



MONTANA -DAKOTA UTILITIES CO.

Before the North Dakota Public Service Commission
Case No. PU-399-02-183

REBUTTAL TESTIMONY
OF
EARL M. ROBINSON, CDP
PRESIDENT & CEO
AUS CONSULTANTS -
WEBER FICK & WILSON DIVISION

Concerning
Gas Depreciation and Common Plant Studies

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REBUTTAL TESTIMONY OF EARL M. ROBINSON

Q. STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.

A. My name is Earl M. Robinson. I am President & CEO of the Weber Fick & Wilson Division (WFW) of AUS Consultants - Utility Services. WFW is a public utility consulting firm specializing in the performance of various financial studies including depreciation, valuation, cost of service and other analysis for the utility industry and regulatory agencies. AUS Consultants provides a wide spectrum of consulting services through its various affiliated groups that include Utility Services, Valuation Services, ICR Survey Research, and Marketing Systems. WFW is located at 1000 North Front Street, Suite 200, Wormleysburg, Pennsylvania 1704

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

A. I am a graduate of Harrisburg Area Community College with an Associate of Arts Degree in Accounting and have completed additional courses at University Center of Harrisburg. I have also successfully completed numerous programs related to service life and salvage estimation, forecasting, and evaluation sponsored by Depreciation Programs, Inc., as well as training programs presented by the Society of Depreciation Professionals. In addition, I have completed cost of service seminars sponsored by the American Water Works Association.

1 Q. PLEASE DESCRIBE YOUR PROFESSIONAL QUALIFICATIONS.

2 A. I have been employed by WFW as a public utility consultant from 1971 to
3 1975 and 1977 to date. During these periods, my responsibilities have
4 included the supervision of analyses and completion of studies related to
5 depreciation, valuation, original cost, trended original cost, cost of service
6 and bill analysis, as well as analyses of expenses, revenues, accounting
7 adjustments for various municipal and investor-owned utilities. Studies
8 prepared have required the review of company records, inspection of
9 property, the preparation of property inventories and original costs,
10 preparation and review of mortality studies, selection of proper service
11 lives and life characteristics, analysis of salvage and analysis of the capital
12 recovery impact of changing depreciation methods. Other areas of
13 responsibility have included the preparation and selection of indices,
14 development of rate base elements, development of data for cost of
15 service studies and testing of consumption and revenue data in the
16 preparation of bill analyses.

17 From 1975 to 1977, I was employed by Gannett, Fleming, Cordry &
18 Carpenter, Inc. as a valuation analyst. My responsibilities included the
19 classification, analysis and coordination of data in the development of
20 depreciation rates for various companies including telephone, gas, water
21 and electric utilities. During the years 1966 to 1971, I was a staff member
22 of the Plant Accounting Department of United Telephone Company of

1 Pennsylvania (now Sprint-Eastern Group Headquarters). My
2 responsibilities included the preparation of various plant accounting ledgers
3 and unitization of property accounts, as well as special studies related to
4 insurance and tax valuations. In summary, I have more than thirty (30)
5 years experience in the public utility field.

6 As a member of the AGA Depreciation Committee (a predecessor to
7 the current AGA Accounting Services Committee), I am a past Chairman of
8 the Statistics, Bibliography, Court and Regulatory Sub-Committee. During
9 my years of membership of the prior organization, as well as the present
10 committee, I participated in many conferences that have incorporated
11 research, analysis, and discussions of numerous depreciation issues and
12 topics. In addition, as a member of the AGA Depreciation Committee, I co-
13 authored a manual entitled "*An Introduction to Net Salvage of Public Utility*
14 *Plant*" which is used as reference material in AGA/EEL training seminars.

15
16 **Q.** PLEASE STATE ANY ADDITIONAL DEPRECIATION
17 QUALIFICATIONS.

18 **A.** I am a Certified Depreciation Professional. The certification is issued by
19 the Society of Depreciation Professionals and is received upon successful
20 completion of an extensive written examination covering all aspects of
21 depreciation. I completed the examination during October 1996.

22

1 **Q.** ARE YOU A MEMBER OF ANY PROFESSIONAL SOCIETIES?

2 A. Yes, I am a member of the American Gas Association, the American
3 Water Works Association, the Pennsylvania Gas Association, an
4 associate member of the American Gas Association (AGA) Accounting
5 Services Committee (past Chairman of the Statistics, Bibliography, Court
6 and Regulatory Sub-Committee), and a member of the American Railway
7 Engineering Association. I am also a founding member of the Society of
8 Depreciation Professionals. As part of that organization, I held numerous
9 positions including President.

10

11 **Q.** MR. ROBINSON, HAVE YOU PREVIOUSLY SPONSORED TESTIMONY
12 BEFORE A REGULATORY BODY?

13 A. Yes. I have testified in numerous proceedings before numerous
14 regulatory agencies concerning telephone, gas, water and electric utilities.
15 I have presented testimony to the Alberta Utilities Energy and Utilities
16 Board, Arizona Corporation Commission, the Connecticut Department of
17 Public Utility Control, the Delaware Public Service Commission, the Public
18 Service Commission of the District of Columbia, the Federal
19 Energy Regulatory Commission, the Illinois Commerce Commission, the
20 Massachusetts Department of Public Utilities, the New Hampshire Public
21 Utilities Commission, the New Jersey Board of Public Utilities, the New
22 Mexico Public Service Commission, the New York Public Service

1 Commission, the North Carolina Utilities Commission, the Pennsylvania
2 Public Utility Commission, the State of Rhode Island Public Utilities
3 Commission, the Public Service Commission of South Carolina, the Virgin
4 Islands Public Services Commission, the California State Board of
5 Equalization and several Valuation Boards with the State of Florida. A list
6 of those prior appearances is set forth in Appendix A of this testimony.
7

8 **Q.** HOW DID YOU FAMILIARIZE YOURSELF WITH THE COMPANY'S
9 PROPERTY, WHICH IS THE SUBJECT OF YOUR ANALYSIS?

