BEFORE THE
STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of the Application of Atmos Energy Corporation for Review and Adjustment of its Natural Gas Rates	))))	**Docket No. 08-ATMG-280-RTS**

DIRECT TESTIMONY

OF

MICHAEL J. MAJOROS, JR.

ON BEHALF OF

THE CITIZENS' UTILITY RATEPAYER BOARD

January 31, 2008

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INTRODUCTION

Q. PLEASE STATE YOUR NAME.

A. My name is Michael J. Majoros, Jr.

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. I am Vice President of Snavely King Majoros O'Connor & Lee, Inc. ("Snavely King"), an economic consulting firm with offices at 1111 14th Street, N.W., Suite 300, Washington, D.C. 20005.

Q. PLEASE DESCRIBE SNAVELY KING.

A. Snavely King is an economic consulting firm, founded in 1970 to conduct research on a consulting basis into the rates, revenues, costs and economic performance of regulated firms and industries. We represent the interests of government agencies, businesses and individuals who are consumers of telecom, public utility and transportation services. In addition to consumer cost and anti-trust issues, we have provided our expertise in support of a clean environment and personal damages resulting from discrimination in agricultural programs. We believe in accountability, fair competition and effective regulation. We seek and use new ideas, findings and opportunities when appropriate, and avoid reliance upon traditional approaches based on faulty premises.

The firm has a professional staff of 11 economists, accountants, engineers and cost analysts. Most of our work involves the development, preparation and presentation of expert witness testimony before Federal and state regulatory agencies. Over the course of our 38-year history, members of the firm have participated in more than 1,000

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. Appendix A is a summary of my qualifications and experience. Appendix B contains a tabulation of my appearances as an expert witness before state and Federal regulatory agencies.

Q. AT WHOSE REQUEST ARE YOU APPEARING?

A. I am appearing at the request of the Citizens' Utility Ratepayer Board ("CURB").

SUBJECT OF TESTIMONY

Q. WHAT IS THE SUBJECT OF YOUR TESTIMONY?

A. I will testify regarding Atmos Energy Corporation's ("Atmos" or "the Company") proposed depreciation rates.

Q. DO YOU HAVE ANY SPECIFIC EXPERIENCE IN THE FIELD OF PUBLIC UTILITY DEPRECIATION?

A. Yes. Among other areas, my firm specializes in the field of public utility depreciation. Our clients have ranged from consumer organizations such as ratepayer advocates and Commission staffs to carriers such as AT&T. We have appeared as expert witnesses on depreciation before the regulatory commissions of more than half of the states in the country. I have testified in well over 100 proceedings on the subject of public utility depreciation, and represented various clients in several other proceedings in which depreciation was an issue but was settled. I have also negotiated on behalf of clients in

fifteen of the Federal Communications Commission's ("FCC") Triennial Depreciation Represcription conferences.

Q. DOES YOUR EXPERIENCE SPECIFICALLY INCLUDE GAS COMPANY DEPRECIATION?

A. Yes, I have testified in many proceedings on the subject of gas company depreciation, and I have prepared testimony in several other gas proceedings in which depreciation was ultimately settled.

Q. HAVE YOU EVER APPEARED BEFORE THE KANSAS CORPORATION COMMISSION ("KCC")?

A. Yes, I have appeared before the KCC on several occasions, including Atmos's last base rate case, Docket No. 03-ATMG-1036-RTS. I submitted testimony on behalf of both CURB and Staff in that proceeding. The case was ultimately settled.

PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. CURB asked me to review the depreciation-related testimony and exhibits of Atmos Energy. I was asked to express an opinion regarding the reasonableness of the Company's depreciation expense proposal and, if warranted, make alternative recommendations.

COMPANY PROPOSAL

Q. PLEASE SUMMARIZE ATMOS'S DEPRECIATION EXPENSE PROPOSALS.

A. Mr. Donald Roff sponsors Atmos's depreciation studies. Mr. Roff conducted separate studies for Kansas gas plant and shared services ("SSU") plant. In both cases, he

calculated remaining life rates using ELG. His studies are based on plant and reserve balances as of September 30, 2006.[1]

Mr. Roff's recommendations result in a $1,462,099 million increase to gas plant depreciation expense and a $2,662,501 million increase to shared services depreciation expense, based on September 30, 2006 balances.[2]

SUMMARY AND CONCLUSIONS

Q. DID YOU REVIEW MR. ROFF'S STUDIES?

A. Yes, I reviewed Mr. Roff's studies, his responses to staff's and my data requests, and I conducted independent analysis. I have accepted some aspects of Mr. Roff's proposals, but overall I disagree with Mr. Roff's proposed depreciation rates and accruals.

Q. WHAT DO YOU RECOMMEND?

A. In recognition of current accounting rules, Atmos has identified the non-legal asset retirement obligations ("non-legal AROs") contained in its accumulated depreciation account. These result from prior cost of removal charges to customers that have exceeded Atmos's actual cost of removal expenditures. I recommend that the KCC specifically recognize and reclassify these amounts from Atmos's account 108 - Accumulated provision for depreciation, to account 254 – Other regulatory liabilities (cost of removal), consistent with the treatment prescribed by generally accepted accounting principles ("GAAP") and required for financial reporting purposes by the Securities and Exchange Commission ("SEC"), and consistent with the KCC's decision in Docket No. 05-WSEE-981-RTS.[3]

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[1] Direct Testimony of Donald Roff, pp. 1 and 2.
[2] Exhibits DSR-3, p. 3 and DSR-4, p. 3.
[3] Order on Petitions for Reconsideration and Clarification, Docket No. 05-WSEE-981-RTS, issued February 13, 2006, p. 49.

The KCC should also return this amount to ratepayers via an amortization over a specific period, which could range from one year to the average remaining life of the plant functions to which these regulatory liabilities relate. I recommend the use of the average remaining life as an amortization period. Use of a remaining life amortization period will result in zero revenue requirement impact from both the reclassification to account 254 as well as the amortization.

On a going-forward basis, the KCC should change the inflated approach Atmos has used to calculate the annual net salvage costs for "non-legal AROs." Rather than Atmos's inflated approach, I recommend an annual normalized cost of removal allowance based on the average of the most recent five years of Atmos's actual experience. This approach will keep Atmos whole regarding any cost of removal it actually incurs and will stop the significant build-up of the regulatory liability. This approach will also facilitate the tracking of the regulatory liability resulting from non-legal AROs.

Q. ARE THERE ANY OTHER REASONS FOR THIS APPROACH?

A. Yes, Exhibit___(MJM-1), summarizes all of Atmos's salvage, cost of removal and net salvage data, supporting its filed study. As you can see, most of the cost of removal data occurs in the most recent few years. Hence, it is impossible to obtain longer-term indications. Consequently, the normalized allowance I propose is, in my opinion, equivalent to the use of a net present value approach to cost of removal. I have no objections to a net present value approach.

Q. DO MR. ROFF'S DEPRECIATION RATES INCORPORATE ANY OTHER CHANGES?

A. Yes, Mr. Roff's depreciation rates incorporate an unnecessary retroactive change to the equal life group ("ELG") procedure, which should be rejected. Such a change should only be made on a going-forward basis, if at all. Atmos's depreciation rates should be calculated using the Average Life Group ("ALG") procedure, consistent with its last depreciation rates addressed in a litigated rate case. Furthermore, while most of Mr. Roff's life recommendations are acceptable, I find that three of his proposed lives are too short.

In summary:

- I recommend that the KCC recognize Atmos's non-legal AROs as a regulatory liability for ratemaking purposes in Kansas.
- I recommend that the KCC return the existing regulatory liability to ratepayers over the remaining life of the plant.
- I recommend that instead of the Company's inflated net salvage proposals, the KCC should adopt a normalized cost of removal allowance approach based upon the most recent five years of actual experience which is equivalent to the adoption of a net present value approach.
- I recommend that Atmos's rates be calculated using the ALG procedure, instead of Mr. Roff's proposed ELG procedure.
- I recommend that the lives for three accounts be lengthened.

Q. WHICH ASPECTS OF MR. ROFF'S STUDIES HAVE YOU ACCEPTED?

A. I have accepted all but three of the Company's forward-looking lives and curves. I have also accepted any gross salvage he incorporated into his rates.

PRESENT DEPRECIATION RATES

Q. WHEN WERE THE COMPANY'S PRESENT DEPRECIATION RATES APPROVED?

A. Atmos's present depreciation rates were approved as part of a Stipulated Settlement in Docket No. 03-ATMG-1036-RTS, Order issued December 1, 2003:

> The parties agree to use Atmos' proposed depreciation rates. The parties further agree that this does not mean that the parties acquiesce to the propriety of Atmos' depreciation parameters, methodology, procedures or techniques. This agreement to use Atmos' proposed depreciation rates is for settlement purposes only and has benefits for all parties. It shall not be cited, referenced, or used in any manner by any party or consultant as a precedential Commission decision or Commission staff action concerning the merits of depreciation issues in any future proceeding in Kansas or any other jurisdiction. Atmos agrees that it will not oppose the initiation of a Commission general investigation into depreciation issues, including the treatment of net salvage costs and use of Equal Life Group procedure.[4]

Q. WHY HAVE YOU QUOTED THE STIPULATED SETTLEMENT AGREEMENT ABOVE?

A. I quoted the depreciation section of the Stipulated Settlement Agreement to demonstrate that Atmos' present rates were neither litigated nor agreed to. They were adopted as part of an overall settlement. Further language in the Settlement Order demonstrates the compromise nature of the settlement.

> In this case a number of parties with varied interests acknowledged the risks and costs of litigation and negotiated a compromise resolution.[5]
>
> The parties believe that the resolution of these issues is just and reasonable, granting a sufficient basis to significantly shorten the hearing. The parties agree that any issue not specifically addressed by this Agreement should not be resolved by implication or the execution of this Agreement, and shall remain reserved for determination on the merits in any future proceeding.[6]

[4] Docket No. 03-ATMG-1036-RTS, Stipulated Settlement Agreement, ¶ 9.
[5] Docket No. 03-ATMG-1036-RTS, Order Approving Stipulated Settlement Agreement, ¶ 4.
[6] Docket No. 03-ATMG-1036-RTS, Stipulated Settlement Agreement, ¶ 6.

Q. WHY IS IT IMPORTANT TO NOTE THAT THE PARTIES IN THE PREVIOUS CASE NEVER SPECIFICALLY AGREED TO THE PARAMETERS, METHODOLOGY, PROCEDURES OR TECHNIQUES UNDERLYING ATMOS' PRESENT DEPRECIATION RATES?

A. It is important because Mr. Roff has again used the Equal Life Group procedure to calculate his rates, as well as the same net salvage methodology he used in the previous case.

Q. DID YOU PARTICIPATE IN DOCKET NO. 03-ATMG-1036-RTS?

A. Yes. I submitted testimony regarding depreciation on behalf of the Commission Staff and CURB.

Q. WHAT WERE YOUR FINDINGS IN THAT CASE?

A. In Docket No. 03-ATMG-1036-RTS I found that Mr. Roff's rates produced an unreasonable level of expense, primarily due to his use of the ELG procedure and his net salvage proposals. I had the following specific disagreements with his proposals in that case:

- The Company's proposed incorporation of future net salvage values in its depreciation rate calculations is unreasonable because they increase the depreciation rates for inflated estimates of costs that probably will not be incurred.

- The Company's proposed retroactive change to the equal life group ("ELG") procedure is unreasonable because such a change should only be made on a going-forward basis.[7]

[7] Docket No. 03-ATMG-1036-RTS, Direct Testimony of Michael J. Majoros, Jr., page 4.

Q. YOU MENTIONED ABOVE THAT MR. ROFF HAS MADE SIMILAR PROPOSALS IN THIS CASE. DO YOU STILL HAVE THE SAME DISAGREEMENTS?

A. Yes, I do. Although his rates were adopted in the previous case, they were not adopted on their merits. I was particularly concerned about his proposed switch to the use of the ELG procedure, as it represented an unnecessary and costly change in the way Atmos calculated its Kansas depreciation rates. It clearly elevated the level of depreciation expense in that proceeding, but that does not mean the procedure or the elevation was sanctioned.

THE EXISTING COST OF REMOVAL REGULATORY LIABILITY

Q. YOUR FIRST RECOMMENDATIONS RELATE TO ATMOS'S NON-LEGAL AROS. WHAT ARE NON-LEGAL AROS?

A. The Financial Accounting Standards Board's ("FASB") Statement of Financial Accounting Standard No. 143 ("SFAS No. 143") and the Federal Energy Regulatory Commission's ("FERC") Order No. 631 have identified and highlighted utilities' prior excess collections for future cost of removal. Order No. 631 defines these excess collections as non-legal asset retirement obligations ("non-legal AROs").

If a utility has charged cost of removal for a non-legal ARO, that amount is to be segregated within accumulated depreciation for FERC purposes and reclassified as a regulatory liability for GAAP purposes. Furthermore, if a utility has collected too much depreciation for a legal ARO, the excess also becomes as a regulatory liability for both FERC and GAAP purposes.[8]

[8] SFAS No. 143.

In other words, if a utility has collected for future cost of removal in its depreciation rates, but does not and never had a legal obligation to spend the money, these excesses are to be segregated and to be reported as a regulatory liability; the company must remain accountable for the money it collected until it is spent on its intended purpose.[9] Otherwise it must be returned to ratepayers.

FERC identified these amounts as "non-legal" asset retirement obligations, because utilities do not have actual legal obligations and liabilities to incur these costs in the future. Atmos reported regulatory liabilities in compliance with SFAS No. 143 as follows:

Atmos Energy Corporation
Regulatory Liabilities Resulting from Non-Legal AROs
($millions)[10]

Period Ending	Atmos Energy Total	KS Jurisdiction	SSU
Sept. 30, 2005	$ 263.4	$ 9.7	$ 0.03
Sept. 30, 2006	261.4	10.2	0.03
Sept. 30, 2007	271.1	N/A	N/A

The regulatory liability for the KS jurisdiction increased by the amount that Atmos collected from KS ratepayers, over and above its actual removal costs for each period.

Q. EXPLAIN THE ISSUES THAT RESULT FROM THE HIGHLIGHTING OF THE NON-LEGAL AROS PROVIDED BY SFAS NO. 143 AND FERC ORDER NO. 631.

[9] Id., paragraph B.73.
[10] See Atmos Energy, September 30, 2006 10-K Report, p. 66, September 30, 2007 10-K Report, p. 64 and response to CURB Data Request No. 180. KS and SSU amounts for Sept. 30, 2007 were not provided due to timing of request and response.

A. There are several new issues. One important new issue is the need for the KCC to recognize Atmos's non-legal ARO reserve as a regulatory liability for regulatory and ratemaking purposes. Although Atmos has recognized these amounts as regulatory liabilities in its 10-K reports, it has not done so for regulatory and ratemaking purposes. Once the KCC recognizes and requires separate identification and regulatory reporting of the cost of removal regulatory liability in Kansas, the Commission should consider disposing of or reducing the liability for ratemaking purposes. Finally, the KCC should consider how to avoid the continued exponential build-up of the regulatory liability on a going-forward basis.

THE KCC SHOULD REQUIRE SEPARATE IDENTIFICATION AND REGULATORY REPORTING

Q. WHAT PROVISIONS OF FERC ORDER NO. 631 REQUIRE SEPARATE IDENTIFICATION AND REPORTING OF NON-LEGAL AROS?

A. FERC Order No. 631 requires jurisdictional entities such as Atmos to "maintain separate subsidiary records for cost of removal for non-legal retirement obligations that are included as specific identifiable allowances recorded in accumulated depreciation in order to separately identify such information to facilitate external reporting and for regulatory analysis, and rate setting purposes. Therefore, the Commission [amended] the instructions of accounts 108 ...in Parts 101 ... to require jurisdictional entities to maintain separate records for the purposes of identifying the amount of specific allowances collected in rates for non-legal retirement obligations included in the

depreciation accruals."[11] The KCC should extend this requirement to regulatory and ratemaking purposes in Kansas.

THE KCC SHOULD SPECIFICALLY RECOGNIZE THE REGULATORY LIABILITY

Q. WHY IS IT NECESSARY FOR THE KCC TO RECOGNIZE A REGULATORY LIABILITY FOR THE NON-LEGAL COST OF REMOVAL AND DISMANTLEMENT AMOUNTS?

A. Although the FERC has recognized and identified the amounts involved, FERC does not require reporting the non-legal AROs as regulatory liabilities. FERC deferred to the states regarding specific recognition of a regulatory liability for ratemaking purposes. Consequently, while FERC Order No. 631 provides a new transparency by requiring identification of the amounts and maintenance of separate subsidiary records for regulatory analysis and rate setting purposes, it did not specifically recognize a regulatory liability for non-legal asset retirement obligations.

From a regulatory and ratemaking standpoint, nothing holds Atmos specifically accountable for these excess collections, even though the public accounting profession and the Securities and Exchange Commission recognize that they are regulatory liabilities and that the KCC implicitly holds Atmos accountable.

Regardless of the transparency provided by FERC, Atmos does not identify or even mention these requirements or the issue in its depreciation study. This is an intolerable situation. The accountability must be explicit, and the KCC must establish that accountability.

Even if it was highly probable that Atmos might spend all this money for future cost of removal, it is fair and reasonable for the KCC to recognize the ratepayers' claims

[11] FERC Docket No. RM02-7-000, Order No. 631, paragraph 38.

on these monies until actually spent on their intended purpose. Unless they are explicitly identified as "subject to refund," there is an ongoing and wholly unnecessary risk that they are merely hidden potential income to Atmos.

Q. DOES ATMOS HAVE ANY LEGAL OBLIGATIONS TO INCUR THE NON-LEGAL ARO COSTS?

A. No, Atmos's non-legal AROs do not even meet baseline tests as liabilities to incur asset removal costs. The KCC, therefore, should recognize the excess collections as regulatory liabilities owed to ratepayers unless and until Atmos spends the funds on their intended purpose.

The KCC should require Atmos to explicitly identify and report this intrastate regulatory liability and all related activity in all future reports, rate cases and depreciation studies that it files with the KCC. Explicit recognition of this amount as an intrastate regulatory liability in Atmos's future annual reports will provide transparency concerning these amounts. Without a requirement for separate identification and reporting of these amounts, they are hidden from the ratemaking and regulatory process in Kansas.

Q. WOULD IT BE SUFFICIENT TO REPORT THE ITEM AS A "DEFERRED CREDIT"?

A. No, treatment as a deferred credit would fail to address the core issue – these are costs recovered for a particular purpose and, if not used for that purpose, will result in future rates being decreased, as described in SFAS No. 71, ¶11. Atmos could easily assert in the future that ratepayers have no claim to a deferred credit. The KCC must specifically recognize and require reporting by Atmos as a regulatory liability for regulatory and

ratemaking purposes. Otherwise, Atmos will identify the amounts as accumulated depreciation for regulatory accounting purposes.

Q. WHAT IS WRONG WITH CONTINUING TO RECORD THE REGULATORY LIABILITY AS ACCUMULATED DEPRECIATION?

A. Atmos and all utilities consider accumulated depreciation to represent a measure of their capital they have recovered from their ratepayers. As simplistic as it sounds, utilities consider any amount in accumulated depreciation to be "their money" even if they collected it for a fictitious future cost.

Q. IS IT TRUE THAT ACCUMULATED DEPRECIATION IS A RATE BASE DEDUCTION AND THEREFORE RATEPAYERS ARE BETTER OFF DUE TO THAT FACT?

A. This is a false distinction between the two approaches. Accumulated depreciation is indeed a rate base deduction. A regulatory liability also can (and should) be a rate base deduction.

Q. WHAT IS THE APPROPRIATE TREATMENT OF ATMOS'S NON-LEGAL ARO REGULATORY LIABILITY?

A. The KCC should separate Atmos's non-legal ARO regulatory liability from accumulated depreciation. The appropriate accounting entry is a debit to account 108 - Accumulated depreciation and an equivalent credit to account 254 – Other regulatory liabilities.

