Rate Structure Costs | November 2, 1987 |
| Dow Jones & Company | R90-1 | Rate Structure Costs | Sept 12, Oct 10, 1990 |
| Dow Jones & Company | MC91-1 | Pre-barcoding Discounts | November 19, 1991 |
| Dow Jones & Company | MC91-3 | Palletization Discounts | March 2, 1992 |

CHARLES W. KING
Appearances before Federal Regulatory Agencies

| Client | Docket | Subject | Date of Cross-Examination |
|--------|--------|---------|---------------------------|
|--------|--------|---------|---------------------------|

U.S. Congress

| | | | |
|-----------------------------------------|--------------------------|-----------------------------------------------|-------------------|
| National Retail Merchants Association | House/Senate Hearings | Electric Rate Reform Legislation | 1976, 1977 & 1979 |
| National Wireless Resellers Association | House Commerce Committee | Interconnection & Resale of Wireless Services | October 12, 1995 |

Federal Maritime Commission

| | | | |
|-----------------------------------|-------|-------------------------|------------------|
| State of Hawaii | 71-18 | Ocean Shipping Rates | October-71 |
| Foss Alaska Line | 79-54 | Barge Rate Increase | July 1979 |
| Palmetto Shipping and Stevedoring | 85-20 | Vessel Charge Liability | October 27, 1986 |

Interstate Commerce Commission - Surface Transportation Board

| | | | |
|--------------------------------------------|---------------------|--------------------|------------------|
| Western Coal Traffic League | Ex Parte 349 | R.R. Rate Increase | May-76 |
| Western Coal Traffic League | Ex Parte 357 | R.R. Rate Increase | Oct-78 |
| Western Coal Traffic League | Ex Parte 375 (Sub1) | R.R. Rate Increase | June 1, 1980 |
| Arkansas Power & Light Co. | 37276 | Cost of Capital | (none) |
| Central Illinois Light Co. | 37450 | Cost of Capital | March 10, 1981 |
| Western Coal Traffic League | Ex Parte 347 | Costing Methods | (none) |
| Snavelly King Majoros O'Connor & Lee, Inc. | Ex Parte 664 | Cost of Capital | December 8, 2006 |

Civil Aeronautics Board

| | | | |
|-------------------|-------|-----------------------|--------|
| Thomas Cook, Inc. | 36595 | Air Fare Deregulation | (none) |
|-------------------|-------|-----------------------|--------|

Copyright Royalty Tribunal

| | | | |
|-----------------------------|-----------|----------------------|--------|
| Public Broadcasting Service | 88-2-86CD | Television Valuation | (none) |
|-----------------------------|-----------|----------------------|--------|

Federal Energy Regulatory Commission

| | | | |
|-----------|------------|-----------------------|------------------|
| Exxon USA | OR89-2-000 | Pipeline Quality Bank | October 18, 1990 |
|-----------|------------|-----------------------|------------------|

Canadian Transport Commission

| | | | |
|----------------------------------------------------------------------------------|--|--|--|
| Rail Costing Inquiry, 1967-1969 Telecommunications Costing Inquiry, 1972-1975 | | | |
|----------------------------------------------------------------------------------|--|--|--|

Surface Transportation Board

| | | | |
|-------------------------------|---------------------|------------------------|---------------|
| Williams Energy Services, Inc | Ex Parte 582, Sub 1 | Rail Merger Guidelines | April 5, 2001 |
|-------------------------------|---------------------|------------------------|---------------|

AFFIDAVIT

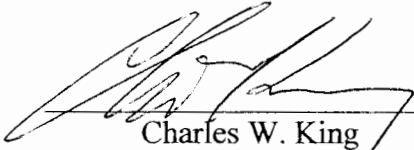
**STATE OF TENNESSEE
BEFORE THE TENNESSEE REGULATORY AUTHORITY**

In The Matter of ATMOS ENERGY CORPORATION)
For approval of Adjustments to its Rates and Revised) Docket No.07-00105
Tariff.)

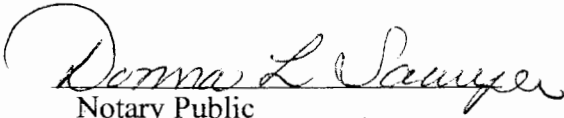
COUNTY OF HANCOCK)
STATE OF MAINE)

Before me this day appeared Charles W. King and stated:

1. My name is Charles W. King, I am the President of Snavelly King Majoros O'Connor & Lee, Inc.
2. I have caused to be filed in the above-referenced case testimony on behalf of the Attorney General of Tennessee, Attachments A and B, and two exhibits.
3. The material was prepared entirely by me or under my direction.
4. The statements made and the data presented are true and correct to the best of my knowledge and belief.



Charles W. King


Notary Public
Donna L. Sawyer
My Commission expires on
11-21-2007