10 **A.** To obtain an overview and knowledge of the Company's facilities, I met with
11 Company representatives to discuss its general scope of operations, which
12 could have a bearing on the service lives of the Company's property. In
13 conjunction with the management meetings, I performed a physical plant
14 inspection of a representative portion of the Company's above-ground
15 facilities. Likewise, the Company's financial management provided detailed
16 information related to each of the Company's plant investment and net
17 salvage databases. Accordingly, my study involved a detailed analysis of
18 the historical accounting data obtained from the Company's continuing
19 property records.
20

1 Q. WHAT WAS THE SOURCE OF THE DATA, WHICH YOU UTILIZED AS A
2 BASIS FOR THE DEPRECIATION RATES YOU ARE RECOMMENDING
3 PER YOUR STUDY?

4 A. All of the Company's historical data utilized in the course of performing the
5 detailed service life and salvage study was obtained from the Company's
6 books and records. The historical vintaged data (additions, retirements,
7 adjustments, and balances) were obtained for each of the Company's
8 depreciable property groups.

9

10 Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

11 A. I have conducted the depreciation studies of the natural gas and common
12 plant in service of Montana Dakota Utilities Co. (Montana-Dakota, or the
13 "Company") as of December 31, 2001. The depreciation study reports are
14 entitled Montana Dakota Utilities Co. Gas Division Depreciation Study as of
15 December 31, 2001 which is identified as Exhibit No.-___ (EMR-1). The
16 Common Plant study is entitled Montana Dakota Utilities Co. – Common
17 Plant Depreciation Study as of December 31, 2001 and is identified as
18 Exhibit No.-___ (EMR-2). Accordingly, I am providing rebuttal testimony
19 relative to statements made and positions taken by Mr. Charles W. King
20 who filed direct testimony on behalf of the Consumer Advocate Staff of the
21 North Dakota Public Service Commission in this case.

22

1 Q. WHAT COMMENTS DO YOU HAVE RELATIVE TO MR. KING'S
2 OPENING SUMMARIZATION OF HIS DEPRECIATION PROPOSAL
3 (PAGE 3 OF HIS TESTIMONY)?

4 A. On page 3 of his testimony, Mr. King sets forth the impact of his
5 depreciation proposal as it relates to the Company's current level of
6 depreciation and as compared to the recommendations set forth in the
7 Company's Gas Depreciation study. With regard to the Company's gas
8 distribution plant (the primary operating component of the Company's
9 overall investment) Mr. King is proposing approximately a 50% percent
10 reduction in depreciation rates and expense from the current going level
11 and more than a 40% reduction from the depreciation rates set forth in
12 Company's filed Gas depreciation study. While Mr. King's depreciation
13 recommendation relative to the General Plant component is generally
14 similar in level to the present depreciation rates for that function, his
15 proposal does not give recognition to the dramatic changes that have
16 occurred with regard to those property groups. Lastly, Mr. King's
17 depreciation proposal relative to the Company's Common Plant results in a
18 10% reduction in depreciation from the Company's current depreciation
19 level and a nearly 30% reduction from the depreciation rates set forth in the
20 Company filed Common Plant depreciation study. All of Mr. King's
21 proposed depreciation deductions are unjustified and inappropriate, but his
22 radical proposed reduction to the Company's Gas Distribution function

1 depreciation rate is particularly disconcerting. The depreciation rates set
2 forth by Mr. King for the Company's distribution plant are clearly not
3 reflective of the capital recovery requirements for this plant. Furthermore,
4 Mr. King's recommendations are dramatically far removed from any normal
5 depreciation level within the gas industry, and equally important, would no
6 doubt result in financial harm to the Company's operations. That is, such a
7 reduction in depreciation expense for the Company property will serve to
8 reduce cash flow and potentially impact the Company's overall capital
9 costs.

10 The bottom line of Mr. King's proposal is simply one of deferral, and then
11 deferring some more, the true total cost of providing service to the
12 Company's customers. Mr. King's selection of estimated service lives and
13 his proposed use of the SFAS method (a discounted cash flow approach) to
14 define the current period's appropriate share of the future retirement cost
15 (cost of removal) are inappropriate. The method grossly understates the
16 current apportionment of those total life costs. The use of Mr. King's
17 proposed net salvage approach is akin to the sinking fund depreciation
18 method that was used long ago by some regulatory agencies to calculate
19 depreciation rates, but was discarded as not being appropriate to set just
20 and reasonable depreciation rates.

21

1 Q. ON PAGE 5 LINES 24 & 25 OF HIS TESTIMONY MR. KING STATES
2 THAT "THE ONLY PARAMETER THAT IS ABOSLUTELY REQUIRED (TO
3 CALCULATE A DEPRECIATION RATE) IS AN ESTIMATE OF THE
4 SERVICE LIFE....". DO YOU HAVE A RESPONDING COMMENT?