Q. HAS THE KCC EVER ORDERED REGULATORY LIABILITY TREATMENT FOR NON-LEGAL AROS IN A PRIOR PROCEEDING?

A. Yes, in Docket No. 05-WSEE-981-RTS the KCC ordered regulatory liability treatment for terminal cost of removal which is also a non-legal ARO. The KCC said:

> The regulatory liability imposed on terminal net salvage is a significant factor. Majoros seemed to be concerned that even with a regulatory liability, an alternative regulatory scheme may allow Westar to divert the funds collected for terminal net salvage. The Commission reminds the parties that its intent in tracking the terminal net salvage values separately and determining that the amounts should be considered a liability is to establish the fact that Westar has an obligation to refund to ratepayers any amount of terminal net salvage not used for demolishing, dismantlement or otherwise removing plant. The point is this: The regulatory liability will track these funds collected for terminal net salvage and will ensure that when Westar dismantles existing plant to make room for additional generation, the cost of that dismantlement will not be capitalized and added to rate base.[12]

THE KCC SHOULD CONSIDER DISPOSING OF THE EXISTING REGULATORY LIABILITY

Q. WHAT SHOULD THE KCC DO WITH ATMOS'S REGULATORY LIABILITY ON A GOING-FORWARD BASIS?

A. There are a number of alternatives to the treatment of the regulatory liability on a going-forward basis. The KCC could require continued maintenance as a permanent rate base offset representing customer-provided capital, or amortization back to ratepayers over some specified amortization period. I recommend an amortization, because I do not believe Atmos will ever spend all of this money on future cost of removal. An amortization would reduce annual depreciation expense over the amortization period. On the other hand, I am proposing a going-forward future cost of removal allowance to ensure Atmos is kept whole.

Q. WHAT AMORTIZATION PERIOD DO YOU RECOMMEND?

[12] I/M/O Westar Energy, Docket No. 05-WSEE-981-RTS, Order on Petitions for Reconsideration and Clarification, Issued February 13, 2006, p. 49.

A. I recommend the Commission amortize the balance over the composite remaining life of Atmos's plant. This will have negligible revenue requirement effects because such amortization is taking place anyway by virtue of remaining life depreciation rates. In other words, the reclassification of the regulatory liability out of accumulated depreciation essentially increases the depreciation expense by an amount equivalent to the remaining life amortization. Hence, the entire regulatory liability and amortization issue is a revenue requirement wash, but it provides needed protection for ratepayers.

Q. IS THE AMORTIZATION A FORM OF RETROACTIVE RATEMAKING?

A. No.

THE KCC SHOULD CHANGE THE MECHANISM THAT CREATED ATMOS'S REGULATORY LIABILITY

Q. HAS MR. ROFF INCLUDED A PROVISION FOR ESTIMATED FUTURE COST OF REMOVAL IN HIS PROPOSED DEPRECIATION RATES?

A. Yes, he has.

Q. HOW MUCH NON-LEGAL ARO COST HAS MR. ROFF INCLUDED IN ATMOS'S ANNUAL DEPRECIATION EXPENSE?

A. Based on September 30, 2006 balances the amount is $1.4 million for Kansas plant.[13] He has included no cost of removal in his Shared Services rates.

Q. WHAT IS ATMOS'S ACTUAL EXPERIENCE?

For the period from 2002 through 2006, the actual average was $616 thousand for Kansas plant.[14] Nevertheless, Mr. Roff proposes to charge $1.4 million per year for cost of removal collections. If this pattern continues, the regulatory liability will continue to

[13] Calculated from Atmos response to CURB-168.

[14] For the period 2002-2006, the SSU plant experienced an average of $621 in cost of removal, all related to a 2004 retirement in account 397.

grow at an exponential rate. That is because Mr. Roff's approach applies an excessive rate to an ever-growing gross plant balance; however, actual cost of removal is in reality a function of annual plant additions. Mr. Roff's accruals will exceed actual cost of removal indefinitely.

Q. WHAT IS YOUR OPINION ABOUT THE INCORPORATION OF ESTIMATED FUTURE COST OF REMOVAL IN DEPRECIATION RATES?

A. I do not object to including future cost of removal estimates in depreciation rates as long as the resulting charges are just and reasonable and reflect current activity. On the other hand, a Company has a special burden to justify charging ratepayers today for any speculative future cost thirty to forty years from now. In this case, Atmos proposes to charge inflated future cost estimates to today's ratepayers, but will not even agree that it has a refundable obligation to ratepayers for any excess charges over and above its actual cost of removal expenditures. Atmos will not even acknowledge a $10.2 million regulatory liability for its past over collections.[15]

Q. REGARDING YOUR REFERENCE TO A "SPECIAL BURDEN," HOW ARE NORMAL EXPENSES ESTIMATED IN A RATE CASE?

A. An extrapolation of recent historical costs into the near-term future is a reasonable approach for most normal ongoing operation and maintenance expenses, but even those extrapolations are subject to challenge and rationalization. A utility must demonstrate that charging such costs to ratepayers is just and reasonable.

Q. IS THIS APPROACH AVAILABLE FOR COST OF REMOVAL?

A. Yes, Atmos maintains its actual expenditures for cost of removal. Consequently, those costs can be extrapolated into the near-term future. Mr. Roff, however, has employed

[15] Response to CURB Data Request No. 180.

another approach to increase the normal charges to today's ratepayers for future cost of removal.

ATMOS'S APPROACH TO FUTURE COST OF REMOVAL

Q. WHAT CAUSES ATMOS'S CHARGES FOR FUTURE COST OF REMOVAL TO BE SO EXCESSIVE?

A. Atmos's charges for future cost of removal are excessive due to the process it uses to derive these estimates and then convert them into depreciation expense. The process results in inflated annual charges for future cost of removal that vastly exceed actual expenditures.

Atmos bundles the inflated cost of removal factors in most of its depreciation rates, and then applies those rates for years to an ever-expanding depreciable plant base. This latter feature results in a double-inflationary effect. The factors are inflated and then they are applied to plant balances which also increase with inflation.

The accruals resulting from this approach have vastly exceeded, year-by-year, the money that Atmos actually spent or allocated for cost of removal, thus producing the $10.2 million regulatory liability – from charges to Kansas ratepayers.

Q. HOW DOES ATMOS'S APPROACH RESULT IN INFLATED COST OF REMOVAL FACTORS?

A. Atmos's net salvage studies relate removal costs in current dollars to asset retirements expressed in very old historical original cost dollars. The inflation experienced between the asset's in-service date and its retirement date results in current removal cost dollars that are many multiples of the historical original cost dollars of the retired asset.

Q. DOES ATMOS'S APPROACH RESULT IN AN INCREASE TO DEPRECIATION RATES?

A. Yes, it does. Any cost of removal factor will increase a depreciation rate. Atmos's inflated cost of removal factors will increase depreciation rates even more, and then will produce yet higher charges when applied to increasing plant balances.

Q. DOES MR. ROFF SPECIFICALLY ADDRESS THE ISSUE OF INCLUSION OF INFLATED COST OF REMOVAL FACTORS IN DEPRECIATION RATES?

A. Yes. At page 6 of his Direct Testimony, Mr. Roff offers the following quote, which he states was taken from the 1996 Edition of the NARUC Public Utility Depreciation Practices manual.

> - Net salvage is expressed as a percentage of plant retired by dividing the dollars of net salvage by the dollars of original cost of plant retired.
>
> - The goal of accounting for net salvage is to allocate the net cost of an asset to accounting periods, making due allowance for the net salvage, positive or negative, that will be obtained when the asset is retired.
>
> - This concept carries with it the premise that property ownership entails the responsibility for the property's ultimate abandonment or removal.[16]
>
> - This treatment of salvage is in harmony with generally accepted accounting *practices* and tends to remove from the income statement fluctuations caused by erratic, although necessary, abandonment and removal operations.[17]

Q. WHY DID MR. ROFF INCLUDE THIS QUOTATION IN HIS TESTIMONY?

A. Mr. Roff states that:

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[16] Roff Direct Testimony, p. 6. Taken from Public Utility Depreciation Practices, NARUC, August 1996 Edition, p. 18.

[17] Id., emphasis added.

> This quotation is important because it addresses several key accounting and ratemaking issues concerning the treatment of net salvage as a component of depreciation. First and foremost, net salvage is an appropriate component of depreciation.[18]

Q. DO YOU AGREE WITH THIS QUOTATION AS MR. ROFF HAS PROVIDED IT?

A. No, I do not. Mr. Roff has quoted the 1996 NARUC manual correctly with the exception of one key word; he used the word "**practices**" in the second paragraph. This is an incorrect quote and an important one.

Q. WHY IS THE DIFFERENCE IN WORDS IMPORTANT?

A. The word "practices" is used in a similar quote appearing in the 1968 NARUC manual. Mr. Roff has used the 1968 version of the quote in the past, and I have specifically commented on his choice to use that version of the quote. In Atmos's recent Kentucky case, Case No. 2006-00464, when asked why he quoted the 1968 NARUC Manual instead of the 1996 Edition, Mr. Roff stated that essentially the same quote appeared in the 1996 Edition.[19] In this case he has updated the quote to match the 1996 Edition, with the exception of the very word I challenged in the Kentucky case.

The 1996 Edition claims that Mr. Roff's treatment of net salvage "is in harmony with generally accepted accounting *principles*" rather than "generally accepted accounting *practices*" as was used in the 1968 Edition. Mr. Roff was employed for many years by a major international accounting firm and he is well aware of the concept of *generally accepted accounting principles* ("GAAP"). The subtle but salient point about Mr. Roff's continued use of the words "generally accepted accounting practices" is that

[18] Roff Direct Testimony, Page 6.
[19] KY Case No. 2006-00464, Roff response to Staff DR Item 2-26, provided as Exhibit___(MJM-1) to the direct testimony of Michael J. Majoros.

they are not GAAP. Nor is Mr. Roff's use of cost of removal factors in depreciation rates. Notwithstanding the NARUC's 1996 claim, GAAP depreciation rates have never allowed cost of removal factors in depreciation rates and SFAS No. 143 most recently affirmed this. Thus, Mr. Roff's use of a quotation implying that his approach is in harmony with GAAP is incorrect.

Q. WHAT IS AT THE HEART OF NARUC'S THINKING REGARDING THE ABOVE QUOTE?

A. The matching principle is at the heart of NARUC's thinking. NARUC focuses on the timing or pattern of cost of removal allocation and intergenerational equity. Unfortunately, NARUC does not address the fundamental questions of whether a company will actually incur the costs, and the intergenerational **inequity** of charging these inflated amounts to ratepayers when there is some doubt that the money will ever be spent on cost of removal, and the inflation element is so overstated. Again, it is worth noting that even the 1996 NARUC manual pre-dates SFAS No. 143. Thus, it reflects earlier deliberations, and did not consider, or even know about the huge regulatory liabilities emanating from the use of this approach.

Q. HAS ANYBODY ADDRESSED THESE FUNDAMENTAL QUESTIONS?

A. Yes, FASB addressed the fundamental questions in SFAS No. 143. The matching principle is in harmony with GAAP when the future costs are genuine obligations and are recognized at their fair value. However, the matching principle of accounting does not require allocation of an inflated future expenditure for which there is no liability to any accounting period.

NARUC focuses on an objective of achieving a particular expense recognition pattern rather than the need to recognize whether or not an actual obligation and liability exists. In paragraph B21, SFAS 143 specifically addresses the tendency to focus on the expense pattern rather than the reality of the cost, and the problems that can result:

> B21. Prior to this Statement, the objective of many accounting practices was not to recognize and measure obligations associated with the retirement of long-lived assets. Rather, the objective was to achieve a particular expense recognition pattern for those obligations over the operating life of the associated long-lived asset. Using that objective, some entities followed an approach whereby they estimated an amount that would satisfy the costs of retiring the asset and accrued a portion of that amount each period as an expense and a liability. Other entities used that objective and the provision in paragraph 37 of FASB Statement No 19, *Financial Accounting and Reporting by Oil and Gas Producing Companies*, that allows them to increase periodic depreciation expense by increasing the depreciable base of a long-lived asset for an amount representing estimated asset retirement costs. Under either of those approaches, the amount of liability or accumulated depreciation recognized in a statement of financial position usually differs from the amount of obligation that an entity actually has incurred. In effect, by focusing on an objective of achieving a particular expense recognition pattern, accounting practices developed that disregarded or circumvented the recognition and measurement requirements of FASB Concepts Statements.[20]

The process focuses on achieving a particular expense pattern rather than "recognition and measurement requirements," that is, the reality of the cost. Thanks to SFAS No. 143, we now know that Mr. Roff's inflated future removal cost estimates do not meet baseline tests as liabilities.

Q. WHY DO YOU SAY THAT MR. ROFF'S INFLATED FUTURE COST OF REMOVAL ESTIMATES DO NOT MEET BASELINE TESTS AS LIABILITIES?

[20] Id., paragraph B21, (emphasis supplied).

A. Atmos does in fact have certain costs that meet these baseline tests. There are assets for which Atmos has identified legal asset retirement obligations ("AROs") as defined by SFAS No. 143. They are discussed in the Company's 2007 10-K Report.[21]

On the other hand, using Mr. Roff's proposals and approach, Atmos has collected, and will continue to collect, unchecked, estimates of future cost of removal relating to the rest of its plant for which it does not have any such legal retirement obligation. These are the non-legal AROs. Atmos does not have any probable obligation to make these expenditures, as "probable" is used in SFAS No. 143. They therefore do not meet the definition of a liability.[22]

All that is necessary to create a legal obligation is for Atmos to promise the Commission and the public at large that it will do the work, incur the cost, and spend the money it collects for that cost on that cost.

As evident from its response to CURB Data Request No. 187, Atmos seems unwilling to make the promise necessary to create a legal obligation for its cost of removal collections.

> **Data Request:** Does Atmos promise to remove each asset for which it is collecting cost of removal and does it promise to spend all of the money it is collecting for cost of removal, on cost of removal? Please explain.
>
> **Response:** The company will continue to remove assets that need to be removed in the course of providing gas utility service. Also, see the response to data request CURB-186.[23]

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[21] Atmos Energy, September 30, 2007 10-K Report, p. 72.

[22] SFAS No. 143, paragraph 4. "Liabilities are *probable* future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events. Probable is used with its general meaning, rather than in a specific accounting or technical sense (such as Statement 5, par.3), and refers to that which can be reasonably expected or believed on a basis of available evidence or logic but neither certain nor proved (Webster's New World Dictionary, p.1132). Its inclusion in the definition is intended to acknowledge that business and other economic activities occur in an environment characterized by uncertainty in which few outcomes are certain."

[23] See response to CURB Data Request No. 187.

Atmos's response to CURB Data Request No. 187 is not sufficient to establish legal AROs or inflated future cost of removal ratios. Atmos's response to CURB Data Request No. 187 is sufficient, however, to adopt reasonable cost of removal factors for inclusion in its depreciation rates.

Q. WHY DO YOU RECOMMEND DISCONTINUATION OF ATMOS'S APPROACH?

A. The inflationary and orders of magnitude mismatches inherent in Atmos's approach have resulted in the build-up of it's $10.2 million regulatory liability, and excessive cost of removal collections on an annual basis; but the problems do not end there.[24]

There is little, if any, relationship between the cost of removal and retirements amounts in Atmos's studies. Furthermore, the data is unreliable, it is typically sporadic, and entirely subject to the control of Atmos's accounting department.

Q. WHY IS THERE LITTLE OR NO RELATIONSHIP BETWEEN THE COST OF REMOVAL AND THE RETIREMENT AMOUNTS IN ATMOS'S STUDIES?

A. A majority of Atmos's retirements result from replacements. Atmos determines a need to replace assets in conjunction with its obligation to provide service. When it is determined that assets should be replaced, Atmos estimates the entire replacement cost, and then allocates a portion of the replacement cost to cost of removal. Each such allocation is unique to the replacement at hand. The cost of removal in Atmos's studies is a function of and derived directly from plant additions - not retirements.

Most of the retirements in Atmos's studies are after-the-fact accounting entries, bearing little if any relationship at all to the recorded cost of removal. It is doubtful that

[24] As I stated earlier, in my opinion the $1.7 million figure is understated.

the cost of removal in any given year relates in anyway to the retirements recorded in that year.

Q. WHY DO YOU SAY THE DATA IN THE ATMOS'S STUDIES IS UNRELIABLE?

A. Not only is the data sporadic in many instances, it is subject to the control of the accounting department. Changes in accounting procedures impact what is reported as cost of removal. Furthermore, significant portions of the recorded cost of removal are the results of allocations. All allocation factors are at least somewhat arbitrary. Consequently, it is reasonable to assume that two independent estimators reviewing the same project could reach different conclusions concerning the portion of a replacement project to be allocated to cost of removal.

Q. DO YOU CONSIDER THE AMOUNTS IN ATMOS'S STUDIES TO BE UNRELIABLE?

A. I assume that once allocated or assigned, Atmos has properly recorded the amounts, but sporadic figures resulting from arbitrary allocations are unreliable for use in a procedure designed to collect huge amounts of money in advance from ratepayers, particularly when the Company's management will not even commit to spending the money for its ostensible purpose.

GOING-FORWARD COST OF REMOVAL RECOMMENDATIONS

Q. WHAT DO YOU RECOMMEND?

A. On a going-forward basis, I recommend the elimination of the existing inflated cost of removal ratios and the adoption of a normalized cost of removal allowance based on Atmos's recent actual experience. In my opinion, the normalized allowance approach is

consistent with the principles and concepts manifested in both SFAS No. 143 and Order No. 631.

Q. WHY IS THIS APPROACH CONSISTENT WITH SFAS NO. 143 PRINCIPLES?

A. Because the amount is the estimate of the net present value of future cost of removal.

Q. WHY IS IT CONSISTENT WITH ORDER NO. 631?

A. Because it is a separate identifiable amount.

Q. PLEASE EXPLAIN YOUR RECOMMENDATION FOR A NORMALIZED COST OF REMOVAL ALLOWANCE.

A. In the normalized cost of removal allowance approach the annual average cost of removal is included as a specifically identifiable amount within the annual depreciation accrual. In other words, a normalized cost of removal amount is still a component of the depreciation expense accrual and is credited to accumulated depreciation and actual cost of removal continues to be charged to accumulated depreciation.

Q. IS THE ANNUAL COST OF REMOVAL ACCRUAL A FIXED AMOUNT?

A. The annual allowance could be either a fixed amount or a rolling five-year average amount.

Q. WHY ARE YOU RECOMMENDING A COST OF REMOVAL ALLOWANCE AS OPPOSED TO A NET SALVAGE ALLOWANCE?

A. I have recommended a cost of removal allowance because SFAS No. 143 specifically relates to cost of removal collections. In calculating my recommended depreciation rates for Atmos I have incorporated Mr. Roff's proposed gross salvage ratios.

Q. HAVE OTHER JURISDICTIONS APPROVED THE NORMALIZED COST OF REMOVAL ALLOWANCE APPROACH, OR A NORMALIZED NET SALVAGE ALLOWANCE APPROACH?

A. The net salvage allowance method has been adopted in several New Jersey rate cases in which I participated. In Rockland Electric Company's 2002 rate case, the New Jersey Board of Public Utilities ("BPU") endorsed my testimony regarding SFAS No. 143, but used a net salvage allowance based on the average net salvage over a 10-year period, as recommended by Staff, instead of the five-year average I recommended.[25] In Jersey Central Power & Light Company's 2002 rate case, the BPU agreed with me that the inclusion of net salvage in depreciation rates was inappropriate. It adopted my recommendation of a $4.8 million net salvage allowance, based on the cost of removal included in JCP&L's test year budget for transmission, distribution and general plant.[26] As agreed to in the settlement of their last rate case, Atlantic City Electric Company also uses the net salvage allowance method to accrue net salvage.[27] However, their previous rates did not have a provision for net salvage at all. In Public Service Electric and Gas Company's most recent electric case, I recommended retention of the existing 2.49 percent composite rate. Some of the parties originally stipulated to a 2.75 percent rate, but the BPU rejected the stipulation and adopted my 2.49 percent recommendation. That

[25] I/M/O Rockland Electric Company, KCC Docket Nos. ER02080614 and ER02100724, Initial Decision, June 10, 2003 and Summary Order, July 31, 2003.
[26] I/M/O Jersey Central Power & Light Company, KCC Docket Nos. ER0208056, ER0208057, EO02070417 and ER02030173, Summary Order, August 1, 2003.
[27] I/M/O Atlantic City Electric Company, KCC Docket Nos. ER03020110, ER04060423, EO03020091 and EM02090633, Decision and Order Adopting Initial Decision and Stipulation of Settlement, May 26, 2005.

rate, which the Company calculated in a previous case, did not have a provision for net salvage.[28]

Q. HAVE ANY OTHER COMMISSIONS ACCEPTED THE NORMALIZED NET SALVAGE ALLOWANCE APPROACH?

A. Yes, the Pennsylvania Public Utility Commission uses the normalized net salvage allowance as a matter of course. Most recently, the Delaware Public Service Commission adopted the normalized net salvage allowance approach based on the five-year average for Delmarva Power & Light, the largest electric utility in that state.

Q. HAVE YOU INCORPORATED A 5-YEAR NORMALIZED COST OF REMOVAL ALLOWANCE IN YOUR DEPRECIATION RECOMMENDATIONS?

A. Yes, Exhibit___(MJM-2) summarizes my recommendations. I have removed Mr. Roff's proposed future cost of removal factors from his proposed depreciation. The result is "plant-only" or "capital recovery" depreciation rates. This yields annual plant-only depreciation, based on September 30, 2006, plant balances of $4.7 million for Kansas property. To that amount, I have added a $400 thousand annual cost of removal allowance based on Atmos's average actual experience for the five years ending December 31, 2006. This yields total annual depreciation of $5.2 million, which is less than Mr. Roff's amount by $3.5 million. Mr. Roff's proposed rates for Shared Services did not include any provision for future cost of removal.

[28] I/M/O Public Service and Gas Company, KCC Docket No. ER02050303, Decision and Order, Issued April 22, 2004.

EQUAL LIFE GROUP

Q. WOULD YOU PLEASE EXPLAIN MR. ROFF'S PROPOSAL TO ADOPT AND RETROACTIVELY APPLY THE EQUAL LIFE GROUP ("ELG") PROCEDURE TO ALL VINTAGES?

A. Yes. Prior to the adoption of Mr. Roff's depreciation rates as part of the Settlement in Docket No. 03-ATMG-1036-RTS, the Company's depreciation rates reflected the use of the broad group ("BG") or Average Life Group procedure ("ALG"). In that Docket, Mr. Roff proposed a retroactive change to the Equal Life Group procedure. All of these are weighting procedures used to calculate an average remaining life. The ELG procedure had not been used previously in Kansas by Atmos. Although the stipulated rates were calculated using ELG, the procedure was not specifically adopted for Atmos' Kansas property. As discussed below, retroactive application of ELG leads to a large initial increase in depreciation due to the prior use of the BG/ALG procedure. Therefore, such a change should only be made on a going-forward basis.

Q. PLEASE SUMMARIZE THE DIFFERENCES BETWEEN THE AVERAGE LIFE GROUP PROCEDURE AND THE EQUAL LIFE GROUP PROCEDURE.

A. A broad group average service life relates to the entire account. The ALG procedure develops a single average depreciation rate which can be applied without change over the entire life of an account. For example, assume the broad group average service life for Account 376, Mains is estimated to be thirty years. The BG/ALG procedure would result in a 3.33 percent depreciation rate (1/30) designed to recover the entire investment in Mains, i.e., those retired prior to the attainment of the thirty-year average service life as well as those in service beyond the thirty-year average service life.

Mr. Roff's primary challenge to the ALG procedure is the averaging explicitly reflected in its use, i.e., the assumption that overrecovery of assets retired beyond the average service life of the group will offset underrecovery of assets retired before the average service life of the group. This is an undeniable assumption in the ALG procedure. In the example above, ALG depreciation would assume that the underrecoveries would be offset by overrecoveries of mains living well beyond the average service life; but the fundamental assumption under ALG is full recovery.

The ELG procedure statistically disaggregates the anticipated retirements within a vintage and then effectively establishes separate depreciation rates for each of the various individual life groups. In the mains example, separate rates would be established for the retirements anticipated to be incurred each year.

Q. WOULD YOU SUMMARIZE THE PROS AND CONS REGARDING ELG AND ALG?

A. Yes. From a theoretical standpoint, ELG has the benefit of providing a more precise cost allocation, assuming perfect foresight. On the other hand, ELG requires annual depreciation rate changes and produces precisely the wrong answer as a result of forecasting inaccuracies. The BG/ALG, procedure, which I have used, has the benefit of a constant depreciation rate, and also in my opinion, a higher probability of producing a correct overall result notwithstanding forecasting inaccuracies. On the other hand, ALG is premised on the averaging concept of offsetting underrecoveries with overrecoveries.

Q. IS ELG NECESSARY?

A. ELG is not necessary. Both ALG and ELG assume full recovery. From a theoretical standpoint, ELG has merit but so does ALG. From a practical standpoint, ELG will produce a depreciation expense increase.

Q. DO YOU RECOMMEND THAT ELG BE ADOPTED FOR USE BY ATMOS IN KANSAS?

A. No. As discussed above, ELG has theoretical merit; however, it has negative aspects, as well. Furthermore, it is not necessary.

Q. IF THE COMMISSION WERE TO ADOPT ELG FOR ATMOS, DO YOU AGREE WITH MR. ROFF'S IMPLEMENTATION PROPOSAL?

A. No. Mr. Roff proposes to retroactively apply ELG to all prior vintages of plant in a composite calculation, and then use the resulting ELG-based composite remaining life in a remaining life rate calculation. In the prior case, where I accepted all of Mr. Roff's lives, I calculated that his retroactive implementation of ELG caused an approximately $1.09 million increase to depreciation expense.[29] The resulting abrupt depreciation expense increase was caused primarily by the fact that ELG had never been used in the past. Had ELG always been used, Atmos's recorded book reserves would have been substantially higher as a result of the use of higher depreciation rates in the past. That is because ELG produces a pattern of depreciation rates which are very similar in nature to accelerated depreciation; double-declining balance is an example.

The depreciation reserve level is a critical element in the calculation of remaining life rates: the higher the reserve, the lower the rate. Conversely, the lower the reserve, the higher the rate. Mr. Roff's application of ELG to all prior vintages produces a composite remaining life for those vintages which is inconsistent with actual past depreciation

[29] Docket No. 03-ATMG-1036-RTS, Direct Testimony of Michael J. Majoros, Jr., page 5.

practices. The practical consequence is that Mr. Roff's implementation proposal creates a significant depreciation reserve deficiency resulting merely from a change in the depreciation grouping procedure.

The most well-known application of the ELG procedure is in the telecommunications industry. Many FCC subject companies made similar proposals for retroactive application of ELG, and all were summarily rejected. They were rejected due to the reserve situations described above, as well as the fact that ELG creates a spike in revenue requirements, just as Mr. Roff's proposal did in the last proceeding. The FCC's initial approach to ELG implementation was to allow it only on a going-forward vintage basis and furthermore, to phase it in by groups of accounts over a series of years. At one point, the FCC was allowing implementation of ELG by applying it to one-half of the gross additions for the year immediately following the study date. For example, if a study was dated December 31, 1990, ELG would be allowed on one-half of the estimated 1991 additions. That practice was abandoned and any carrier subsequently applying for ELG would not see its effects until its study actually contained ELG vintages. For example, if ELG was approved as a result of a 1990 study, the first ELG vintage would be 1991. The Company would receive the benefit either in its next regularly scheduled depreciation study or in a technical update.

Q. IF ELG IS APPROVED, WHAT DO YOU RECOMMEND?

A. If ELG is approved, I recommend that it not be applied retroactively. If ELG is approved, I recommend that the FCC's approach be adopted, i.e., the first ELG vintage would be 2006 for the purposes of the next depreciation study. I also recommend that

Atmos be required to file depreciation studies every three (3) years to ensure that the ELG rates are properly managed.

Q. HAVE YOU CALCULATED NEW REMAINING LIVES USING THE ALG PROCEDURE INSTEAD OF MR. ROFF'S PROPOSED ELG?

A. Yes. My remaining life calculations are included in Exhibit___(MJM-3), which is my depreciation study.

ASSET LIVES AND CURVES

Q. HAVE YOU ACCEPTED ALL OF THE COMPANY'S PROPOSED LIVES AND CURVES?

A. No. As stated in the beginning of my testimony, I have accepted most of the lives and curves on which Mr. Roff based his depreciation rates. I disagree with his proposed lives and curves for accounts 380 – Services, 381 – Meters, and 382 – Meter Installations.

Q. PLEASE EXPLAIN HOW MR. ROFF CONDUCTED HIS ANALYSES.

A. According to his testimony, Mr. Roff used both the Actuarial method and the Simulated Plant Records-Balances method ("SPR") of life analysis to study plant activity and arrive at his service life estimates. The Actuarial method relies on aged plant and retirement data to generate an observed life table ("OLT"), which is then fit, using the least squares approach, to various Iowa Curves to obtain an estimate of the pattern of retirements around the average service life. This method was used only for the accounts for which aged data was available. The SPR method was used for accounts for which the plant data is question was not "aged", meaning, the age of retirements is not known.

Q. WHAT ARE IOWA CURVES?

A. Iowa Curves are a set of predefined curves developed at Iowa State University to study plant lives and retirement patterns. They are designated as "R" right, "S" symmetrical, "L" left and "O" original. These designations identify the modal frequency of retirements relative to the average service life. For example, an R-curve indicates that the modal frequency of retirements will occur to the right of the average service life. These letters are also combined with subscripts indicating the range of dispersion from wide (1) to narrow (5).

Q. DID YOU REVIEW MR. ROFF'S ANALYSES?

A. Yes, I did.

Q. DID YOU CONDUCT YOUR OWN ANALYSES?

A. Yes. I used Mr. Roff's data to conduct my own actuarial and SPR analyses, as well as GMT analyses. I then compared my results with Mr. Roff's proposals to check the reasonableness of his proposed lives and curves.

Q. PLEASE EXPLAIN WHERE YOU DIFFER FROM MR. ROFF.

A. As I mentioned above, I disagree with three of Mr. Roff's proposed lives. My analyses for these accounts are provided in Exhibit___(MJM-3). I will discuss each in turn below.

Account 380 – Services. Mr. Roff has proposed retention of the existing 40 S1 life and curve for this account. My SPR analysis results in a best fit life and curve of 60 R1.5. Mr. Roff's own SPR balances analyses for this account support a longer life than the one he is proposing. Only by using the most recent 5-year band do his resultant best-fit lives approach the 41 year mark. His longer bands support much longer lives. I recommend my best-fit 60 R1.5 life and curve for this account.

Account 381 – Meters. Mr. Roff has proposed a 20 R0.5 life and curve for this account. This is a 5-year life reduction from his proposal in the previous case. In conducting his analysis, he analyzed both accounts 381 and 382 separately and combined together. It appears he relied upon his combined analysis in his result. In my opinion the data for this account has been skewed by large recent additions. Furthermore, although the Company was authorized a depreciation rate of 3.81% for the meters account in the prior case, it appears to have used a rate of 3.25% instead.[30] This will have caused an understated depreciation reserve for this account. I recommend that the use of a 25 R0.5 life and curve for this account, consistent with Mr. Roff's results from his previous study.

Account 382 – Meter Installations. As with account 381, Mr. Roff has proposed a 20 R0.5 life and curve for this account, relying on his combined analysis. The existing rate for this account is based on a 25 R0.5 life and curve. Unlike account 381, it appears Atmos has been using its authorized rate for this account. Because accounts 381 and 382 are associated, I recommend the use of a 25 R0.5 year life and curve for this account.

SUMMARY

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS.

A. My recommendations are individually discussed in my testimony above. In general:

- I have recommended that the KCC recognize Atmos's non-legal AROs as a regulatory liability for ratemaking purposes in Kansas.
- I have recommended that the KCC return the existing regulatory liability to ratepayers over the remaining life of the plant, resulting in an annual amortization of $358,508.
- I have recommended that instead of the Company's inflated net salvage proposals, the KCC should adopt a normalized cost of removal allowance

[30] Docket No. 03-ATMG-1036-RTS, Wp 10-1 and Exhibit DSR-2, Schedule 1.

approach based upon the most recent five years of actual experience. This will reduce Atmos's depreciation proposal by approximately $1.1 million.

- I have recommend that Atmos's rates be calculated using the ALG procedure, instead of Mr. Roff's proposed ELG procedure.

- I have recommended longer lives for three accounts.

Q. HAVE YOU CALCULATED NEW DEPRECIATION RATES BASED ON YOUR RECOMMENDATIONS?

A. Yes, I have. My recommended rates are calculated in Exhibit___(MJM-2). The sum of my recommendations results in an annual depreciation expense accrual of $4.8 million for KS plant and $21.4 million for Shared Services plant, based on plant as of September 30, 2006. For KS plant, my recommended accrual is $3.8 million less than Mr. Roff's proposal and $2.4 less than that provided by the existing rates (based on September 30, 2006 plant balances). For Shared Services plant, my recommended accrual is $863 thousand less than Mr. Roff's proposal and $1.8 million greater than that provided by the existing rates.

Q. HAVE YOU CALCULATED THE IMPACT OF YOUR RECOMMENDATIONS OF THE DEPRECIATION EXPENSE REQUESTED IN THIS CASE?

A. Yes. My recommendations result in $2.8 million reduction from Atmos's book depreciation expense for the test year, a $3.9 million reduction from the Company's request. This calculation is shown on page 6 of Exhibit___(MJM-2)

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

VERIFICATION

Washington,)
District of Columbia) ss:

The undersigned, being of lawful age and upon oath duly sworn, states that he is a consultant for the Citizens' Utility Ratepayer Board et. al., that he has read the foregoing testimony, knows the contents thereof; and that the statements contained therein are true.

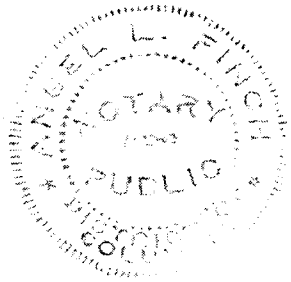
Michael J. Majoros, Jr.

Subscribed and sworn to before me this 31st day of January, 2008.

Notary Public

My Appointment Expires:

March 14, 2011



Atmos Energy - Kansas
Average Net Salvage Experience
(1992-2006)
All Accounts

Year	Retirements	Salvage	COR	Net Salvage
1992	957,382	15,618	67,424	(51,806)
1993	555,926	5,127	61,133	(56,006)
1994	586,443	13,850	35,412	(21,562)
1995	786,789	4,533	38,745	(34,212)
1996	982,741	21,428	38,582	(17,154)
1997	773,725	87,094	43,868	43,226
1998	601,092	16,715	59,854	(43,139)
1999	373,002	47,746	60,968	(13,222)
2000	8,015,492	37,146	1,965	35,181
2001	1,070,492	183,051	988,459	(805,408)
2002	4,265,413	63,152	295,992	(232,840)
2003	4,548,061	8,719	424,114	(415,395)
2004	6,637,406	32,345	764,738	(732,393)
2005	4,804,646	98,836	913,894	(815,058)
2006	2,791,554	894,071	683,598	210,473
1992-2006				
15-Year Total	37,750,163	1,529,431	4,478,746	(2,949,315)
15-Year Avg.	2,516,678	101,962	298,583	(196,621)
1997-2006				
10-Year Total	33,880,882	1,468,875	4,237,450	(2,768,575)
10-Year Avg.	3,388,088	146,888	423,745	(276,857)
2002-2006				
5-Year Total	23,047,079	1,097,123	3,082,336	(1,985,213)
5-Year Avg.	4,609,416	219,425	616,467	(397,043)
2004-2006				
3-Year Total	14,233,606	1,025,252	2,362,230	(1,336,978)
3-Year Avg.	4,744,535	341,751	787,410	(445,659)

Source: Response to CURB 1-105

Atmos Energy - Shared Services
Average Net Salvage Experience
(1993-2006)

Year	Retirements	Salvage	Cost of Removal	Net Salvage
1993	92,083	200	-	200
1994	363,910	-	-	-
1995	6,108	-	-	-
1996	358,364	9,000	-	9,000
1997	-	-	(5,108)	5,108
1998	6,852	-	-	-
1999	-	-	-	-
2000	8,306,339	3,000	45	2,955
2001	-	-	-	-
2002	16,632,481	-	-	-
2003	56,637	-	-	-
2004	34,015	26,609	3,107	23,502
2005	-	-	-	-
2006	5,784,348	-	-	-
1993-2006				
14-Year Total	31,641,137	38,809	(1,956)	40,765
14-Year Avg.	2,260,081	2,772	(140)	2,912
1997-2006				
10-Year Total	30,820,672	29,609	(1,956)	40,565
10-Year Avg.	3,082,067	2,961	(196)	4,056
2002-2006				
5-Year Total	22,507,481	26,609	3,107	23,502
5-Year Avg.	4,501,496	5,322	621	4,700
2004-2006				
3-Year Total	5,818,363	26,609	3,107	23,502
3-Year Avg.	1,939,454	8,870	1,036	7,834

Source: Response to CURB 1-105

ATMOS ENERGY CORPORATION - KANSAS (Divs. 79-81, & 86)
Book Depreciation Study as of September 30, 2006
Snavely King Recommended Depreciation Rates and Annual Amounts

[1]	[2]	[3]	[4]	[5]	[6]	[7]=5+6	[8]=7*3	[9]=3-4-8	[10]	[11]	[12]	[13]=14/3	[14]=9/12
Account	Description	9/30/2006 Balance $	9/30/2006 Accumulated Depreciation $	Gross Salvage %	Cost of Removal %	Net Salvage %	Net Salvage $	Net Balance $	ASL yrs.	Iowa Curve	RL	BG/VG Rate %	Annual Amount $
	STORAGE PLANT												
350.20	Rights-of-Way	568,935	0	0	0	0	-	568,935	50	R5	32.81	3.05	17,340
351.00	Structures and Improvements	102,923	45,058	0	0	0	-	57,865	40	R4	25.84	2.18	2,239
352.00	Wells	1,130,321	493,242	0	0	0	-	637,079	50	S4	33.87	1.66	18,810
352.02	Reservoirs	36,515	15,934	0	0	0	-	20,581	60	R3	18.23	3.09	1,129
353.00	Pipelines	1,090,230	475,747	0	0	0	-	614,483	50	S2	35.11	1.61	17,502
354.00	Compressor Station Equipment	2,273,547	992,116	0	0	0	-	1,281,431	25	S2	15.25	3.70	84,028
355.00	M&R Equipment	203,329	88,582	0	0	0	-	114,747	25	S2	13.09	4.31	8,766
356.00	Purification Equipment	288,382	122,236	0	0	0	-	166,146	30	R4	13.18	4.37	12,606
357.00	Other Equipment	125,321	54,687	0	0	0	-	70,634	35	R5	18.36	3.07	3,847
	Total Storage Plant	5,819,503	2,287,602				0	3,531,901				2.86	166,267
	TRANSMISSION PLANT												
365.20	Rights-of-Way	7,169	18,022	0	0	0	-	(10,853)	50	R5	45.50	(3.33)	(239)
366.00	Structures and Improvements	33,191	29,374	0	0	0	-	3,817	40	R2.5	20.13	0.57	190
367.00	Mains	3,525,247	1,483,956	0	0	0	-	2,041,291	50	S2	32.94	1.76	61,970
368.00	Compressor Station Equipment	31,496	139,837	5	0	5	1,575	(109,915)	20	SQ	19.50	(17.90)	(5,637)
369.00	M&R Station Equipment	395,928	310,298	5	0	5	19,796	65,833	30	R0.5	11.96	1.39	5,504
	Total Transmission Plant	3,993,031	1,981,487				21,371	1,990,173				1.55	61,789
	DISTRIBUTION PLANT												
374.02	Rights-of-Way	289,231	(102,934)	0	0	0	-	392,165	50	R5	46.44	2.92	8,445
375.00	Structures and Improvements	109,190	33,752	0	0	0	-	75,438	35	L2	23.77	2.91	3,174
376.00	Mains	101,068,393	31,671,255	0	0	0	-	69,397,138	50	S2	37.45	1.83	1,853,061
378.00	M&R Station Equipment	2,632,312	988,553	0	0	0	-	1,643,759	25	S2	13.15	4.75	125,001
379.00	City Gate Equipment												
	Division 81 - UCG	1,906,135							30	R1		2.53	48,225
	Division 86 - Southwest	1,494							30	R1		2.53	38
	Total Account 379.00	1,907,629	932,535	0	0	0	0	975,094			20.19	2.53	48,296
380.00	Services	47,517,588	11,853,414	0	0	0	-	35,664,174	60	R1.5	52.01	1.44	685,718
381.00	Meters	12,346,071	4,551,094	0	0	0	-	7,794,977	25	R0.5	20.48	3.08	380,614
382.00	Meter Installations	18,518,817	966,262	0	0	0	-	17,552,555	25	R0.5	21.23	4.46	826,781
383.00	House Regulators	2,106,434	899,197	0	0	0	-	1,207,237	30	R0.5	20.67	2.77	58,405
384.00	House Regulator Installations	209,462	184,366	0	0	0	-	25,096	30	S5	12.90	0.93	1,945
385.00	Industrial M&R Station Equipment	623,163	138,187	0	0	0	-	484,976	25	R0.5	19.96	3.90	24,297
387.00	Other Equipment	13,769	(5,222)	5	0	5	688	18,303	20	L3	10.38	12.81	1,763
	Total Distribution Plant	187,342,060	52,110,459				688	135,230,913				2.14	4,017,500