5 A. Yes, while in absolute terms of being able to mathematically calculate a
6 depreciation rate Mr. King may be generally correct, however, he is
7 incorrect in not recognizing the critical importance of net salvage. That is, it
8 is "equally imperative" that the calculation include recognition of the net
9 salvage relative to the plant being recovered. It is not just an after thought
10 of "oh, maybe we should consider net salvage"—it is a key component in
11 the development of the depreciation.

12
13 Q. ON PAGE 8 OF HIS TESTIMONY, MR. KING STATES THAT THERE
14 WERE PROBLEMS WITH THE HISTORICAL DATA. DO YOU HAVE AN
15 EXPLANATION RELATIVE TO THIS ISSUE?

16 A. On page 8, Lines 14 to 19 Mr. King discusses issues he has with the basic
17 historical data. Unfortunately, in the assembling the basic historical data
18 the Company was unable to retrieve historical information relative to
19 additions and retirements prior to January 1, 1948. Notwithstanding, the
20 fact that the account balance of the Company's plant in service as of
21 January 1, 1948 was only approximately 6% of the current balance, the life
22 analysis process uses information relative to additions and retirements

1 available since the inception of the property groups. While this earlier data
2 does not influence the results to any significant degree, an attempt was
3 made to recreate the information as best as possible through the inclusion
4 of estimates. To estimate the additions and retirement activity for the years
5 1946 to 1948 the amounts were estimated as being equal to the 1949
6 amounts. With regard to the War years 1941 through 1945, which Mr. King
7 discussed in his testimony, no amounts were included for either additions or
8 retirements. The decision not to include activity for the war years was
9 based upon experience from reviewing numerous other utility reports during
10 those time periods. Given the limitation of the available (and rationing of)
11 materials during the war years little activity occurred within most utilities.
12 For years prior to the war year's gross additions were generally reduced by
13 2.5 percent for each prior year's activity to give recognition for plant growth
14 over time. The level of annual retirements was based upon a ratio of each
15 year's gross additions. Again while the level of plant activity is quite modest
16 as compared to current plant and produces only a limited impact on any
17 study results, an attempt was made to estimate values for those years as
18 best as possible.

19

20 **Q.** ON PAGES 12, LINES 24 TO 29 AND PAGES 13 TO 16 OF HIS
21 TESTIMONY, MR. KING DISCUSSES HIS RECOMMENDATIONS OF
22 AVERAGE SERVICE LIFE PARAMETERS FOR A VARIETY OF THE

1 COMPANY'S PLANT ACCOUNTS. ALSO MR. KING STATES THAT
2 YOUR PREPARED SPR ANALYSIS (RESULTS) DO NOT SUPPORT THE
3 SERVICE LIFE PARAMETER RECOMMENDATIONS SET FORTH IN THE
4 COMPANY'S DEPRECIATION STUDY. WHAT IS YOUR RESPONSE?

5 A. First. I will respond with regard to Mr. King's criticism that my SPR analysis
6 results do not support the "average service life parameter"
7 recommendations contained in the Company's Gas Depreciation Study
8 Exhibit No.-___ (EMR-1). In response to Mr. King's statement, a discussion
9 of the basic concepts and underlying reasons for historical life analysis is
10 required, and then, secondly, the general assumptions and range of
11 considerations that enter into the estimation of the proposed average
12 service life parameters is also required. The historical data and related life
13 analysis is a basic depreciation study tool which is assembled to enable the
14 depreciation professional to determine (estimate) forward looking service
15 life and salvage parameters used in completing a comprehensive
16 depreciation study. That is, the data base is a source from which to
17 prepare historical analysis, make assessments and judgments concerning
18 the life and salvage factors being achieved. **The historical life analysis**
19 **procedure and indicated service life parameter results is a tool not an**
20 **end in and by itself.** In the process of assessing the service life analysis
21 results, one must consider not only the results of the historical analysis, but
22 also must give recognition to the general life characteristics of utility

1 property when selecting the survival characteristic (i.e., the Iowa Curve that
2 goes along with the average service life.) Simply said, utility property is
3 generally placed into service with the expectation that it will remain in
4 service for some time before it is removed from service. That is, there is
5 not a general expectation that significant levels of property retirements will
6 occur shortly after the property is placed into service. In that regard, in
7 estimating survival characteristics (Iowa Curves) for the various plant
8 categories, a somewhat greater focus is placed on more Right Mode Iowa
9 Curves (R Curves as opposed to O and L Curves); as well as higher
10 subscript Curves, 2.5 and 3 curves as opposed to 1 and 2 Curves). In his
11 life parameter selections, Mr. King has generally focused on the more left
12 mode and lower subscript Curves simply because they met "some of his
13 other criteria and conceivably indicated a better arithmetic fit of the
14 available historical data. The impact of his selection process is to estimate
15 average service lives that are, 1) longer than appropriate and, 2) do not
16 generally represent the characteristic of the property being studied.
17 Standard service life depreciation analysis processes were utilized along
18 with the Company's developed depreciation data base compiled through
19 December 31, 2001 to develop property life indications. Likewise, the net
20 salvage data base was used as a basis to identify historical experience and
21 trends and to determine each property group's recommended net salvage
22 factors. This process is used as a benchmark, together with professional

1 analysis and consideration, to estimate future lives and salvage factors over
2 which to recover the Company's un-depreciated fixed capital investments.
3 It is not a process of simple arithmetic calculations and accepting whatever
4 is generated from the "Computer Analysis" to estimate the future
5 parameters, but one of clear and deliberate consideration of all factors
6 impacting the Company's property.

7 I will now respond to various specific account criticisms made by Mr. King.

8 **Account 375 - Distribution Meas. & Reg. Structures and**

9 **Improvements.** This class of property contains investments relative to
10 structures which tend to be placed into service followed by somewhat
11 limited subsequent activity. Mr. King's selection of an S1 curve implies that
12 greater levels of young aged retirements (mortality) than the proposed R2.5
13 curve contained in the Company's depreciation study Exhibit No.-____
14 (EMR-1). Even a somewhat limited change to a more right mode or higher
15 subscript curve would have altered his conclusion. For example, even if Mr.
16 King had selected an S2 or S3 curve, which demonstrates fewer early aged
17 retirements (rather than simply the historical arithmetic best fit curve of an
18 Iowa S1 Curve) his resulting average remaining life recommendation would
19 have been shorter (which translates into a higher depreciation rate) than my
20 proposed remaining life using the R2.5 Iowa Curve.

21 **Account 376 – Mains.** While Mr. King has selected an "R" mode Iowa
22 curve for this property group, he has again selected a relatively low

1 subscript curve, an Iowa R1.5 Curve as opposed to an Iowa R3 Curve
2 recommended per the Company's Gas depreciation study Exhibit No.- ____
3 (EMR-1). Conversely, the use of the estimated R3 Curve, within the
4 Company's Depreciation Study, recognizes that a greater frequency of
5 retirements will occur later in life as opposed to earlier in life. These
6 estimated later in average life retirements is generally consistent with that
7 anticipated by operating personnel for gas mains throughout the utility
8 industry. Using the Iowa R3 curve for Account 376-Mains and Mr. King's
9 own analysis per CWK-2 identifies that the indicated average service life of
10 the Company's Main's investment should be 44.7 years (which is consistent
11 with the life proposed by the Company's depreciation study). Also following
12 Mr. King's own general criteria for estimating the applicability of a service
13 parameter within the life analysis process, the Retirement Experience Index
14 for an Iowa 44.7-R3 Curve is at 100 (higher is better) as opposed to the
15 57.6-R1.5 Curve which has a Retirement Experience Index of 87.5.
16 Furthermore, as a general check on the reasonableness of the estimated
17 Iowa 45-R3 service life parameters estimated per the Company's
18 depreciation study report Exhibit No.- ____ (EMR-1), the AGA depreciation
19 survey indicates that nearly one-third of the reporting companies are
20 utilizing a service life in the range of 45-52 years. However, in reviewing
21 such statistics one must recognize that segments of this industry data are
22 being influenced by sizeable investments related to Cast Iron Main dating

1 back to the 1800's which has routinely experienced a substantially longer
2 average service life due to operating at far lower operating pressures, etc.

3 The Company does not have Cast Iron Mains. Absent that service life
4 information relative to cast iron main property, the overall average of the
5 industry service lives is most likely years shorter.

6 Finally, Mr. King states that he is recommending the use of a Whole Life
7 based depreciation rate as opposed to a Remaining Life based depreciation
8 rate for this asset categories. This approach of switching to a different
9 depreciation technique for this account and one other account is apparently
10 an effort to offset some of the impact of his inappropriately proposed
11 depreciation parameters and procedures which produce results that even
12 Mr. King recognizes as totally irrational.

13 **Account 378 – Measuring & Regulating Station Equipment.** Again, Mr.
14 King has selected an average service life parameter (an SC Curve which is
15 a constant retirement percent dispersion) indicating that from day one after
16 the property group investment is placed in to service the property group will
17 experience continuous and ongoing retirements. Such a service life
18 parameter is not anticipated and/or realistic for this class of property.
19 Conversely, the Company's filed Gas depreciation study Exhibit No.-____
20 (EMR-1) recommends an Iowa R1 Curve for this property category. While
21 the Iowa R1 curve recognizes that various levels of retirements will occur
22 throughout the property's life, the anticipated retirement levels are not

1 nearly as accelerated as that indicated under Mr. King's recommendation.
2 Furthermore, in reviewing Mr. King's Exhibit CWK-2 it is further noted that
3 the Company recommended Iowa R1 curve has a superior Retirement
4 Experience Index (Mr. King's selected criteria) of 99.5 versus a Retirement
5 Experience Index of 82.2 for Mr. King's selected SC Curve.

6 **Account 379 – Measuring & Regulating Station Equipment – City Gate.**

7 For this account Mr. King states that he picked the best SPR result with a
8 Retirement Experience Index of greater than 75. His statement is incorrect;
9 the Retirement Experience index is only 67.36 as shown by his Exhibit
10 CWK-3. The important factor however is that he again selected an Iowa
11 Curve (an S1) that experiences higher levels of retirements earlier in life
12 than the Iowa R2.5 Curve incorporated into the Company's study for this
13 property group. In general City Gate stations tend to be constructed to
14 service a selected community and/or service territory. They are typical
15 designed for the larger area as compared to a district regulator station and
16 therefore tend to be less prone to changes earlier in life. Conversely,
17 district regulator stations (Account 378) are more influenced by changes of
18 demand within a given neighborhood and therefore would likely experience
19 a somewhat greater level of retirements early in life (and thus would
20 demonstrate a lower subscript curve). Again using Mr. King's own
21 measurement criteria the Iowa 33.2-R2.5 (from Mr. King's Exhibit CWK-3)
22 produces a Retirement Experience Index of 93.96 (higher is better) as

1 opposed to Mr. King's recommended curve of an Iowa S1 curve which
2 produces a Retirement Experience Index of only 67.4.