ATMOS ENERGY CORPORATION - KANSAS (Divs. 79-81, & 86)
Book Depreciation Study as of September 30, 2006
Snavely King Recommended Depreciation Rates and Annual Amounts

[1]	[2]	[3]	[4]	[5]	[6]	[7]=5+6	[8]=7*3	[9]=3-4-8	[10]	[11]	[12]	[13]=14/3	[14]=9/12
Account	Description	9/30/2006 Balance $	9/30/2006 Accumulated Depreciation $	Gross Salvage %	Cost of Removal %	Net Salvage %	Net Salvage $	Net Balance $	ASL yrs.	Iowa Curve	RL	BG/VG Rate %	Annual Amount $
	GENERAL PLANT												
390.00	Structures and Improvements	825,019	107,883	0	0	0	-	717,136	30	R2	26.26	3.31	27,309
391.00	Office Furniture and Equipment	463,740	(273,010)	0	0	0	-	736,750	15	R5	13.02	12.20	56,586
392.00	Transportation Equipment	258,484	147,012	5	0	5	12,924	98,548	6	L3	1.47	25.94	67,039
393.00	Stores Equipment	5,160	(3,752)	0	0	0	-	8,912	28	R0.5	22.00	7.85	405
394.00	Tools, Shop and Garage Equipment	1,121,979	342,878	0	0	0	-	779,101	15	L5	8.65	8.03	90,070
395.00	Laboratory Equipment	12,748	4,090	0	0	0	-	8,658	20	S6	8.91	7.62	972
396.00	Power Operated Equipment	507,301	160,140	0	0	0	-	347,161	10	L4	4.12	16.61	84,262
397.00	Communication Equipment	348,040	210,330	0	0	0	-	137,710	12	S6	3.31	11.95	41,604
398.00	Miscellaneous Equipment	1,044,617	214,068	0	0	0	-	830,549	15	R1	12.00	6.63	69,212
399.00	Other Tangible Property	1,346,374	872,270	0	0	0	-	474,104	8	S5	4.88	7.22	97,152
	Total General Plant	5,933,462	1,781,909				12,924	4,138,629				9.01	534,612
	Total Depreciable Plant	203,088,056	58,161,457				34,984	144,891,616			30.31	2.35	4,780,168
	Annual COR Allowance												400,000
	Total Depreciation												5,180,168
	Annual Regulatory Liability Amortization												(352,785)
	Total Depreciation and Amortization PIS												10,007,551

Sources:
Col. [3] from Exhibit DSR-3, Schedule 1.
Col. [4] from page 3
Cols. [5], [10] and [11] from Exhibit DSR-4, Schedule 2
Col. [12] from Exhibit___(MJM-3).

ATMOS ENERGY CORPORATION - KANSAS (Divs. 79-81, & 86)
Separation of Reserves
As of September 30, 2006

[1]	[2]	[3]	[4]	[5]	[6]=4-5
Account	Description	9/30/2006 Balance	9/30/2006 Book Reserve	9/30/2006 COR Reserve	9/30/2006 Accumulated Depreciation
	STORAGE PLANT				
350.20	Rights-of-Way	568,935	0	0	0
351.00	Structures and Improvements	102,923	45,058	0	45,058
352.00	Wells	1,130,321	493,242	0	493,242
352.02	Reservoirs	36,515	15,934	0	15,934
353.00	Pipelines	1,090,230	475,747	0	475,747
354.00	Compressor Station Equipment	2,273,547	992,116	0	992,116
355.00	M&R Equipment	203,329	88,582	0	88,582
356.00	Purification Equipment	288,382	122,236	0	122,236
357.00	Other Equipment	125,321	54,687	0	54,687
	Total Storage Plant	5,819,503	2,287,602	0	2,287,602
	TRANSMISSION PLANT				
365.20	Rights-of-Way	7,169	804	(17,218)	18,022
366.00	Structures and Improvements	33,191	23,893	(5,481)	29,374
367.00	Mains	3,525,247	1,908,663	424,707	1,483,956
368.00	Compressor Station Equipment	31,496	1,058	(138,779)	139,837
369.00	M&R Station Equipment	395,928	316,709	6,411	310,298
	Total Transmission Plant	3,993,031	2,251,127	269,640	1,981,487
	DISTRIBUTION PLANT				
374.02	Rights-of-Way	289,231	(102,934)	0	(102,934)
375.00	Structures and Improvements	109,190	34,107	355	33,752
376.00	Mains	101,068,393	36,989,641	5,318,386	31,671,255
378.00	M&R Station Equipment	2,632,312	1,123,722	135,169	988,553
379.00	City Gate Equipment				
	Division 81 - UCG	1,906,135			
	Division 86 - Southwest	1,494			
	Total Account 379.00	1,907,629	932,293	(242)	932,535
380.00	Services	47,517,588	16,827,265	4,973,851	11,853,414
381.00	Meters	12,346,071	4,551,094	0	4,551,094
382.00	Meter Installations	18,518,817	808,570	(157,692)	966,262
383.00	House Regulators	2,106,434	1,052,483	153,286	899,197
384.00	House Regulator Installations	209,462	164,862	(19,504)	184,366
385.00	Industrial M&R Station Equipment	623,163	153,480	15,293	138,187
387.00	Other Equipment	13,769	(7,108)	(1,886)	(5,222)
	Total Distribution Plant	187,342,060	62,527,475	10,417,016	52,110,459
	GENERAL PLANT				
390.00	Structures and Improvements	825,019	107,883	0	107,883
391.00	Office Furniture and Equipment	463,740	(273,058)	(48)	(273,010)
392.00	Transportation Equipment	258,484	147,012	0	147,012
393.00	Stores Equipment	5,160	(3,752)	0	(3,752)
394.00	Tools, Shop and Garage Equipment	1,121,979	342,120	(758)	342,878
395.00	Laboratory Equipment	12,748	6,914	2,824	4,090
396.00	Power Operated Equipment	507,301	160,140	0	160,140
397.00	Communication Equipment	348,040	210,249	(81)	210,330
398.00	Miscellaneous Equipment	1,044,617	218,728	4,660	214,068
399.00	Other Tangible Property	1,346,374	872,270	0	872,270
	Total General Plant	5,933,462	1,788,506	6,597	1,781,909
	Total Depreciable Plant	203,088,056	68,854,710	10,693,253	58,161,457
	Composite RL			30.31	
	Annual Amortization			$ 352,785	

Sources:
Col. [3] from Atmos Depreciation Study, Schedule 1.
Col. [4] from response to CURB-105.
Col. [5] from response to CURB 180(b). Only amounts relating to study accounts have been included, therefore the total differs slightly from Atmos reported total of $10.2 million.

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

[1]	[2]	[3]	[4]	[5]	[6]	[7]=5+6	[8]=7*3	[9]=3-4-8	[10]	[11]	[12]	[13]=14/3	[14]=9/12
Account Number	Description	9/30/2006 Balance $	9/30/2006 Accumulated Depreciation $	Gross Salvage %	Cost of Removal %	Net Salvage %	Net Salvage $	Net Balance $	ASL yrs.	Iowa Curve	RL	Rate %	Annual Amount $
	GENERAL PLANT												
390.09	Improvements to Leased Premises	9,949,143	6,328,771	0	0	0	-	3,620,372	12.0	S4	4.13	8.81	876,603
391.00	Office Furniture and Equipment	9,074,352	5,979,839	0	0	0	-	3,094,513	25.0	R4	17.20	1.98	179,914
397.00	Communication Equipment	25,311,861	7,373,931	0	0	0	-	17,937,930	12.0	S5	8.55	8.29	2,098,004
398.00	Miscellaneous Equipment	633,466	382,453	5	0	5	31,673	219,340	15.0	S3	4.45	7.78	49,290
399.00	Other Tangible Property	224,866	214,729	0	0	0	-	10,137	7.0	R5	0.99	4.55	10,239
399.01	Servers Hardware	14,567,322	8,806,463	0	0	0	-	5,760,859	10.0	SQ	5.69	6.95	1,012,453
399.02	Servers Software	8,647,580	6,468,490	0	0	0	-	2,179,090	10.0	SQ	6.30	4.00	345,887
399.03	Network Hardware	2,377,029	515,277	0	0	0	-	1,861,752	10.0	SQ	8.42	9.30	221,111
399.06	PC Hardware	6,691,156	2,805,820	0	0	0	-	3,885,336	7.0	S1	4.46	13.02	871,152
399.07	PC Software	3,928,199	2,043,132	0	0	0	-	1,885,067	8.5	R5	5.40	8.89	349,086
399.08	Application Software	111,323,312	49,761,208	0	0	0	-	61,562,104	10.0	S3	5.25	10.53	11,726,115
399.24	General Startup Cost	23,172,326	13,969,919	0	0	0	-	9,202,407	10.0	SQ	2.50	15.89	3,680,963
	Total Depreciable General Plant	215,900,612	104,650,032				31,673	111,218,907			5.19	9.92	21,420,817
	Fully Depreciated	5,331,910											
	Late Retirements	4,363,383											
	Total Shared Services Facilities	225,595,905											
	Annual COR Allowance												0
	Total Depreciation												21,420,817
	Annual Regulatory Liability Amortization												(5,723)
	Total Depreciation and Amortization												21,415,093

Sources:
Col. [3] from Exhibit DSR-4, Schedule 1.
Col. [4] from page 5.
Cols. [5], [10] and [11] from Exhibit DSR-4, Schedule 2
Col. [12] from ALG remaining life rates provided in response to CAPD 2-11, TRA Docket No. 07-00105 (Atmos TN case). See Exhibit___(MJM-3).

ATMOS ENERGY CORPORATION - SHARED SERVICES
Separation of Reserves
As of September 30, 2006

[1]	[2]	[3]	[4]	[5]	[6]=4-5
Account Number	Description	9/30/2006 Balance $	9/30/2006 Book Reserve	9/30/2006 COR Reserve	9/30/2006 Accumulated Depreciation
	GENERAL PLANT				
390.09	Improvements to Leased Premises	9,949,143	6,328,771	-	6,328,771
391.00	Office Furniture and Equipment	9,074,352	5,979,839	-	5,979,839
397.00	Communication Equipment	25,311,861	7,403,647	29,716	7,373,931
398.00	Miscellaneous Equipment	633,466	382,453	-	382,453
399.00	Other Tangible Property	224,866	214,729	-	214,729
399.01	Servers Hardware	14,567,322	8,806,463	-	8,806,463
399.02	Servers Software	8,647,580	6,468,490	-	6,468,490
399.03	Network Hardware	2,377,029	515,277	-	515,277
399.06	PC Hardware	6,691,156	2,805,820	-	2,805,820
399.07	PC Software	3,928,199	2,043,132	-	2,043,132
399.08	Application Software	111,323,312	49,761,208	-	49,761,208
399.24	General Startup Cost	23,172,326	13,969,919	-	13,969,919
	Total Depreciable General Plant	215,900,612	104,679,748	29,716	104,650,032
	Fully Depreciated	5,331,910			
	Late Retirements	4,363,383			
	Total Shared Services Facilities	225,595,905			
	Composite RL			5.19	
	Annual Amortization			5,723	

Sources:
Col. [3] from Atmos SSU Depreciation Study, Schedule 1.
Col. [4] from response to CURB-105.
Col. [5] from response to CURB 180(b).

Kansas Distribution System
Depreciation and Amortization Expense
Twelve Months Ended March 31, 2007
Reflecting Snavely King Recommended Depreciation Rates

Line No.	Description	Reference	Kansas	Southwest	SK Total	Company Total	Difference
	(a)	(b)	(c)	(d)	(e)	(f)	(g)=(e)-(f)
1	Depreciation and Amortization Expense, Book	Sect. 9	$ 7,937,351	$ 520,697	$ 8,458,048	$ 8,458,048	$ -
2							
3							
4	Depreciation and Amortization Expense, As Adjusted for New Rates	Wp 10-1,2	$ 5,324,847	$ 312,183	$ 5,637,029	$ 9,623,968	$ (3,986,939)
5							
6	Annual COR Allowance				$ 400,000	$ -	$ 400,000
7							
8	Annual Regulatory Liability Amortization				$ (358,508)	$ -	$ (358,508)
9							
10	Total Depreciation, COR Allowance and Amortization Expense, As Adjusted				$ 5,678,521	$ 9,623,968	$ (3,945,447)
11							
13	Difference From Book Expense (L. 10 - L. 1)				$ (2,779,527)	$ 1,165,920	$ (3,945,447)

Adjustment reflects the pro-forma depreciation expense associated with the adjusted test-year end plant in service balances and includes Snavely King's recommended depreciation rates, COR allowance and regulatory liability amortization.

Atmos - Kansas

Depreciation Life Analysis Study Through 2006

Account: **380.00 - Services**

Balance: **$ 47,517,588**

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Comments:

Company:

SPR Results
Atmos - Kansas
Account: 380.00 - Services

Curve	Life	Sum of Squared Differences	Index of of Variation
BAND: 1926 - 2006			
R1.5	60	6.12E+11	13
S0	58	6.40E+11	13
h 2	54	6.96E+11	14
R2	48	7.48E+11	15
S0.5	49	7.55E+11	15
L1	55	7.66E+11	15
L1.5	48	9.01E+11	16
R2.5	42	9.52E+11	16
h 2.5	43	9.62E+11	16
S1	42	1.00E+12	17
L0.5	63	1.20E+12	18
L2	41	1.23E+12	19
S1.5	39	1.24E+12	19
R3	37	1.32E+12	19
h 3	38	1.35E+12	20
h 1.5	63	1.44E+12	20
R1	63	1.64E+12	22
S2	36	1.66E+12	22
h 3.5	35	1.76E+12	22
L3	35	1.85E+12	23
R4	33	2.04E+12	24
S3	33	2.25E+12	25
L4	33	2.42E+12	26
R5	31	2.57E+12	27
S6	31	2.58E+12	27
S4	32	2.58E+12	27
S5	31	2.59E+12	27
SQ	32	2.61E+12	27
L5	32	2.61E+12	27
S-0.5	63	4.50E+12	36
L0	63	6.71E+12	44
R0.5	63	8.56E+12	49
h 1	63	9.87E+12	53
O1	63	2.20E+13	79
h .5	63	2.58E+13	85
O2	63	3.41E+13	98
O3	63	1.05E+14	173
O4	63	2.34E+14	257

Minimum Equipment Life Expectancy: 10
Maximum Equipment Life Expectancy: 63
Life Expectancy Increment: 1
Begin Year: 1926
End Year: 2006
Year Fit Increment: 0

Plant Balances

Year	Balance	Year	Balance	Year	Balance	Year	Balance
2006	47,523,577	2005	44,424,070	2004	42,241,851	2003	40,448,578
2002	38,529,787	2001	36,128,688	2000	32,444,174	1999	30,020,543
1998	27,093,899	1997	24,724,457	1996	23,242,620	1995	20,235,878
1994	17,568,118	1993	15,562,382	1992	13,013,132	1991	12,132,784
1990	8,060,893	1989	5,563,921	1988	4,431,779	1987	3,734,954
1986	3,340,258	1985	2,943,471	1984	2,768,270	1983	2,620,030
1982	2,524,232	1981	2,438,776	1980	2,307,616	1979	2,135,992
1978	1,939,801	1977	1,787,416	1976	1,661,138	1975	1,542,115
1974	1,460,083	1973	1,424,767	1972	1,381,986	1971	1,266,955
1970	1,174,383	1969	1,082,661	1968	975,245	1967	889,873
1966	821,364	1965	766,510	1964	712,607	1963	665,210
1962	621,007	1961	578,248	1960	543,781	1959	510,310
1958	469,298	1957	430,623	1956	366,848	1955	333,498
1954	319,707	1953	291,071	1952	261,103	1951	245,442
1950	230,673	1949	186,695	1948	178,935	1947	171,175
1946	163,415	1945	155,655	1944	147,894	1943	140,133
1942	132,371	1941	124,608	1940	116,844	1939	109,079
1938	101,313	1937	93,545	1936	85,775	1935	78,002
1934	70,227	1933	62,448	1932	54,665	1931	46,878
1930	39,086	1929	31,287	1928	23,481	1927	15,667
1926	7,844						

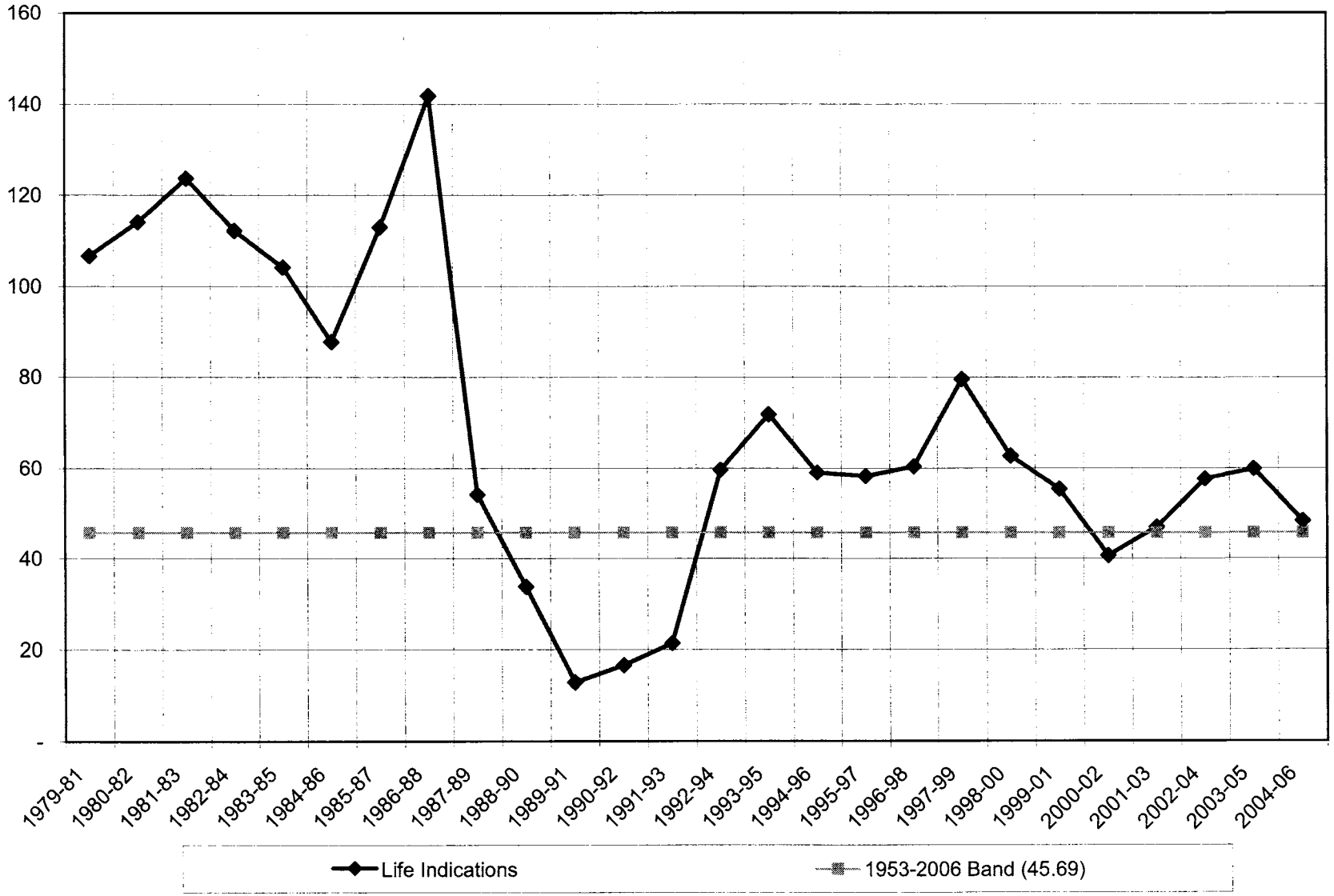
Atmos - Kansas
Gas Plant In Service
Geometric Mean Turnover Analysis