3 **Account 380 – Services.** Mr. King has recommended a service life for the
4 Company's Services account that is inconsistent with the general range of
5 data he reviewed. As with essentially all previous accounts studied, his
6 primary stated measurement criteria is that the recommended service life
7 parameters historically generated a Retirement Experience of greater than
8 75. In addition he has referenced that a life in the range of 60 to 80 years
9 might be justified by the study data, even without giving consideration to the
10 survivor life characteristics indicated by those life indications (extremely left
11 modal Curves being mostly O mode curves and a low subscript (R1) curve).
12 Furthermore, Mr. King quotes that the maximum life used by any AGA
13 reporting Company is 63 years and that the average service life reported by
14 the industry for Services is 40 years. All this data referenced by Mr. King
15 better supports the Company's proposed service life of 40 years (per
16 Exhibit No.-___ (EMR-1)) as opposed to the extremely long and irrational
17 life of 55 years recommended by Mr. King. Also, the Iowa R2.5
18 recommended per the Company's Gas depreciation study produces a
19 Retirement Experience Index (Mr. King's preferred measurement) of 100
20 versus Mr. King's recommended R1 Curve which produces a Retirement
21 Experience Index of 83.9.

22 As with Account 376 – Mains Mr. King states that he is recommending the

1 use of a Whole Life based depreciation rate as opposed to a Remaining
2 Life based depreciation rate. Again, this approach of switching to a
3 different depreciation technique for these accounts is apparently an effort to
4 offset some of the impact of his inappropriately proposed depreciation
5 parameters and procedures which produce results that even Mr. King
6 recognizes as totally irrational.

7 **Account 381 – Meters.** Mr. King's schedule on Page 15 of his testimony
8 indicates that he recommended an Iowa R1.5 curve for this property group,
9 however, his text on Page 14 of his testimony and his Exhibit CWK-1
10 Schedule 2 identifies that an Iowa R2.5 Curve was utilized as the applicable
11 depreciation parameters. The Iowa R2.5 curve is the same as
12 recommended by the Company's Gas depreciation report.

13 **Account 383 – Service Regulators.** This property investment is related to
14 house regulators that are installed on the Customer premise to reduce the
15 pressure from the distribution level to the lower pressure that is utilized by
16 the customer's gas appliances, etc. This category of property experiences
17 only minimal levels of early retirements given that the drivers for retirement
18 tend to be generally physical in nature and/or could be the product of a
19 pressure change with district service area. Accordingly, there is absolutely
20 no justification for estimating an Iowa R1 Curve as the applicable service
21 life parameter for this asset category. Reviewing Mr. King's curve fitting
22 analysis (Exhibit CWK-2) for this account identifies that the Iowa R3 Curve

1 recommended per the Company's Gas depreciation study produces an
2 indicated average service life of 32.4 (which is less than the 35 years
3 recommended per the Company study report). Likewise the R3 Curve
4 produces a Retirement Experience Index of 100 (higher is better) as
5 opposed to Mr. King's recommended R1 Curve which has a Retirement
6 Experience Index of 80 and an average service life of 38.7 years. Mr. King
7 proposed a 40 year life for the account.

8 **Account 385 – Industrial Measuring & Regulating Station Equipment.**

9 Counter to Mr. King's statement that he is not surprised that Service
10 Regulators and Industrial M&R Equipment would have the same life, these
11 two categories of property are dramatically different classes of assets. The
12 service regulator is a very small unit used for providing relatively small
13 volumes of gas to residential and/or commercial customers. Conversely,
14 Industrial Measuring & Regulating Station Equipment is typically a relatively
15 larger regulator set used to provide large volumes of gas to industrial
16 customers. These Industrial M & R facilities are more akin to District
17 Regulator Stations but more susceptible to life limitations due to changing
18 individual business operations. While the Company's Gas depreciation
19 study recommended relatively similar depreciation parameters for Service
20 Regulators and Industrial Measuring & Regulating Station Equipment it is
21 not for the same reason as indicated by Mr. King. Even according to Mr.
22 King's analysis the lower R2 Curve recommended by the Company's Gas

1 depreciation report produces a Retirement Experience Index of 95.8 while
2 Mr. King's recommended R1 Curve produces a Retirement Experience
3 Index of 78.4. Likewise Mr. King's R1 curve indicates greater levels of
4 retirements earlier in life than does the Company's study recommendation
5 of an R2 Curve.

6 **Account 386 – Miscellaneous Equipment.** As Mr. King stated, a larger
7 portion of this property group's investment is related to CNG Refueling
8 Station equipment. Due to the lack of historical retirements, the historical
9 data does not produce applicable service life indications. This class of plant
10 is an evolving technology which relies on various levels of cascading
11 equipment that is upgraded over time. Also this is somewhat of an
12 unproven product with regard to whether there is real long term viability for
13 this asset class. Lastly the Investment in the class is relatively modest;
14 accordingly, a 15 year life with an R3 Curve was deemed the most
15 appropriate service life parameters for this asset class.

16 **Account 387.10 – Cathodic Protection.** Cathodic Protection is a
17 technology driven asset group that does experience various levels of
18 somewhat gradual and earlier in life retirements than represented by the
19 Iowa L4 Curve proposed by Mr. King. Accordingly, the R1.5 Curve as
20 recommended by the Company Gas depreciation study Exhibit No.-____
21 (EMR-1) is deemed as a superior life recommendation as opposed to Mr.
22 King's proposed L4 Curve.

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Q. MR. KING, ON PAGE 16, OF HIS TESTIMONY DISCUSSES YOUR DISAGGREGATION OF SELECTED ACCOUNTS. WHY DID YOU DISAGGREGATE THE INVESTMENTS IN VARIOUS ACCOUNTS?

A. In completing depreciation studies, it has been my practice, as well as the practice of various other depreciation professionals, to segment various larger plant accounts into more homogenous types of property groups. It is noted that the Company's investment in Account 376 - Mains comprises more than 45 percent of the Company's depreciable plant while Account 380 – Services comprises more than 18 percent of the depreciable plant. The segmentation of these assets and the calculation of individual sub-account depreciation rates provides the opportunity to look at separate types of property individually and then subsequently composite those rates together into a total account depreciation rate. It is not necessary that the Company accrue depreciation on the separate categories only that the depreciation professional consider the possible/probable differences between the facilities when developing depreciation rates. Conversely, relative to Mr. King's reference to Account 387, that property group was not disaggregated in performing the depreciation study. The Company maintains investment information in this manner on its books and records, therefore a depreciation rate was developed for each property category.

1 Q. ON PAGE 18 LINES 13 TO 19 OF HIS TESTIMONY MR KING
2 DISCUSSES THE DATA THAT HE RECEIVED RELATIVE TO ACCOUNT
3 391 AS WELL AS HIS ANALYSIS AND RECOMMENDATIONS FOR THIS
4 PROPERTY CATEGORY. WHAT COMMENTS DO YOU HAVE IN THIS
5 REGARD?

6 A. Mr. King states that he included computers with office furniture into a
7 composite analysis because he did not have the separated data. Mr. King
8 was provided all the detail in electronic form in response to Staff DR1.1. In
9 fact, the combined Account 391 data "was not" provided inasmuch as the
10 Company only maintains the information on an individual sub-account
11 basis. The only way that Mr. King could have obtained the total combined
12 Account data would have been to physically add the sub-account related
13 data together. Counter to Mr. King's rebuttal testimony concerning his
14 statement that "he is not persuaded that the separation results in a more
15 accurate picture", real life facts demonstrate a far different picture. The life
16 of office furniture in no way has any relationship to the life expectancy of
17 computer (PC) equipment. Mr. King's estimated life of 17 years for the
18 overall account which is comprised of nearly 60 percent PC related
19 equipment is totally unrealistic. In fact it is very routine for company's to
20 experience 15 years as an average service life for non-computer related
21 furniture and office equipment. Applying a 17 year life to Account 391.3 -
22 PC Computer related equipment investment is another clear example

1 where Mr. King is proposing to defer recovery to future customers. With the
2 ongoing radical and dramatic changes to PC and related software (which
3 drives much of the equipment replacement) there is a never ending
4 revolving door of PC equipment. The 15 year amortization period for Office
5 Furniture & Equipment and the low 5-R2 service life parameter
6 recommended by the Company's Gas depreciation study report are
7 justified, reasonable, and extremely well supported by extensive experience
8 through the utility industry.

9 For example, of the various Companies reporting within the AGA/EEI
10 depreciation statistics the mean average service life relative to Furniture
11 and Equipment for 98 Gas Companies is 14 years while the median service
12 life is 13 years. Similarly for 52 entities with Common Plant the reported
13 mean average service life for Furniture and Equipment is 14 years while the
14 median service life is 11 years, and for 168 electric reporting companies the
15 mean average service life is 14 years while the median service life is 12
16 years. Within the above referenced reporting groups, for the single largest
17 group, 31 of 98 reporting Gas companies, the average service life fell in the
18 range of 2 to 8 years. By comparison, for 26 of 52 Common Plant
19 reporting, the average service life was in the range of 5 to 10 years. Lastly,
20 for 62 of 168 reporting electric companies, the average service life was in
21 the range of 5 to 10 years. This information recognizes that the useful life
22 of Furniture and Equipment is being significantly influenced by a short life

1 for Computer Equipment. Given that the AGA statistics report does not
2 specifically separate depreciation lives between office furniture and
3 equipment and PC Computer equipment, specific listings of the average
4 service lives for PC's is not available from this source. Nevertheless there
5 is extensive anecdotal evidence concerning the rapid changes and limited
6 life of PC Equipment, however, the actual empirical evidence is somewhat
7 more limited.

8 With regard to specific empirical evidence related to the average service of
9 Computer Equipment, based upon the available actuarial data for the
10 Company's Common Plant investments, a historical life analysis produced
11 an average service life indication of 6 years for PC Equipment. Likewise,
12 similar studies performed on Computer Equipment for several other entities
13 including California-American Water, Illinois-American Water, and Northern
14 Indiana Public Service produced life indications for Computer PC and
15 Peripheral Equipment in the range of 5-8 years as shown on the
16 accompanying data and curve plots (Exhibit No.-___ (EMR-3)). A curve
17 plot for Montana-Dakota is also included in the exhibit. This information
18 demonstrates that historically, the life being achieved for this asset
19 class(PC's & Peripheral Equipment), is substantially shorter than that
20 indicated by Mr. King. Furthermore, it is highly likely that sizable portions of
21 the PC equipment remaining on the various Company's books and records
22 is subject to increasing levels of obsolescence and is awaiting replacement

1 in the near term.

2

3 Q. ON PAGE 18 AND 19 OF HIS TESTIMONY MR. KING DISCUSSES
4 VARIOUS LIVES RELATIVE TO AMORTIZATION PERIODS WHICH THE
5 COMPANY HAS REQUESTED FOR SELECTED GENERAL PLANT
6 ACCOUNTS. WHAT COMMENTS DO YOU HAVE IN THIS REGARD?