Account 380.00 - Services

Year	BOY Plant Balance a	Avg. Plant Balance b=(a+(a+1))/2	Single Year Additions c	Single Year Retirements d	Addition Ratio e = c/b	Retirement Ratio f = d/b	Geometric Mean Life Estimate g = 1/sqrt(e*f)	3 Year Band	3 Year Band Avg. Plant Balance i	3 Year Band Additions j	3 Year Band Retirements k	3 Year Band Addition Ratio l = j/i	3 Year Band Retirement Ratio m = k/i	3 Year Band Geometric Mean ife Estimat = 1/sqrt(l*m
1926	-	3,922	7,844	-	2.00000	-	-							
1927	7,844	11,756	7,823	-	0.66548	-	-							
1928	15,667	19,574	7,814	-	0.39920	-	-	1926-28	35,252	23,481	-	0.66610	-	-
1929	23,481	27,384	7,806	-	0.28506	-	-	1927-29	58,714	23,443	-	0.39928	-	-
1930	31,287	35,187	7,799	-	0.22165	-	-	1928-30	82,145	23,419	-	0.28510	-	-
1931	39,086	42,982	7,792	-	0.18129	-	-	1929-31	105,553	23,397	-	0.22166	-	-
1932	46,878	50,772	7,787	-	0.15337	-	-	1930-32	128,940	23,378	-	0.18131	-	-
1933	54,665	58,557	7,783	-	0.13291	-	-	1931-33	152,310	23,362	-	0.15338	-	-
1934	62,448	66,338	7,779	-	0.11726	-	-	1932-34	175,666	23,349	-	0.13292	-	-
1935	70,227	74,115	7,775	-	0.10491	-	-	1933-35	199,009	23,337	-	0.11727	-	-
1936	78,002	81,889	7,773	-	0.09492	-	-	1934-36	222,341	23,327	-	0.10492	-	-
1937	85,775	89,660	7,770	-	0.08666	-	-	1935-37	245,663	23,318	-	0.09492	-	-
1938	93,545	97,429	7,768	-	0.07973	-	-	1936-38	268,978	23,311	-	0.08667	-	-
1939	101,313	105,196	7,766	-	0.07382	-	-	1937-39	292,285	23,304	-	0.07973	-	-
1940	109,079	112,962	7,765	-	0.06874	-	-	1938-40	315,587	23,299	-	0.07383	-	-
1941	116,844	120,726	7,764	-	0.06431	-	-	1939-41	338,884	23,295	-	0.06874	-	-
1942	124,608	128,490	7,763	-	0.06042	-	-	1940-42	362,177	23,292	-	0.06431	-	-
1943	132,371	136,252	7,762	-	0.05697	-	-	1941-43	385,468	23,289	-	0.06042	-	-
1944	140,133	144,014	7,761	-	0.05389	-	-	1942-44	408,755	23,286	-	0.05697	-	-
1945	147,894	151,775	7,761	-	0.05114	-	-	1943-45	432,040	23,284	-	0.05389	-	-
1946	155,655	159,535	7,760	-	0.04864	-	-	1944-46	455,323	23,282	-	0.05113	-	-
1947	163,415	167,295	7,760	-	0.04639	-	-	1945-47	478,605	23,281	-	0.04864	-	-
1948	171,175	175,055	7,760	-	0.04433	-	-	1946-48	501,885	23,280	-	0.04639	-	-
1949	178,935	182,815	7,760	-	0.04245	-	-	1947-49	525,165	23,280	-	0.04433	-	-
1950	186,695	208,684	43,978	-	0.21074	-	-	1948-50	566,554	59,498	-	0.10502	-	-
1951	230,673	238,058	14,769	-	0.06204	-	-	1949-51	629,557	66,507	-	0.10564	-	-
1952	245,442	253,273	15,661	-	0.06183	-	-	1950-52	700,015	74,408	-	0.10629	-	-
1953	261,103	276,087	30,154	186	0.10922	0.00067	116.58	1951-53	767,418	60,584	186	0.07895	0.00024	228.61
1954	291,071	305,389	28,843	207	0.09445	0.00068	124.98	1952-54	834,749	74,657	393	0.08944	0.00047	154.11
1955	319,707	326,602	14,874	1,083	0.04554	0.00332	81.37	1953-55	908,078	73,871	1,476	0.08135	0.00163	86.96
1956	333,498	350,173	34,298	948	0.09795	0.00271	61.41	1954-56	982,164	78,015	2,238	0.07943	0.00228	74.33
1957	366,848	398,735	64,816	1,041	0.16255	0.00261	48.54	1955-57	1,075,511	113,988	3,072	0.10598	0.00286	57.47
1958	430,623	449,960	40,478	1,803	0.08996	0.00401	52.67	1956-58	1,198,869	139,592	3,792	0.11644	0.00316	52.11
1959	469,298	489,804	41,853	841	0.08545	0.00172	82.56	1957-59	1,338,499	147,147	3,685	0.10993	0.00275	57.48
1960	510,310	527,046	37,030	3,558	0.07026	0.00675	45.92	1958-60	1,466,810	119,361	6,202	0.08137	0.00423	53.91
1961	543,781	561,015	34,805	339	0.06204	0.00060	163.32	1959-61	1,577,864	113,688	4,738	0.07205	0.00300	67.99
1962	578,248	599,627	43,636	877	0.07277	0.00146	96.93	1960-62	1,687,687	115,471	4,774	0.06842	0.00283	71.88
1963	621,007	643,108	44,362	158	0.06898	0.00025	242.91	1961-63	1,803,750	122,803	1,374	0.06808	0.00076	138.86
1964	665,210	688,908	48,697	1,301	0.07069	0.00189	86.55	1962-64	1,931,644	136,695	2,336	0.07077	0.00121	108.10
1965	712,607	739,558	54,536	632	0.07374	0.00085	125.97	1963-65	2,071,575	147,595	2,091	0.07125	0.00101	117.92
1966	766,510	793,937	55,199	345	0.06953	0.00043	181.93	1964-66	2,222,404	158,432	2,278	0.07129	0.00103	116.98
1967	821,364	855,618	68,570	62	0.08014	0.00007	414.97	1965-67	2,389,114	178,305	1,039	0.07463	0.00043	175.53
1968	889,873	932,559	85,510	138	0.09169	0.00015	271.47	1966-68	2,582,114	209,280	545	0.08105	0.00021	241.78
1969	975,245	1,028,953	107,647	231	0.10462	0.00022	206.34	1967-69	2,817,130	261,728	431	0.09291	0.00015	265.24
1970	1,082,661	1,128,522	91,809	87	0.08135	0.00008	399.31	1968-70	3,090,033	284,966	456	0.09222	0.00015	271.07
1971	1,174,383	1,220,669	92,573	-	0.07584	-	-	1969-71	3,378,144	292,029	318	0.08645	0.00009	350.55
1972	1,266,955	1,324,470	115,195	165	0.08697	0.00012	303.80	1970-72	3,673,661	299,577	252	0.08155	0.00007	422.81
1973	1,381,986	1,403,376	43,854	1,073	0.03125	0.00076	204.58	1971-73	3,948,516	251,622	1,238	0.06373	0.00031	223.72
1974	1,424,767	1,442,425	47,013	11,697	0.03259	0.00811	61.51	1972-74	4,170,271	206,062	12,935	0.04941	0.00310	80.78
1975	1,460,083	1,501,099	83,707	1,675	0.05576	0.00112	126.77	1973-75	4,346,899	174,574	14,445	0.04016	0.00332	86.56
1976	1,542,115	1,601,626	122,306	3,283	0.07636	0.00205	79.93	1974-76	4,545,149	253,026	16,655	0.05567	0.00366	70.02
1977	1,661,138	1,724,277	129,115	2,837	0.07488	0.00165	90.09	1975-77	4,827,001	335,128	7,795	0.06943	0.00161	94.44
1978	1,787,416	1,863,608	157,168	4,783	0.08434	0.00257	67.97	1976-78	5,189,511	408,589	10,903	0.07873	0.00210	77.75
1979	1,939,801	2,037,896	198,398	2,207	0.09735	0.00108	97.39	1977-79	5,625,781	484,681	9,827	0.08615	0.00175	81.52
1980	2,135,992	2,221,804	173,737	2,113	0.07820	0.00095	115.96	1978-80	6,123,308	529,303	9,103	0.08644	0.00149	88.21
1981	2,307,616	2,373,196	134,479	3,319	0.05667	0.00140	112.33	1979-81	6,632,895	506,614	7,639	0.07638	0.00115	106.62
1982	2,438,776	2,481,504	89,706	4,250	0.03615	0.00171	127.09	1980-82	7,076,503	397,922	9,682	0.05623	0.00137	114.01
1983	2,524,232	2,572,131	99,375	3,577	0.03864	0.00139	136.43	1981-83	7,426,830	323,560	11,146	0.04357	0.00150	123.67
1984	2,620,030	2,694,150	154,317	6,077	0.05728	0.00226	87.98	1982-84	7,747,784	343,398	13,904	0.04432	0.00179	112.13
1985	2,768,270	2,855,870	179,583	4,382	0.06288	0.00153	101.81	1983-85	8,122,150	433,275	14,036	0.05334	0.00173	104.15
1986	2,943,471	3,141,864	399,710	2,923	0.12722	0.00093	91.92	1984-86	8,691,884	733,610	13,382	0.08440	0.00154	87.72
1987	3,340,258	3,537,606	394,714	18	0.11158	0.00001	1,327.19	1985-87	9,535,340	974,007	7,323	0.10215	0.00077	112.90
1988	3,734,954	4,083,366	697,744	919	0.17087	0.00023	161.25	1986-88	10,762,836	1,492,168	3,860	0.13864	0.00036	141.82
1989	4,431,779	4,997,850	1,155,425	23,283	0.23118	0.00466	30.47	1987-89	12,618,821	2,247,883	24,220	0.17814	0.00192	54.08
1990	5,563,921	6,812,407	2,523,339	26,367	0.37040	0.00387	26.41	1988-90	15,893,622	4,376,508	50,569	0.27536	0.00318	33.78
1991	8,060,893	10,096,838	4,380,930	309,039	0.43389	0.03061	8.68	1989-91	21,907,094	8,059,694	358,689	0.36790	0.01637	12.88
1992	12,132,784	12,572,958	946,378	66,030	0.07527	0.00525	50.30	1990-92	29,482,202	7,850,647	401,436	0.26628	0.01362	16.61
1993	13,013,132	14,287,757	2,553,472	4,222	0.17872	0.00030	137.61	1991-93	36,957,552	7,880,780	379,291	0.21324	0.01026	21.38
1994	15,562,382	16,565,250	2,031,430	25,694	0.12263	0.00155	72.51	1992-94	43,425,964	5,531,280	95,946	0.12737	0.00221	59.61
1995	17,568,118	18,901,998	2,703,617	35,857	0.14303	0.00190	60.71	1993-95	49,755,004	7,288,519	65,773	0.14649	0.00132	71.86
1996	20,235,878	21,739,249	3,065,739	58,998	0.14102	0.00271	51.12	1994-96	57,206,496	7,800,786	120,548	0.13636	0.00211	58.99
1997	23,242,620	23,983,538	1,555,370	73,533	0.06485	0.00307	70.92	1995-97	64,624,785	7,324,726	168,387	0.11334	0.00261	58.19
1998	24,724,457	25,909,178	2,436,503	67,061	0.09404	0.00259	64.10	1996-98	71,631,965	7,057,612	199,591	0.09853	0.00279	60.35
1999	27,093,899	28,557,221	2,926,644	-	0.10248	-	-	1997-99	78,449,938	6,918,517	140,593	0.08819	0.00179	79.54
2000	30,020,543	31,232,359	2,591,397	167,766	0.08297	0.00537	47.37	1998-00	85,698,758	7,954,544	234,827	0.09282	0.00274	62.70
2001	32,444,174	34,286,431	3,826,195	141,681	0.11160	0.00413	46.57	1999-01	94,076,011	9,344,236	309,448	0.09933	0.00329	55.32
2002	36,128,688	37,329,238	2,786,790	385,690	0.07465	0.01033	36.01	2000-02	102,848,027	9,204,382	695,138	0.08949	0.00676	40.66
2003	38,529,787	39,489,182	2,039,166	120,376	0.05164	0.00305	79.70	2001-03	111,104,851	8,652,151	647,748	0.07787	0.00583	46.93
2004	40,448,578	41,345,215	1,911,230	117,956	0.04623	0.00285	87.08	2002-04	118,163,634	6,737,186	624,022	0.05702	0.00528	57.63
2005	42,241,851	43,332,961	2,600,387	418,168	0.06001	0.00965	41.56	2003-05	124,167,358	6,550,783	656,500	0.05276	0.00529	59.87
2006	44,424,070	45,973,823	3,479,430	379,923	0.07568	0.00826	39.99	2004-06	130,651,999	7,991,047	916,048	0.06116	0.00701	48.29
1926-2006	487,771,888	511,533,676	50,014,356	2,490,779	0.09777	0.00487	45.83							
1953-2006	484,958,750	508,589,987	49,753,253	2,490,779	0.09783	0.00490	45.69							

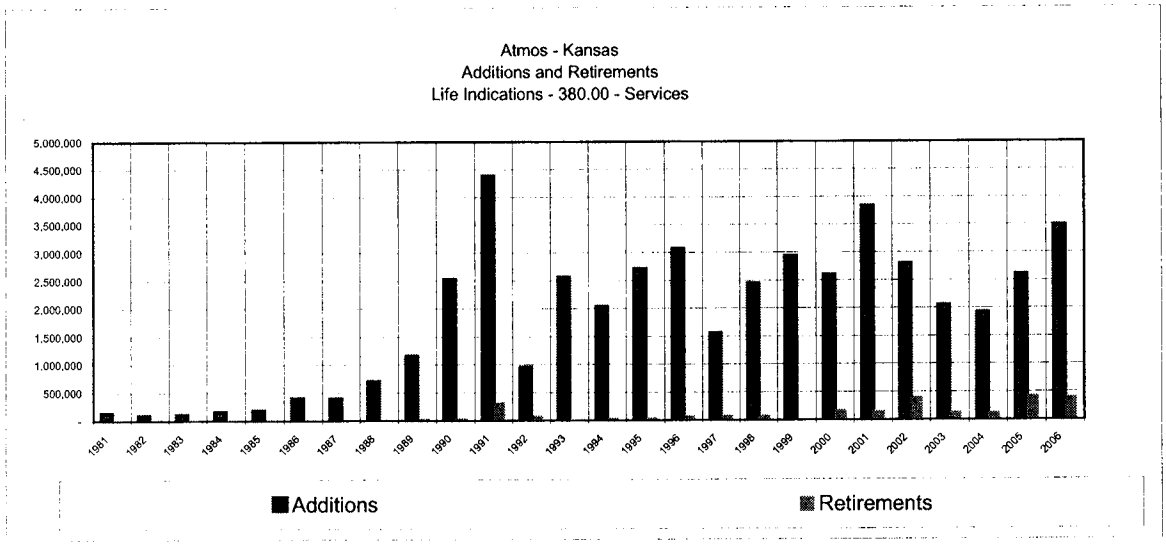
Data Source: CURB 105

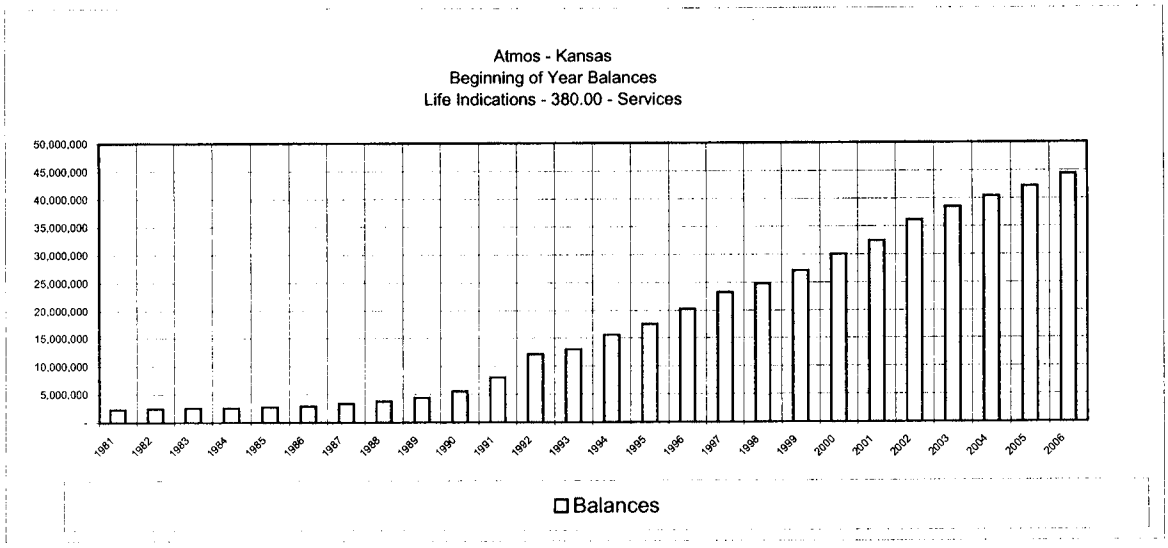
Atmos - Kansas
Geometric Mean 3 Year Rolling Band Analysis
Life Indications - 380.00 - Services



Atmos - Kansas
Electric Plant In Service
Additions, Retirements and Balances

Account 380.00 - Services





Atmos - Kansas

Depreciation Life Analysis Study Through 2006

Account: **381.00 - Meters**

Balance: **$ 12,346,071**

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Comments:

Company:

SPR Results
Atmos - Kansas
Account: 381.00 - Meters

Curve	Life	Sum of Squared Differences	Index of of Variation
BAND: 1926 - 2006			
O4	60	6.05E+12	114
SQ	23	6.14E+12	115
S6	23	6.15E+12	115
O3	46	6.16E+12	115
S5	24	6.23E+12	115
L5	24	6.23E+12	115
R5	24	6.26E+12	116
S4	24	6.28E+12	116
O2	35	6.45E+12	117
L4	24	6.48E+12	118
R4	24	6.51E+12	118
h .5	34	6.53E+12	118
O1	32	6.61E+12	119
S3	24	6.68E+12	120
h 1	32	6.72E+12	120
R0.5	30	6.75E+12	120
h 3.5	25	6.77E+12	120
R3	25	6.77E+12	120
L3	25	6.80E+12	121
L0	32	6.85E+12	121
S-0.5	30	6.85E+12	121
h 1.5	29	6.91E+12	122
R1	28	6.91E+12	122
h 3	25	6.93E+12	122
R2.5	26	6.94E+12	122
R1.5	27	6.96E+12	122
S2	25	6.96E+12	122
R2	26	6.99E+12	122
h 2.5	26	7.01E+12	122
L0.5	30	7.04E+12	123
h 2	27	7.06E+12	123
S1.5	26	7.10E+12	123
L2	27	7.11E+12	123
S0	28	7.14E+12	124
L1.5	28	7.15E+12	124
L1	29	7.19E+12	124
S0.5	27	7.19E+12	124
S1	26	7.27E+12	125

Minimum Equipment Life Expectancy: 13
Maximum Equipment Life Expectancy: 60
Life Expectancy Increment: 1
Begin Year: 1926
End Year: 2006
Year Fit Increment: 0

Plant Balances

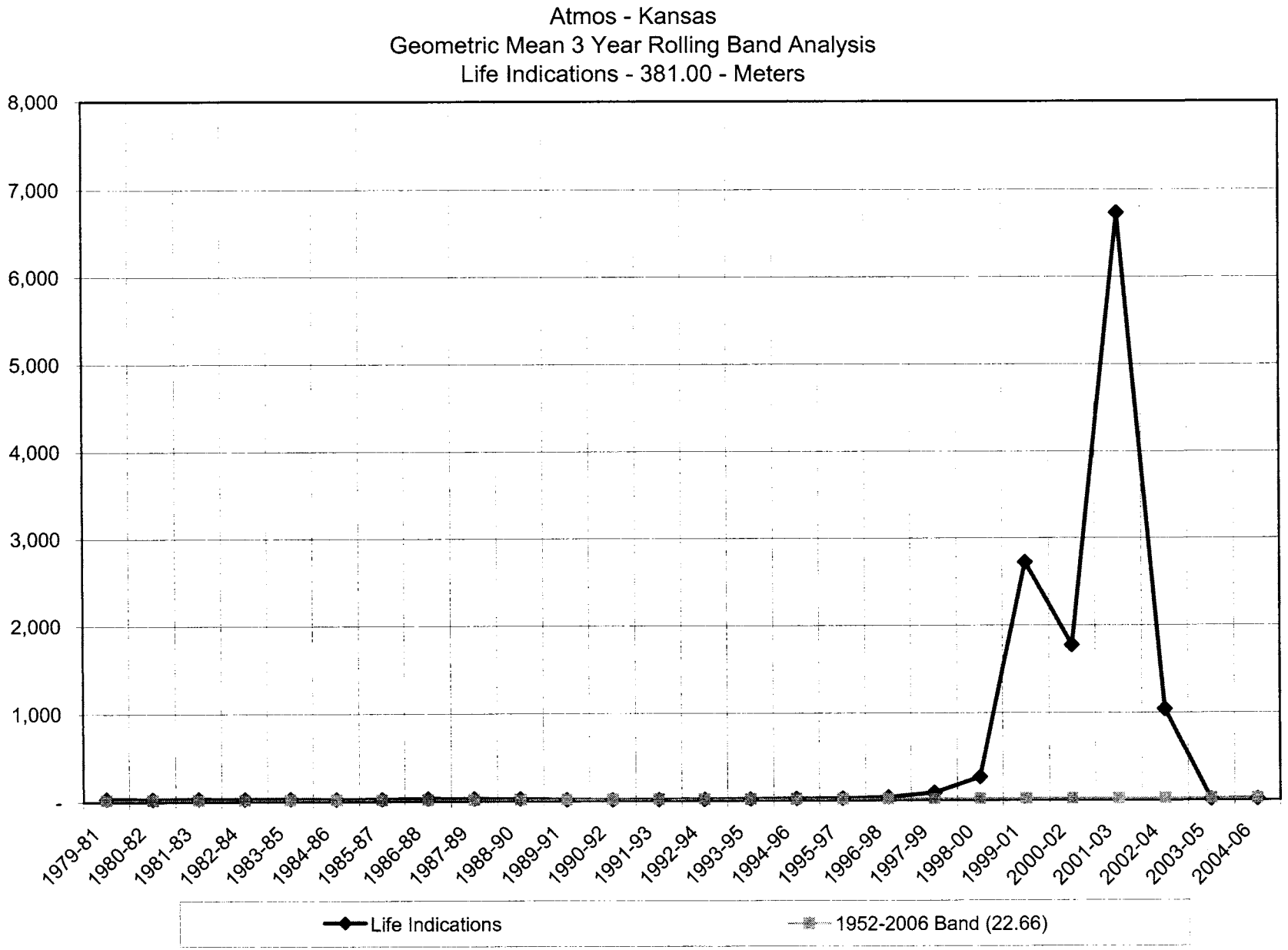
Year	Balance	Year	Balance	Year	Balance	Year	Balance
2006	14,789,076	2005	14,206,607	2004	7,685,347	2003	7,089,903
2002	7,089,903	2001	7,076,451	2000	7,076,451	1999	6,986,412
1998	6,986,412	1997	6,978,455	1996	6,795,501	1995	6,531,926
1994	6,080,723	1993	5,800,614	1992	5,509,902	1991	5,272,840
1990	4,948,903	1989	4,439,672	1988	3,969,159	1987	3,668,115
1986	3,370,119	1985	2,989,315	1984	2,716,862	1983	2,530,229
1982	2,460,197	1981	2,329,903	1980	2,225,407	1979	2,074,807
1978	1,945,940	1977	1,768,460	1976	1,708,061	1975	1,660,458
1974	1,630,716	1973	1,483,517	1972	1,407,746	1971	1,310,493
1970	1,227,782	1969	1,167,653	1968	1,088,073	1967	987,086
1966	929,803	1965	861,606	1964	802,092	1963	720,088
1962	647,233	1961	605,886	1960	581,676	1959	566,890
1958	529,127	1957	494,897	1956	469,061	1955	452,894
1954	431,380	1953	418,581	1952	399,469	1951	564,447
1950	549,451	1949	534,242	1948	518,777	1947	503,016
1946	486,923	1945	470,463	1944	453,600	1943	436,298
1942	418,522	1941	400,234	1940	381,397	1939	361,973
1938	341,921	1937	321,201	1936	299,768	1935	277,574
1934	254,568	1933	230,693	1932	205,889	1931	180,091
1930	153,229	1929	125,225	1928	95,996	1927	65,451
1926	33,491						

Atmos - Kansas
Gas Plant In Service
Geometric Mean Turnover Analysis

Account 381.00 - Meters

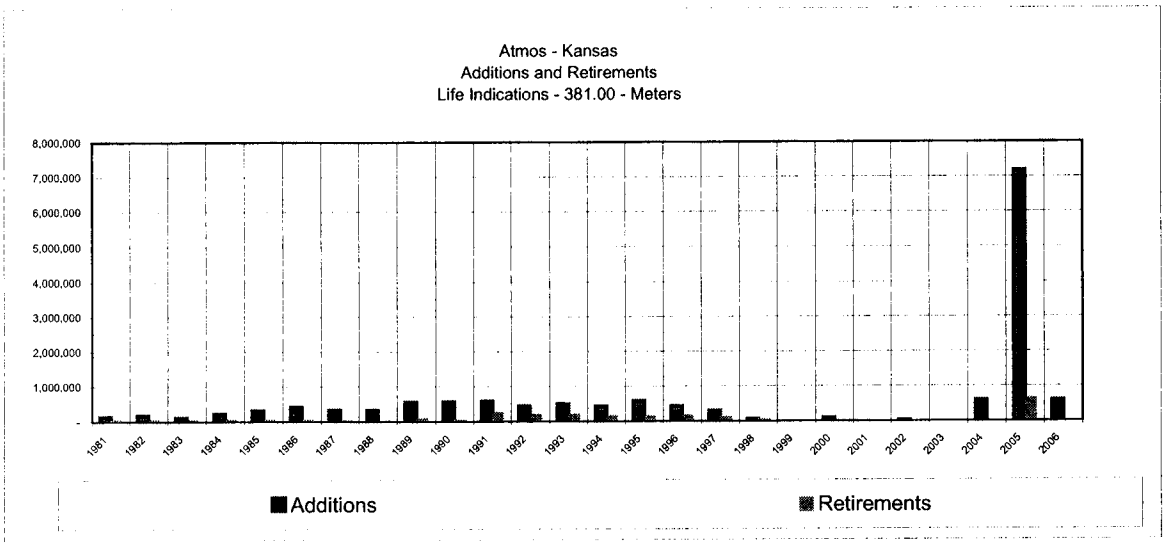
Year	BOY Plant Balance a	Avg. Plant Balance b=(a+(a+1))/2	Single Year Additions c	Single Year Retirements d	Addition Ratio e = c/b	Retirement Ratio f = d/b	Geometric Mean Life Estimate g = 1/sqrt(e*f)	3 Year Band h	3 Year Band Avg. Plant Balance i	3 Year Band Additions j	3 Year Band Retirements k	3 Year Band Addition Ratio l = j/i	3 Year Band Retirement Ratio m = k/i	3 Year Band Geometric Mean life Estimat = 1/sqrt(l*m
1926	-	16,746	33,491	-	2.00000	-	-							
1927	33,491	49,471	31,960	-	0.64604	-	-							
1928	65,451	80,724	30,545	-	0.37839	-	-	1926-28	146,940	95,996	-	0.65330	-	-
1929	95,996	110,611	29,229	-	0.26425	-	-	1927-29	240,805	91,734	-	0.38095	-	-
1930	125,225	139,227	28,004	-	0.20114	-	-	1928-30	330,561	87,778	-	0.26554	-	-
1931	153,229	166,660	26,862	-	0.16118	-	-	1929-31	416,498	84,095	-	0.20191	-	-
1932	180,091	192,990	25,798	-	0.13368	-	-	1930-32	498,877	80,664	-	0.16169	-	-
1933	205,889	218,291	24,804	-	0.11363	-	-	1931-33	577,941	77,464	-	0.13403	-	-
1934	230,693	242,631	23,875	-	0.09840	-	-	1932-34	653,912	74,477	-	0.11389	-	-
1935	254,568	266,071	23,006	-	0.08647	-	-	1933-35	726,993	71,685	-	0.09860	-	-
1936	277,574	288,671	22,194	-	0.07688	-	-	1934-36	797,373	69,075	-	0.08663	-	-
1937	299,768	310,485	21,433	-	0.06903	-	-	1935-37	865,227	66,633	-	0.07701	-	-
1938	321,201	331,561	20,720	-	0.06249	-	-	1936-38	930,717	64,347	-	0.06914	-	-
1939	341,921	351,947	20,052	-	0.05697	-	-	1937-39	993,993	62,205	-	0.06258	-	-
1940	361,973	371,685	19,424	-	0.05226	-	-	1938-40	1,055,193	60,196	-	0.05705	-	-
1941	381,397	390,816	18,837	-	0.04820	-	-	1939-41	1,114,448	58,313	-	0.05232	-	-
1942	400,234	409,378	18,288	-	0.04467	-	-	1940-42	1,171,879	56,549	-	0.04826	-	-
1943	418,522	427,410	17,776	-	0.04159	-	-	1941-43	1,227,604	54,901	-	0.04472	-	-
1944	436,298	444,949	17,302	-	0.03889	-	-	1942-44	1,281,737	53,366	-	0.04164	-	-
1945	453,600	462,032	16,863	-	0.03650	-	-	1943-45	1,334,391	51,941	-	0.03892	-	-
1946	470,463	478,693	16,460	-	0.03439	-	-	1944-46	1,385,674	50,625	-	0.03653	-	-
1947	486,923	494,970	16,093	-	0.03251	-	-	1945-47	1,435,694	49,416	-	0.03442	-	-
1948	503,016	510,897	15,761	-	0.03085	-	-	1946-48	1,484,559	48,314	-	0.03254	-	-
1949	518,777	526,510	15,465	-	0.02937	-	-	1947-49	1,532,376	47,319	-	0.03088	-	-
1950	534,242	541,847	15,209	-	0.02807	-	-	1948-50	1,579,253	46,435	-	0.02940	-	-
1951	549,451	556,949	14,996	-	0.02693	-	-	1949-51	1,625,305	45,670	-	0.02810	-	-
1952	564,447	481,958	14,840	179,818	0.03079	0.37310	9.33	1950-52	1,580,754	45,045	179,818	0.02850	0.11375	17.56
1953	399,469	409,025	55,529	36,417	0.13576	0.08903	9.10	1951-53	1,447,932	85,365	216,235	0.05896	0.14934	10.66
1954	418,581	424,981	47,817	35,018	0.11252	0.08240	10.39	1952-54	1,315,964	118,186	251,253	0.08981	0.19093	7.64
1955	431,380	442,137	63,785	42,271	0.14427	0.09561	8.51	1953-55	1,276,143	167,131	113,706	0.13097	0.08910	9.26
1956	452,894	460,978	62,791	46,624	0.13621	0.10114	8.52	1954-56	1,328,095	174,393	123,913	0.13131	0.09330	9.03
1957	469,061	481,979	80,573	54,737	0.16717	0.11357	7.26	1955-57	1,385,094	207,149	143,632	0.14956	0.10370	8.03
1958	494,897	512,012	82,361	48,131	0.16086	0.09400	8.13	1956-58	1,454,969	225,725	149,492	0.15514	0.10275	7.92
1959	529,127	548,009	102,693	64,930	0.18739	0.11848	6.71	1957-59	1,542,000	265,627	167,798	0.17226	0.10882	7.30
1960	566,890	574,283	71,062	56,276	0.12374	0.09799	9.08	1958-60	1,634,304	256,116	169,337	0.15671	0.10361	7.85
1961	581,676	593,781	69,292	45,082	0.11670	0.07592	10.62	1959-61	1,716,073	243,047	166,288	0.14163	0.09690	8.54
1962	605,886	626,560	93,448	52,101	0.14914	0.08315	8.98	1960-62	1,794,624	233,802	153,459	0.13028	0.08551	9.47
1963	647,233	683,661	123,303	50,448	0.18036	0.07379	8.67	1961-63	1,904,001	286,043	147,631	0.15023	0.07754	9.27
1964	720,088	761,090	134,972	52,968	0.17734	0.06959	9.00	1962-64	2,071,310	351,723	155,517	0.16981	0.07508	8.86
1965	802,092	831,849	111,950	52,436	0.13458	0.06304	10.86	1963-65	2,276,600	370,225	155,852	0.16262	0.06846	9.48
1966	861,606	895,705	129,149	60,952	0.14419	0.06805	10.10	1964-66	2,488,644	376,071	166,356	0.15111	0.06685	9.95
1967	929,803	958,445	80,425	23,142	0.08391	0.02415	22.22	1965-67	2,685,998	321,524	136,530	0.11970	0.05083	12.82
1968	987,086	1,037,580	115,827	14,840	0.11163	0.01430	25.03	1966-68	2,891,729	325,401	98,934	0.11253	0.03421	16.12
1969	1,088,073	1,127,863	122,494	42,914	0.10861	0.03805	15.56	1967-69	3,123,887	318,746	80,896	0.10204	0.02590	19.45
1970	1,167,653	1,197,718	84,039	23,910	0.07017	0.01996	26.72	1968-70	3,363,160	322,360	81,664	0.09585	0.02428	20.73
1971	1,227,782	1,269,138	106,658	23,947	0.08404	0.01887	25.11	1969-71	3,594,718	313,191	90,771	0.08713	0.02525	21.32
1972	1,310,493	1,359,120	124,246	26,993	0.09142	0.01986	23.47	1970-72	3,825,975	314,943	74,850	0.08232	0.01956	24.92
1973	1,407,746	1,445,632	101,170	25,399	0.06998	0.01757	28.52	1971-73	4,073,889	332,074	76,339	0.08151	0.01874	25.59
1974	1,483,517	1,557,117	209,944	62,745	0.13483	0.04030	13.57	1972-74	4,361,868	435,360	115,137	0.09981	0.02640	19.48
1975	1,630,716	1,645,587	73,483	43,741	0.04465	0.02658	29.03	1973-75	4,648,335	384,597	131,885	0.08274	0.02837	20.64
1976	1,660,458	1,684,260	61,295	13,692	0.03639	0.00813	58.14	1974-76	4,886,963	344,722	120,178	0.07054	0.02459	24.01
1977	1,708,061	1,738,261	76,644	16,245	0.04409	0.00935	49.26	1975-77	5,068,107	211,422	73,678	0.04172	0.01454	40.61
1978	1,768,460	1,857,200	189,813	12,333	0.10220	0.00664	38.38	1976-78	5,279,720	327,752	42,270	0.06208	0.00801	44.86
1979	1,945,940	2,010,374	145,258	16,391	0.07225	0.00815	41.20	1977-79	5,605,834	411,715	44,969	0.07344	0.00802	41.20
1980	2,074,807	2,150,107	169,656	19,056	0.07891	0.00886	37.81	1978-80	6,017,681	504,727	47,780	0.08387	0.00794	38.75
1981	2,225,407	2,277,655	135,902	31,406	0.05967	0.01379	34.86	1979-81	6,438,136	450,816	66,853	0.07002	0.01038	37.09
1982	2,329,903	2,395,050	169,567	39,273	0.07080	0.01640	29.35	1980-82	6,822,812	475,125	89,735	0.06964	0.01315	33.04
1983	2,460,197	2,495,213	103,092	33,060	0.04132	0.01325	42.74	1981-83	7,167,918	408,561	103,739	0.05700	0.01447	34.82
1984	2,530,229	2,623,546	221,605	34,972	0.08447	0.01333	29.80	1982-84	7,513,809	494,264	107,305	0.06578	0.01428	32.63
1985	2,716,862	2,853,089	305,429	32,976	0.10705	0.01156	28.43	1983-85	7,971,847	630,126	101,008	0.07904	0.01267	31.60
1986	2,989,315	3,179,717	420,352	39,548	0.13220	0.01244	24.66	1984-86	8,656,351	947,386	107,496	0.10944	0.01242	27.13
1987	3,370,119	3,519,117	324,520	26,524	0.09222	0.00754	37.93	1985-87	9,551,923	1,050,301	99,048	0.10996	0.01037	29.61
1988	3,668,115	3,818,637	314,487	13,443	0.08236	0.00352	58.73	1986-88	10,517,471	1,059,359	79,515	0.10072	0.00756	36.24
1989	3,969,159	4,204,416	547,334	76,821	0.13018	0.01827	20.50	1987-89	11,542,170	1,186,341	116,788	0.10278	0.01012	31.01
1990	4,439,672	4,694,288	555,421	46,190	0.11832	0.00984	29.31	1988-90	12,717,340	1,417,242	136,454	0.11144	0.01073	28.92
1991	4,948,903	5,110,872	575,960	252,023	0.11269	0.04931	13.41	1989-91	14,009,575	1,678,715	375,034	0.11983	0.02677	17.66
1992	5,272,840	5,391,371	440,709	203,647	0.08174	0.03777	18.00	1990-92	15,196,530	1,572,090	501,860	0.10345	0.03302	17.11
1993	5,509,902	5,655,258	495,777	205,065	0.08767	0.03626	17.74	1991-93	16,157,501	1,512,446	660,735	0.09361	0.04089	16.16
1994	5,800,614	5,940,669	425,774	145,665	0.07167	0.02452	23.85	1992-94	16,987,298	1,362,260	554,377	0.08019	0.03263	19.55
1995	6,080,723	6,306,325	579,525	128,322	0.09190	0.02035	23.13	1993-95	17,902,251	1,501,076	479,052	0.08385	0.02676	21.11
1996	6,531,926	6,663,714	424,173	160,599	0.06365	0.02410	25.53	1994-96	18,910,707	1,429,472	434,585	0.07559	0.02298	23.99
1997	6,795,501	6,886,978	294,866	111,912	0.04281	0.01625	37.91	1995-97	19,857,016	1,298,564	400,833	0.06540	0.02019	27.52
1998	6,978,455	6,982,433	50,648	42,691	0.00725	0.00611	150.16	1996-98	20,533,125	769,688	315,202	0.03749	0.01535	41.69
1999	6,986,412	6,986,412	-	-	-	-	-	1997-99	20,855,822	345,514	154,604	0.01657	0.00741	90.24
2000	6,986,412	7,031,431	90,702	663	0.01290	0.00009	906.73	1998-00	21,000,276	141,350	43,354	0.00673	0.00206	268.26
2001	7,076,451	7,076,451	-	-	-	-	-	1999-01	21,094,293	90,702	663	0.00430	0.00003	2,720.19
2002	7,076,451	7,083,177	14,156	704	0.00200	0.00010	2,243.73	2000-02	21,191,058	104,858	1,367	0.00495	0.00006	1,769.98
2003	7,089,903	7,089,903	-	-	-	-	-	2001-03	21,249,530	14,156	704	0.00067	0.00003	6,731.20
2004	7,089,903	7,387,625	595,444	-	0.08060	-	-	2002-04	21,560,704	609,600	704	0.02827	0.00003	1,040.77
2005	7,685,347	10,945,977	7,165,247	643,987	0.65460	0.05883	5.10	2003-05	25,423,504	7,760,691	643,987	0.30526	0.02533	11.37
2006	14,206,607	14,497,842	582,470	-	0.04018	-	-	2004-06	32,831,443	8,343,161	643,987	0.25412	0.01961	14.16
1926-2006	179,851,240	187,245,778	18,302,124	3,513,048	0.09774	0.01876	23.35							
1952-2006	171,751,247	178,863,561	17,737,677	3,513,048	0.09917	0.01964	22.66							