7 A. Mr. King states that he has performed life analysis on various of these
8 accounts and/or retained the current life for others, namely 393,
9 394.1,394.2 394.3, 394.5, 397, and 397. The real issue is simply that the
10 items in these accounts tend to be numerous and minor in nature which
11 makes detailed record keeping administratively burdensome. Accordingly,
12 this is the specific reason for the Company requesting to amortize these
13 limited asset investments over a pre determined useful life. The proposed
14 useful life was the product of the available historical data from Company as
15 well as industry data along with input from Company management
16 concerning the likely useful life of such property classes. To base the
17 estimated amortization periods simply on the existing depreciation period
18 and/or the life indication generated from questionable historical data alone
19 is totally inappropriate. Accordingly, the amortization periods set forth on
20 Table 2 (and as contained in the following list) of the Company's Gas
21 depreciation report (Exhibit No.- ___(EMR-1)) are the appropriate lives to
22 use.

	<u>Acct. No.</u>	<u>Account Description</u>	<u>Amortiz. Period (Yrs)</u>
1			
2	391.10	Office Furniture & Equipment	15
3	393	Stores Equipment	35
4	394.10	Tools, Shop & Garage Eq. (Non-Unit)	18
5	394.20	Tools, Shop & Garage Eq. (Unitized)	18
6	394.30	Vehicle Maintenance Equipment	20
7	394.40	Vehicle Refueling Equipment	15
8	395	Laboratory Equipment	20
9	397.10	Radio Comm. Equip (Fixed)	15
10	397.20	Radio Comm. Equip (Mobile)	15
11	397.30	General Tel. Comm. Equip.	10
12	397.50	Supervisory & Telemetering Equip.	10
13	397.60	SCADA Equipment	8
14	397.80	Network Equipment	5
15	398	Miscellaneous Equipment	20

16

17

- 18 **Q** WHAT COMMENT DO YOU HAVE REGARDING MR. KING'S
19 ESTIMATED AMORTIZATION PERIOD'S FOR COMMON PLANT
20 ACCOUNTS AS DISCUSSED ON PAGE 19, LINES 29-31 AND PAGE 20
21 LINES 1-12 AND AS INCLUDED IN HIS EXHIBIT CWK-1 SCHEDULE 4?
22 **A.** As with his recommendation concerning the amortization of the Company

1 Gas Plant General Accounts the real issue for Common Plant is also simply
 2 that the items in these accounts tend to be numerous and minor in nature
 3 which makes detailed record keeping administratively burdensome.
 4 Accordingly, this is the specific reason for the Company requesting to
 5 amortize this limited asset investments over a pre determined useful life.
 6 The proposed useful life was the product of the available historical data
 7 from Company as well as industry data along with input from Company
 8 management concerning the likely useful life of such property classes. To
 9 base the estimated amortization periods simply on the existing depreciation
 10 period and/or the life indication generated from questionable historical data
 11 alone is total inappropriate. Accordingly, the amortization periods set forth
 12 on Table 2 (and as contained in the following list) of the Company's
 13 Common Plant depreciation report (Exhibit No.-___(EMR-2)) are the
 14 appropriate lives to use.

15	<u>Acct. No.</u>	<u>Account Description</u>	<u>Amortiz. Period (Yrs)</u>
16	391.10	Office Furniture & Equipment	15
17	393	Stores Equipment	30
18	394.10	Tools, Shop & Garage Eq. (Non-Unit)	18
19	394.30	Vehicle Maintenance Equipment	18
20	394.40	Vehicle Refueling Equipment	15
21	397.10	Radio Comm. Equip (Fixed)	15
22	397.20	Radio Comm. Equip (Mobile)	15

1	397.30	General Tel. Comm. Equip.	10
2	397.50	Supervisory & Telemetering Equip.	15
3	397.80	Network Equipment	5
4	398	Miscellaneous Equipment	20

5

6 **Q.** DO YOU HAVE A COMMENT CONCERNING MR. KING'S ESTIMATED
7 AVERAGE SERVICE LIFE FOR THE COMPANY'S COMMON PLANT PC
8 EQUIPMENT?

9 **A.** Mr. King is recommending a 15 year average service life relative to the
10 Company's Common Plant Account 391.3 PC Computer Equipment. Similar to
11 Mr. King's position for Gas-General Plant, to even consider applying a 15 year
12 life to PC Computer related equipment investment is totally beyond belief.
13 With the ongoing radical and dramatic changes to PC and related software
14 (which drives much of the equipment replacement) there is a never ending
15 revolving door of PC equipment. The Iowa 5-R3 service life parameter
16 recommended by the Company's Common Plant depreciation study report is
17 justified, reasonable, and extremely well supported by extensive experience
18 through the utility industry as I previously discussed for gas general plant. I
19 would again refer you to Exhibit No.- ___(EMR-3).