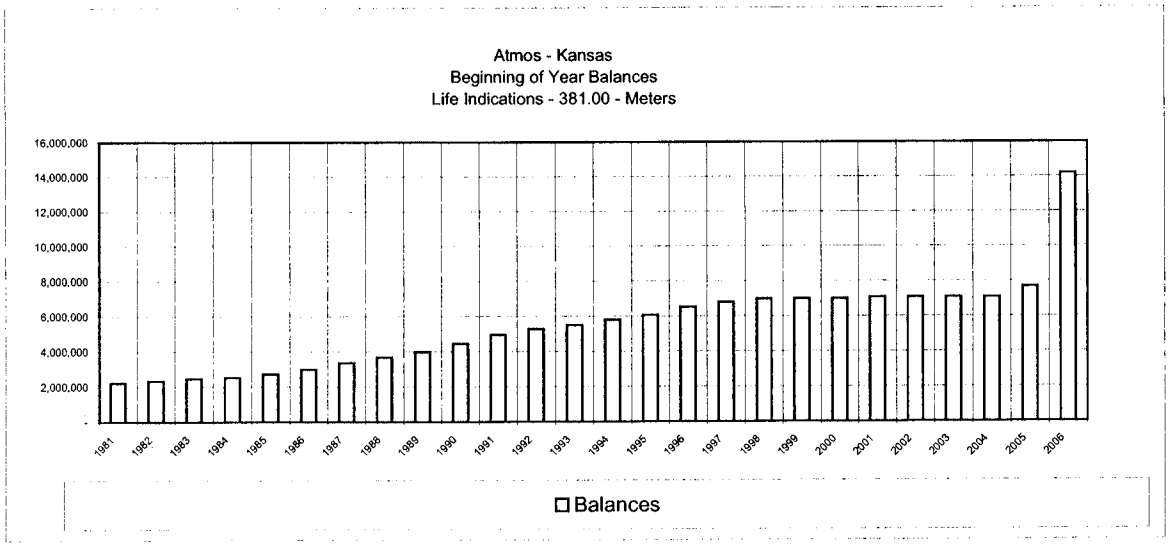
Data Source: CURB 105


Atmos - Kansas
Geometric Mean 3 Year Rolling Band Analysis
Life Indications - 381.00 - Meters
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
1979-81
1980-82
1981-83
1982-84
1983-85
1984-86
1985-87
1986-88
1987-89
1988-90
1989-91
1990-92
1991-93
1992-94
1993-95
1994-96
1995-97
1996-98
1997-99
1998-00
1999-01
2000-02
2001-03
2002-04
2003-05
2004-06
Life Indications
1952-2006 Band (22.66)

Atmos - Kansas
Electric Plant In Service
Additions, Retirements and Balances

Account 381.00 - Meters





Atmos - Kansas

Depreciation Life Analysis Study Through 2006

Account: **382.00 - Meter Installations**

Balance: **$ 18,518,817**

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Comments:

Company:

SPR Results
Atmos - Kansas
Account: 382.00 - Meter Installations

Curve	Life	Sum of Squared Differences	Index of of Variation
BAND: 1926 - 2006			
O4	43	4.70E+12	111
O3	32	4.84E+12	113
h .5	22	5.22E+12	117
O2	23	5.23E+12	118
O1	21	5.36E+12	119
L0	19	5.42E+12	120
h 1	19	5.59E+12	122
L0.5	17	5.80E+12	124
R0.5	18	5.81E+12	124
S-0.5	18	5.85E+12	124
h 1.5	16	6.17E+12	128
L1	15	6.19E+12	128
S0	15	6.22E+12	128
R1	16	6.35E+12	130
L1.5	14	6.57E+12	132
S0.5	14	6.59E+12	132
h 2	14	6.73E+12	133
R1.5	14	6.92E+12	135
L2	13	6.94E+12	135
S1	13	6.94E+12	135
h 2.5	13	7.20E+12	138
R2	13	7.29E+12	139
S1.5	12	7.48E+12	141
h 3	12	7.65E+12	142
S2	12	7.73E+12	143
L3	12	7.79E+12	144
R2.5	12	7.85E+12	144
R3	12	8.24E+12	148
h 3.5	11	8.26E+12	148
S3	11	8.29E+12	148
L4	11	8.50E+12	150
R4	11	8.78E+12	152
S4	11	9.33E+12	157
S5	10	9.41E+12	158
R5	10	9.42E+12	158
L5	10	9.44E+12	158
S6	10	9.60E+12	159
SQ	10	1.00E+13	163

Minimum Equipment Life Expectancy: 9
Maximum Equipment Life Expectancy: 63
Life Expectancy Increment: 1
Begin Year: 1926
End Year: 2006
Year Fit Increment: 0

Plant Balances

Year	Balance	Year	Balance	Year	Balance	Year	Balance
2006	20,548,180	2005	20,409,187	2004	18,528,044	2003	17,232,027
2002	15,982,858	2001	15,049,556	2000	10,269,943	1999	8,418,105
1998	7,077,330	1997	6,356,064	1996	4,685,812	1995	3,409,454
1994	2,673,630	1993	2,280,892	1992	2,101,133	1991	2,062,281
1990	1,612,709	1989	1,500,865	1988	1,432,423	1987	1,255,633
1986	1,130,982	1985	912,578	1984	818,564	1983	766,814
1982	685,252	1981	600,757	1980	551,280	1979	500,752
1978	452,591	1977	413,855	1976	395,256	1975	382,667
1974	357,444	1973	325,323	1972	296,981	1971	251,669
1970	233,896	1969	208,584	1968	194,242	1967	178,776
1966	161,644	1965	150,290	1964	139,637	1963	134,381
1962	125,219	1961	117,937	1960	109,045	1959	102,202
1958	94,145	1957	89,571	1956	89,867	1955	87,764
1954	87,492	1953	83,146	1952	63,674	1951	61,317
1950	58,960	1949	56,603	1948	54,246	1947	51,889
1946	49,532	1945	47,175	1944	44,818	1943	42,461
1942	40,104	1941	37,747	1940	35,390	1939	33,033
1938	30,676	1937	28,319	1936	25,962	1935	23,605
1934	21,248	1933	18,891	1932	16,534	1931	14,177
1930	11,820	1929	9,463	1928	7,106	1927	4,747
1926	2,381						

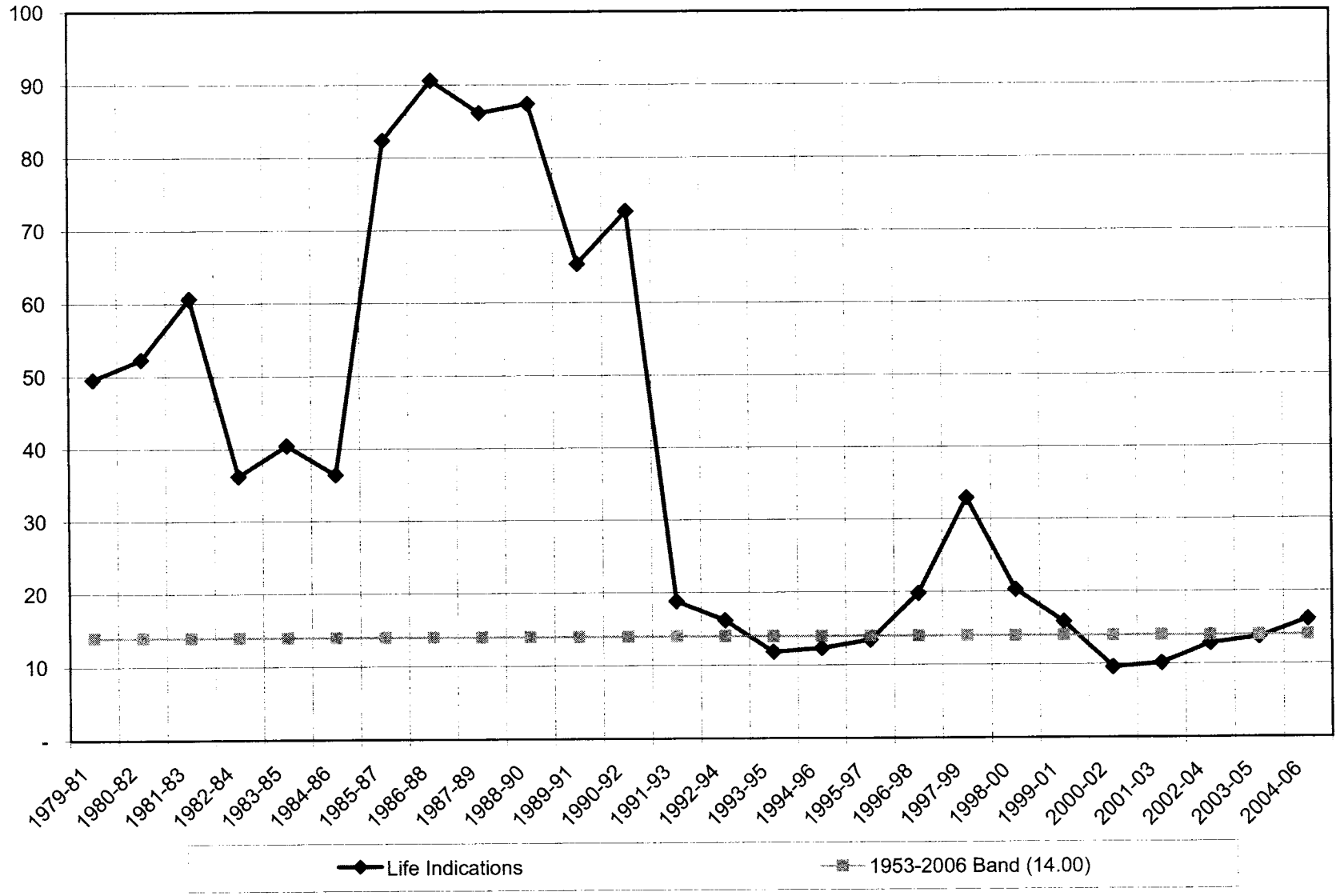
Atmos - Kansas
Gas Plant In Service
Geometric Mean Turnover Analysis

Account 382.00 - Meter Installations

Year	BOY Plant Balance	Avg. Plant Balance	Single Year Additions	Single Year Retirements	Addition Ratio	Retirement Ratio	Geometric Mean Life Estimate	3 Year Band	Avg. Plant Balance	Additions	Retirements	Addition Ratio	Retirement Ratio	Geometric Mean ife Estimat
	a	b=(a+(a+1))/2	c	d	e = c/b	f = d/b	g = 1/sqrt(e*f)	h	i	j	k	l = j/i	m = k/i	= 1/sqrt(l*m
1926	-	1,191	2,381	-	2.00000	-	-							
1927	2,381	3,564	2,366	-	0.66386	-	-							
1928	4,747	5,927	2,359	-	0.39804	-	-	1926-28	10,681	7,106	-	0.66529	-	-
1929	7,106	8,285	2,357	-	0.28451	-	-	1927-29	17,775	7,082	-	0.39842	-	-
1930	9,463	10,642	2,357	-	0.22149	-	-	1928-30	24,853	7,073	-	0.28460	-	-
1931	11,820	12,999	2,357	-	0.18133	-	-	1929-31	31,925	7,071	-	0.22149	-	-
1932	14,177	15,356	2,357	-	0.15350	-	-	1930-32	38,996	7,071	-	0.18133	-	-
1933	16,534	17,713	2,357	-	0.13307	-	-	1931-33	46,067	7,071	-	0.15350	-	-
1934	18,891	20,070	2,357	-	0.11744	-	-	1932-34	53,138	7,071	-	0.13307	-	-
1935	21,248	22,427	2,357	-	0.10510	-	-	1933-35	60,209	7,071	-	0.11744	-	-
1936	23,605	24,784	2,357	-	0.09510	-	-	1934-36	67,280	7,071	-	0.10510	-	-
1937	25,962	27,141	2,357	-	0.08684	-	-	1935-37	74,351	7,071	-	0.09510	-	-
1938	28,319	29,498	2,357	-	0.07991	-	-	1936-38	81,422	7,071	-	0.08684	-	-
1939	30,676	31,855	2,357	-	0.07399	-	-	1937-39	88,493	7,071	-	0.07991	-	-
1940	33,033	34,212	2,357	-	0.06889	-	-	1938-40	95,564	7,071	-	0.07399	-	-
1941	35,390	36,569	2,357	-	0.06445	-	-	1939-41	102,635	7,071	-	0.06889	-	-
1942	37,747	38,926	2,357	-	0.06055	-	-	1940-42	109,706	7,071	-	0.06445	-	-
1943	40,104	41,283	2,357	-	0.05709	-	-	1941-43	116,777	7,071	-	0.06055	-	-
1944	42,461	43,640	2,357	-	0.05401	-	-	1942-44	123,848	7,071	-	0.05709	-	-
1945	44,818	45,997	2,357	-	0.05124	-	-	1943-45	130,919	7,071	-	0.05401	-	-
1946	47,175	48,354	2,357	-	0.04875	-	-	1944-46	137,990	7,071	-	0.05124	-	-
1947	49,532	50,711	2,357	-	0.04648	-	-	1945-47	145,061	7,071	-	0.04875	-	-
1948	51,889	53,068	2,357	-	0.04442	-	-	1946-48	152,132	7,071	-	0.04648	-	-
1949	54,246	55,425	2,357	-	0.04253	-	-	1947-49	159,203	7,071	-	0.04442	-	-
1950	56,603	57,782	2,357	-	0.04079	-	-	1948-50	166,274	7,071	-	0.04253	-	-
1951	58,960	60,139	2,357	-	0.03919	-	-	1949-51	173,345	7,071	-	0.04079	-	-
1952	61,317	62,496	2,357	-	0.03771	-	-	1950-52	180,416	7,071	-	0.03919	-	-
1953	63,674	73,410	23,467	3,995	0.31967	0.05442	7.58	1951-53	196,044	28,181	3,995	0.14375	0.02038	18.48
1954	83,146	85,319	6,555	2,209	0.07683	0.02589	22.42	1952-54	221,225	32,379	6,204	0.14636	0.02804	15.61
1955	87,492	87,628	3,085	2,813	0.03521	0.03210	29.75	1953-55	246,357	33,107	9,017	0.13439	0.03660	14.26
1956	87,764	88,816	3,245	1,142	0.03654	0.01286	46.14	1954-56	261,763	12,885	6,164	0.04922	0.02355	29.37
1957	89,867	89,719	2,790	3,086	0.03110	0.03440	30.58	1955-57	266,163	9,120	7,041	0.03426	0.02645	33.21
1958	89,571	91,858	9,595	5,021	0.10445	0.05466	13.23	1956-58	270,393	15,630	9,249	0.05780	0.03421	22.49
1959	94,145	98,174	10,525	2,468	0.10721	0.02514	19.26	1957-59	279,751	22,910	10,575	0.08189	0.03780	17.97
1960	102,202	105,624	11,267	4,424	0.10667	0.04188	14.96	1958-60	295,655	31,387	11,913	0.10616	0.04029	15.29
1961	109,045	113,491	9,487	595	0.08359	0.00524	47.77	1959-61	317,288	31,279	7,487	0.09858	0.02360	20.73
1962	117,937	121,578	8,860	1,578	0.07288	0.01298	32.52	1960-62	340,693	29,614	6,597	0.08692	0.01936	24.37
1963	125,219	129,800	10,240	1,078	0.07889	0.00831	39.07	1961-63	364,869	28,587	3,251	0.07835	0.00891	37.85
1964	134,381	137,009	9,126	3,870	0.06661	0.02825	23.05	1962-64	388,387	28,226	6,526	0.07267	0.01680	28.62
1965	139,637	144,964	11,757	1,104	0.08110	0.00762	40.24	1963-65	411,773	31,123	6,052	0.07558	0.01470	30.00
1966	150,290	155,967	17,025	5,671	0.10916	0.03636	15.87	1964-66	437,940	37,908	10,645	0.08656	0.02431	21.80
1967	161,644	170,210	19,281	2,149	0.11328	0.01263	26.44	1965-67	471,141	48,063	8,924	0.10201	0.01894	22.75
1968	178,776	186,509	16,232	766	0.08703	0.00411	52.89	1966-68	512,686	52,538	8,586	0.10248	0.01675	24.14
1969	194,242	201,413	20,375	6,033	0.10116	0.02995	18.17	1967-69	558,132	55,888	8,948	0.10013	0.01603	24.96
1970	208,584	221,240	28,297	2,985	0.12790	0.01349	24.07	1968-70	609,162	64,904	9,784	0.10655	0.01606	24.17
1971	233,896	242,783	19,113	1,340	0.07872	0.00552	47.97	1969-71	665,436	67,785	10,358	0.10187	0.01557	25.11
1972	251,669	274,325	46,447	1,135	0.16931	0.00414	37.78	1970-72	738,348	93,857	5,460	0.12712	0.00739	32.62
1973	296,981	311,152	29,712	1,370	0.09549	0.00440	48.77	1971-73	828,260	95,272	3,845	0.11503	0.00464	43.27
1974	325,323	341,384	43,452	11,331	0.12728	0.03319	15.39	1972-74	926,861	119,611	13,836	0.12905	0.01493	22.78
1975	357,444	370,056	27,862	2,639	0.07529	0.00713	43.16	1973-75	1,022,591	101,026	15,340	0.09879	0.01500	25.98
1976	382,667	388,962	14,000	1,411	0.03599	0.00363	87.51	1974-76	1,100,401	85,314	15,381	0.07753	0.01398	30.38
1977	395,256	404,556	19,002	403	0.04697	0.00100	146.19	1975-77	1,163,573	60,864	4,453	0.05231	0.00383	70.68
1978	413,855	433,223	39,141	405	0.09035	0.00093	108.81	1976-78	1,226,740	72,143	2,219	0.05881	0.00181	96.96
1979	452,591	476,672	50,435	2,274	0.10581	0.00477	44.51	1977-79	1,314,450	108,578	3,082	0.08260	0.00234	71.85
1980	500,752	526,016	53,686	3,158	0.10206	0.00600	40.40	1978-80	1,435,911	143,262	5,837	0.09977	0.00407	49.66
1981	551,280	576,019	50,600	1,123	0.08784	0.00195	76.41	1979-81	1,578,706	154,721	6,555	0.09800	0.00415	49.57
1982	600,757	643,005	86,059	1,564	0.13384	0.00243	55.42	1980-82	1,745,039	190,345	5,845	0.10908	0.00335	52.32
1983	685,252	726,033	83,548	1,986	0.11507	0.00274	56.36	1981-83	1,945,056	220,207	4,673	0.11321	0.00240	60.63
1984	766,814	792,689	63,480	11,730	0.08008	0.01480	29.05	1982-84	2,161,727	233,087	15,280	0.10782	0.00707	36.22
1985	818,564	865,571	94,685	671	0.10939	0.00078	108.59	1983-85	2,384,293	241,713	14,387	0.10138	0.00603	40.43
1986	912,578	1,021,780	220,309	1,905	0.21561	0.00186	49.88	1984-86	2,680,040	378,474	14,306	0.14122	0.00534	36.42
1987	1,130,982	1,193,308	125,253	602	0.10496	0.00050	137.42	1985-87	3,080,659	440,247	3,178	0.14291	0.00103	82.36
1988	1,255,633	1,344,028	177,235	445	0.13187	0.00033	151.34	1986-88	3,559,116	522,797	2,952	0.14689	0.00083	90.60
1989	1,432,423	1,466,644	73,147	4,705	0.04987	0.00321	79.06	1987-89	4,003,980	375,635	5,752	0.09382	0.00144	86.14
1990	1,500,865	1,556,787	113,558	1,714	0.07294	0.00110	111.59	1988-90	4,367,459	363,940	6,864	0.08333	0.00157	87.38
1991	1,612,709	1,837,495	451,825	2,253	0.24589	0.00123	57.59	1989-91	4,860,926	638,530	8,672	0.13136	0.00178	65.32
1992	2,062,281	2,081,707	44,216	5,364	0.02124	0.00258	135.17	1990-92	5,475,989	609,599	9,331	0.11132	0.00170	72.61
1993	2,101,133	2,191,013	304,534	124,775	0.13899	0.05695	11.24	1991-93	6,110,215	800,575	132,392	0.13102	0.02167	18.77
1994	2,280,892	2,477,261	474,395	81,657	0.19150	0.03296	12.59	1992-94	6,749,981	823,145	211,796	0.12195	0.03138	16.17
1995	2,673,630	3,041,542	799,847	64,023	0.26297	0.02105	13.44	1993-95	7,709,816	1,578,776	270,455	0.20477	0.03508	11.80
1996	3,409,454	4,047,633	1,359,967	83,609	0.33599	0.02066	12.00	1994-96	9,566,436	2,634,209	229,289	0.27536	0.02397	12.31
1997	4,685,812	5,520,938	1,748,339	78,087	0.31667	0.01414	14.94	1995-97	12,610,114	3,908,153	225,719	0.30992	0.01790	13.43
1998	6,356,064	6,716,697	735,796	14,530	0.10955	0.00216	64.96	1996-98	16,285,268	3,844,102	176,226	0.23605	0.01082	19.79
1999	7,077,330	7,747,717	1,344,294	3,519	0.17351	0.00045	112.65	1997-99	19,985,353	3,828,429	96,136	0.19156	0.00481	32.94
2000	8,418,105	9,344,024	2,159,798	307,960	0.23114	0.03296	11.46	1998-00	23,808,438	4,239,888	326,009	0.17808	0.01369	20.25
2001	10,269,943	12,659,749	4,888,194	108,580	0.38612	0.00858	17.38	1999-01	29,751,491	8,392,286	420,060	0.28208	0.01412	15.85
2002	15,049,556	15,516,207	2,174,659	1,241,357	0.14015	0.08000	9.44	2000-02	37,519,981	9,222,651	1,657,898	0.24581	0.04419	9.60
2003	15,982,858	16,607,442	2,046,274	797,106	0.12321	0.04800	13.00	2001-03	44,783,399	9,109,127	2,147,043	0.20340	0.04794	10.13
2004	17,232,027	17,880,035	1,779,089	483,071	0.09950	0.02702	19.29	2002-04	50,003,685	6,000,022	2,521,534	0.11999	0.05043	12.86
2005	18,528,044	19,468,616	2,919,308	1,038,165	0.14995	0.05333	11.18	2003-05	53,956,094	6,744,671	2,318,342	0.12500	0.04297	13.64
2006	20,409,187	20,478,684	913,156	774,163	0.04459	0.03780	24.36	2004-06	57,827,335	5,611,553	2,295,399	0.09704	0.03969	16.11
1926-2006	154,460,428	164,734,518	25,859,298	5,311,118	0.15698	0.03224	14.06							
1953-2006	153,632,224	163,874,477	25,795,624	5,311,118	0.15741	0.03241	14.00							

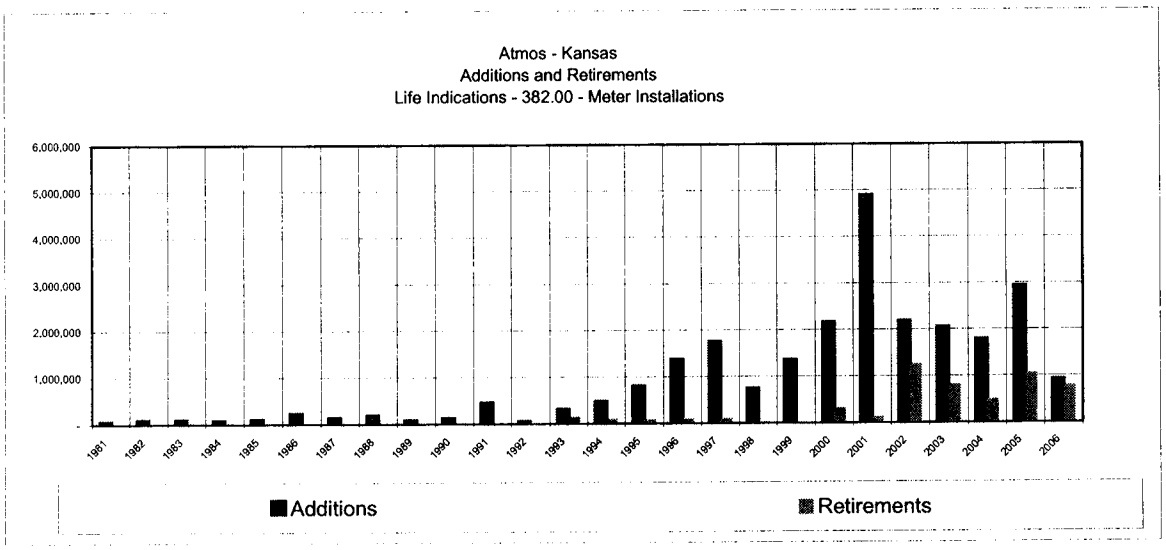
Data Source: CURB 105

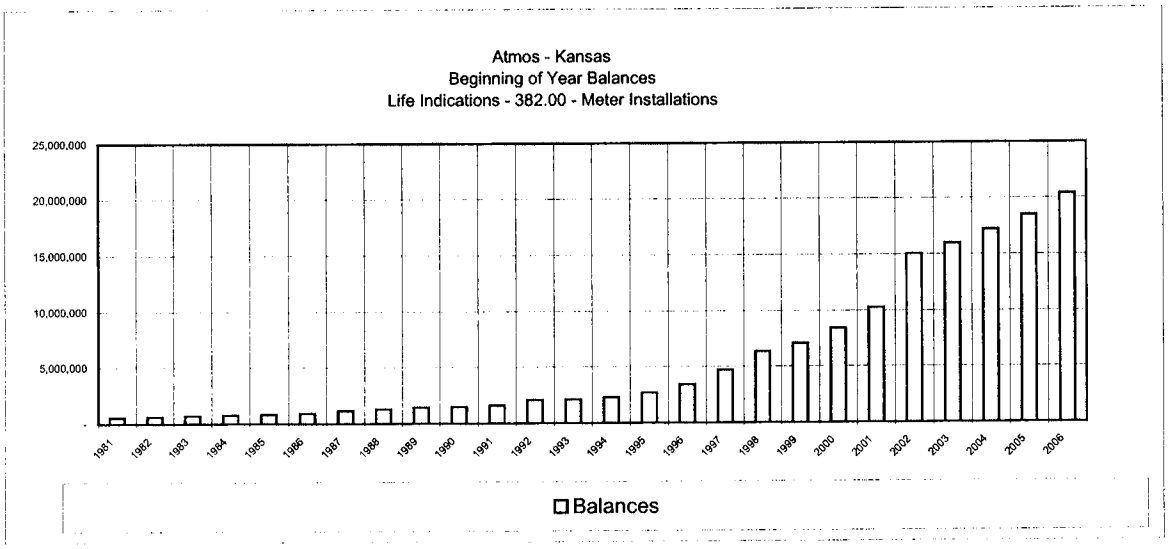
Atmos - Kansas
Geometric Mean 3 Year Rolling Band Analysis
Life Indications - 382.00 - Meter Installations



Atmos - Kansas
Electric Plant In Service
Additions, Retirements and Balances

Account 382.00 - Meter Installations





Atmos - Kansas

350.2 - Rights of Way

Calculation of Remaining Life
Based Upon Broad Group/Vintage Group Procedures
Related to Original Cost as of September 30, 2006

Survivor Curve .. IOWA: 50 R5

Year (1)	Age (2)	Surviving Investment (3)	BG/VG Average Service Life (4)	BG/VG Average Remaining Life (5)	ASL Weights (6)=(3)/(4)	RL Weights (7)=(6)*(5)
2006	0.5	0	50.00	49.50	0	0
2005	1.5	0	50.00	48.50	0	0
2004	2.5	0	50.00	47.50	0	0
2003	3.5	0	50.00	46.50	0	0
2002	4.5	0	50.00	45.50	0	0
2001	5.5	0	50.00	44.50	0	0
2000	6.5	0	50.00	43.50	0	0
1999	7.5	0	50.00	42.50	0	0
1998	8.5	0	50.00	41.50	0	0
1997	9.5	0	50.00	40.50	0	0
1996	10.5	0	50.00	39.50	0	0
1995	11.5	0	50.00	38.50	0	0
1994	12.5	0	50.00	37.50	0	0
1993	13.5	136,008	50.00	36.50	2,720	99,284
1992	14.5	0	50.00	35.50	0	0
1991	15.5	0	50.00	34.50	0	0
1990	16.5	373,633	50.00	33.50	7,473	250,329
1989	17.5	30,604	50.00	32.50	612	19,892
1988	18.5	0	50.00	31.50	0	0
1987	19.5	0	50.00	30.50	0	0
1986	20.5	0	50.00	29.50	0	0
1985	21.5	0	50.00	28.50	0	0
1984	22.5	0	50.00	27.50	0	0
1983	23.5	0	50.00	26.50	0	0
1982	24.5	0	50.00	25.51	0	0
1981	25.5	0	50.00	24.52	0	0
1980	26.5	0	50.00	23.53	0	0
1979	27.5	4,241	50.00	22.54	85	1,912
1978	28.5	0	50.00	21.57	0	0
1977	29.5	0	50.00	20.59	0	0
1976	30.5	0	50.00	19.63	0	0
1975	31.5	0	50.00	18.68	0	0
1974	32.5	0	50.00	17.74	0	0
1973	33.5	0	50.00	16.82	0	0
1972	34.5	0	50.00	15.91	0	0

Atmos - Kansas

350.2 - Rights of Way

Calculation of Remaining Life
Based Upon Broad Group/Vintage Group Procedures
Related to Original Cost as of September 30, 2006

Survivor Curve .. IOWA: 50 R5

Year (1)	Age (2)	Surviving Investment (3)	BG/VG Average Service Life (4)	BG/VG Average Remaining Life (5)	ASL Weights (6)=(3)/(4)	RL Weights (7)=(6)*(5)
1971	35.5	0	50.00	15.01	0	0
1970	36.5	0	50.00	14.13	0	0
1969	37.5	0	50.00	13.27	0	0
1968	38.5	0	50.00	12.44	0	0
1967	39.5	0	50.00	11.62	0	0
1966	40.5	0	50.00	10.83	0	0
1965	41.5	0	50.00	10.07	0	0
1964	42.5	0	50.00	9.34	0	0
1963	43.5	0	50.00	8.64	0	0
1962	44.5	0	50.00	7.98	0	0
1961	45.5	0	50.00	7.35	0	0
1960	46.5	0	50.00	6.76	0	0
1959	47.5	0	50.00	6.20	0	0
1958	48.5	0	50.00	5.68	0	0
1957	49.5	0	50.00	5.20	0	0
1956	50.5	6,520	50.00	4.75	130	620
1955	51.5	6,300	50.00	4.34	126	547
1954	52.5	0	50.00	3.96	0	0
1953	53.5	0	50.00	3.62	0	0
1952	54.5	0	50.00	3.30	0	0
1951	55.5	11,629	50.00	3.02	233	702
		568,935			11,379	373,287

AVERAGE SERVICE LIFE 50.00
AVERAGE REMAINING LIFE 32.81

Atmos - Kansas

351.00 - Structures & Improvements

Calculation of Remaining Life
Based Upon Broad Group/Vintage Group Procedures
Related to Original Cost as of September 30, 2006

Survivor Curve .. IOWA: 40 R4

Year (1)	Age (2)	Surviving Investment (3)	BG/VG Average Service Life (4)	BG/VG Average Remaining Life (5)	ASL Weights (6)=(3)/(4)	RL Weights (7)=(6)*(5)
2006	0.5	0	40.00	39.50	0	0
2005	1.5	0	40.00	38.50	0	0
2004	2.5	0	40.00	37.50	0	0
2003	3.5	0	40.00	36.50	0	0
2002	4.5	0	40.00	35.51	0	0
2001	5.5	0	40.00	34.51	0	0
2000	6.5	0	40.00	33.52	0	0
1999	7.5	0	40.00	32.52	0	0
1998	8.5	0	40.00	31.53	0	0
1997	9.5	0	40.00	30.54	0	0
1996	10.5	0	40.00	29.56	0	0
1995	11.5	26,475	40.00	28.57	662	18,912
1994	12.5	14,371	40.00	27.60	359	9,914
1993	13.5	13,078	40.00	26.62	327	8,704
1992	14.5	0	40.00	25.65	0	0
1991	15.5	7,732	40.00	24.69	193	4,773
1990	16.5	39,591	40.00	23.74	990	23,498
1989	17.5	1,129	40.00	22.80	28	643
1988	18.5	0	40.00	21.86	0	0
1987	19.5	0	40.00	20.94	0	0
1986	20.5	0	40.00	20.03	0	0
1985	21.5	0	40.00	19.13	0	0
1984	22.5	34	40.00	18.25	1	16
1983	23.5	0	40.00	17.38	0	0
1982	24.5	0	40.00	16.52	0	0
1981	25.5	0	40.00	15.69	0	0
1980	26.5	0	40.00	14.87	0	0
1979	27.5	0	40.00	14.07	0	0
1978	28.5	0	40.00	13.29	0	0
1977	29.5	0	40.00	12.53	0	0
1976	30.5	74	40.00	11.79	2	22
1975	31.5	0	40.00	11.07	0	0
1974	32.5	0	40.00	10.36	0	0
1973	33.5	0	40.00	9.67	0	0
1972	34.5	0	40.00	9.00	0	0

Atmos - Kansas

351.00 - Structures & Improvements

Calculation of Remaining Life
Based Upon Broad Group/Vintage Group Procedures
Related to Original Cost as of September 30, 2006

Survivor Curve .. IOWA: 40 R4

Year	Age	Surviving Investment	BG/VG Average Service Life	BG/VG Average Remaining Life	ASL Weights	RL Weights
(1)	(2)	(3)	(4)	(5)	(6)=(3)/(4)	(7)=(6)*(5)
1971	35.5	0	40.00	8.36	0	0
1970	36.5	0	40.00	7.74	0	0
1969	37.5	0	40.00	7.15	0	0
1968	38.5	0	40.00	6.60	0	0
1967	39.5	0	40.00	6.10	0	0
1966	40.5	0	40.00	5.64	0	0
1965	41.5	0	40.00	5.21	0	0
1964	42.5	0	40.00	4.82	0	0
1963	43.5	0	40.00	4.46	0	0
1962	44.5	0	40.00	4.12	0	0
1961	45.5	0	40.00	3.81	0	0
1960	46.5	0	40.00	3.51	0	0
1959	47.5	0	40.00	3.23	0	0
1958	48.5	0	40.00	2.95	0	0
1957	49.5	0	40.00	2.68	0	0
1956	50.5	0	40.00	2.42	0	0
1955	51.5	0	40.00	2.16	0	0
1954	52.5	0	40.00	1.91	0	0
1953	53.5	0	40.00	1.67	0	0
1952	54.5	0	40.00	1.44	0	0
1951	55.5	440	40.00	1.22	11	13
		102,923			2,573	66,496

AVERAGE SERVICE LIFE 40.00
AVERAGE REMAINING LIFE 25.84

Atmos - Kansas

352.00 - Wells

Calculation of Remaining Life
Based Upon Broad Group/Vintage Group Procedures
Related to Original Cost as of September 30, 2006

Survivor Curve .. IOWA: 50 S4

Year (1)	Age (2)	Surviving Investment (3)	BG/VG Average Service Life (4)	BG/VG Average Remaining Life (5)	ASL Weights (6)=(3)/(4)	RL Weights (7)=(6)*(5)
2006	0.5	0	50.00	49.50	0	0
2005	1.5	0	50.00	48.50	0	0
2004	2.5	0	50.00	47.50	0	0
2003	3.5	0	50.00	46.50	0	0
2002	4.5	2,530	50.00	45.50	51	2,302
2001	5.5	74,133	50.00	44.50	1,483	65,977
2000	6.5	42,485	50.00	43.50	850	36,961
1999	7.5	0	50.00	42.50	0	0
1998	8.5	2,756	50.00	41.50	55	2,287
1997	9.5	25,181	50.00	40.50	504	20,396
1996	10.5	67,055	50.00	39.50	1,341	52,972
1995	11.5	0	50.00	38.50	0	0
1994	12.5	2,909	50.00	37.50	58	2,182
1993	13.5	235,990	50.00	36.50	4,720	172,267
1992	14.5	99,287	50.00	35.50	1,986	70,491
1991	15.5	0	50.00	34.50	0	0
1990	16.5	373,545	50.00	33.50	7,471	250,267
1989	17.5	108,186	50.00	32.50	2,164	70,319
1988	18.5	0	50.00	31.50	0	0
1987	19.5	3,870	50.00	30.50	77	2,361
1986	20.5	0	50.00	29.50	0	0
1985	21.5	7,917	50.00	28.50	158	4,513
1984	22.5	0	50.00	27.51	0	0
1983	23.5	0	50.00	26.51	0	0
1982	24.5	0	50.00	25.52	0	0
1981	25.5	114	50.00	24.54	2	56
1980	26.5	3,701	50.00	23.56	74	1,744
1979	27.5	0	50.00	22.58	0	0
1978	28.5	0	50.00	21.62	0	0
1977	29.5	0	50.00	20.67	0	0
1976	30.5	0	50.00	19.74	0	0
1975	31.5	0	50.00	18.82	0	0
1974	32.5	0	50.00	17.93	0	0
1973	33.5	0	50.00	17.06	0	0
1972	34.5	0	50.00	16.21	0	0

Atmos - Kansas

352.00 - Wells

Calculation of Remaining Life
Based Upon Broad Group/Vintage Group Procedures
Related to Original Cost as of September 30, 2006

Survivor Curve .. IOWA: 50 S4

Year	Age	Surviving Investment	BG/VG Average Service Life	BG/VG Average Remaining Life	ASL Weights	RL Weights
(1)	(2)	(3)	(4)	(5)	(6)=(3)/(4)	(7)=(6)*(5)
1971	35.5	6	50.00	15.39	0	2
1970	36.5	0	50.00	14.60	0	0
1969	37.5	0	50.00	13.84	0	0
1968	38.5	6,747	50.00	13.11	135	1,770
1967	39.5	504	50.00	12.42	10	125
1966	40.5	518	50.00	11.76	10	122
1965	41.5	0	50.00	11.13	0	0
1964	42.5	0	50.00	10.53	0	0
1963	43.5	2,487	50.00	9.97	50	496
1962	44.5	0	50.00	9.44	0	0
1961	45.5	0	50.00	8.93	0	0
1960	46.5	3,444	50.00	8.46	69	582
1959	47.5	5	50.00	8.01	0	1
1958	48.5	2,517	50.00	7.59	50	382
1957	49.5	2,428	50.00	7.19	49	349
1956	50.5	1,997	50.00	6.81	40	272
1955	51.5	3,505	50.00	6.46	70	453
1954	52.5	5,589	50.00	6.13	112	685
1953	53.5	7,568	50.00	5.81	151	880
1952	54.5	6,278	50.00	5.51	126	692
1951	55.5	37,068	50.00	5.23	741	3,880
		1,130,321			22,606	765,786

AVERAGE SERVICE LIFE 50.00
AVERAGE REMAINING LIFE 33.87