20

21 **Q.** LIKewise, MR. KING IS RECOMMENDING THE USE OF AN IOWA 13-L1
22 LIFE AND CURVE FOR THE COMPANY'S COMMON PLANT ACCOUNT
23 392.2 -CARS AND TRUCKS INVESTMENT. WHAT COMMENT DO YOU

1 HAVE CONCERNING THIS RECOMMENDATION?

2 A. Suggesting that, on average, the Company's Cars and Trucks would ever last
3 13 years is just not realistic. Such a recommendation is just simply wrong.
4 Secondly, Cars and Trucks are routinely placed into service and continue to be
5 utilized for a typical life period. While there may be some limited
6 circumstances where vehicles are involved in accidents, etc and taken out of
7 service early in their service period that is far from the norm. Mr. King's
8 estimate of an L1 curve along with a 13 year average service life suggests not
9 only do the Company vehicles last, on average, an extremely long period of
10 years, but also that relatively sizeable portions of the property is taken out of
11 service over the entire service period from zero age to maximum life. This
12 recommended service life parameter is simply illogical. Mr. King's
13 recommendation is even more irrational due to the fact that the Company has
14 been purchasing increased amounts of (previously owned) "Program Vehicles."
15 These vehicles, while new to the Company, already have been used for a
16 period of time. Conversely, the Iowa 7-R3 Life and Curve recommended via
17 the Company's Common Plant depreciation study for the Company's Account
18 392.2 – Cars and Trucks is supported, rational, and reasonable.

19
20 Q. ON PAGE 21 OF HIS TESTIMONY MR. KING SUMMARIZES AND
21 HIGHLIGHTS THE NEGATIVE SALVAGE FACTORS INCLUDED IN THE
22 COMPANY'S DEPRECIATION STUDIES. WERE THERE POSITIVE NET
23 SALVAGE FACTORS ESTIMATED FOR VARIOUS OTHER ACCOUNTS?

1 A. Yes, while Mr. King focuses only on the negative net salvage factors there
2 were, likewise, positive net salvage estimated for various accounts. The
3 net salvage summaries, and analysis included within the Company's
4 depreciation studies were handled consistently for all the property groups
5 studied.

6

7 Q. WITH REGARD TO THE CURRENT WORK EFFORT AND RELATED
8 COSTS ATTRIBUTABLE TO THE COST INCURRED IN RETRING PLANT,
9 IS IT ANTICIPATED THAT IN FUTURE YEARS, THE REQUIREMENT
10 UPON THE COMPANY WILL BECOME MORE OR LESS STRINGENT?

11 A. As with all operations and related regulations, it can only be anticipated that
12 with the passage of time such government regulations and other
13 requirements upon the Company will be more stringent thereby increasing
14 effort and resulting cost incurred in conjunction with retirements. That is, not
15 only will future costs likely increase as a result of future labor cost
16 increases, etc but the level of requirements and related costs are also
17 anticipated to increase.

18 Q. ON PAGES 21-23 OF HIS TESTIMONY MR. KING DISCUSSES THE
19 APPROACH THAT WAS USED TO ANALYZE NET SALVAGE WITHIN
20 THE COMPANY'S DEPRECIATION STUDY. IS HIS DISCUSSION
21 CORRECT?

22 A. Mr. King's initial discussion about how the calculations were prepared are

1 essentially correct, however, once he begins his discussion of how the data
2 analysis results were interpreted and incorporated into the recommended
3 depreciation rates, he is incorrect.

4 First, as previously noted in this testimony during discussions related to
5 average service life analysis, **“ the net salvage data base was used as a
6 basis to identify historical experience and trends and to determine
7 each property group’s recommended net salvage factors. This
8 process is used as a benchmark, together with professional analysis
9 and consideration, to estimate future lives and salvage factors over
10 which to recover the Company’s depreciated fixed capital
11 investments. It is not a process of simple arithmetic calculations and
12 accepting whatever is generated from the “Computer Analysis” to
13 estimate the future parameters, but one of clear and deliberate
14 consideration of all factors impacting the Company’s property.”**

15 For example on Page 23 Lines 1 to 7 and later on Page 24, Mr. King
16 discusses at some length the fact that the linear trend analysis produces
17 negative gross salvage percent. He expounds in great volumes about the
18 absurdity of the calculation of negative gross salvage percents. I agree
19 wholeheartedly that there is absolutely no justification for incorporating the
20 **negative “gross salvage percents”** into the recommended annual
21 depreciation rates. In fact, no such data was incorporated in the annual
22 depreciation rates recommended per the Company’s depreciation studies.

1 However, as previously indicated in the discussion above, the same
2 consistent calculations were utilized for all of the accounts studies. The
3 bottom line is that the linear analysis of the gross salvage trend shows that
4 there is a likelihood that such accounts that trend to “negative gross
5 salvage percents” will experience little or no gross salvage irrespective of
6 the fact that on an overall historical basis those accounts demonstrated (in
7 some circumstances) relatively significant levels of positive salvage.
8 Again the information is calculated consistently for all accounts, and is
9 available for professional analysis and interpretation.

10
11 **Q.** ON PAGE 23, LINES 28-31 AND PAGE 25 LINES 1-13 OF HIS
12 TESTIMONY MR. KING LAMENTS THE INCORPORATION OF THE
13 COST OF REMOVAL ADJUSTMENTS INTO THE COMPANY’S FUTURE
14 COST OF REMOVAL ESTIMATES. WHAT IS YOUR RESPONSE?

15 **A.** First, just because Mr. King has not seen such a presentation does not
16 make the process invalid. In fact the very textbook that Mr. King references
17 in his testimony, “The NARUC Public Utility Depreciation Practices”,
18 references age sensitivity in salvage and cost of removal in its discussion
19 on net salvage on pages 158-161. Furthermore on page 288 of that same
20 textbook, listed as a bibliography is an AGA/EEI paper by a well recognized
21 expert Mr. John Ferguson on the subject of “Influence of Aged Net Salvage
22 on Depreciation Rates.” Furthermore there is a 1989 AGA/EEI treatise

1 entitled "An Introduction to Net Salvage of Public Utility Plant" which
2 discusses the subject of age sensitivity of gross salvage and cost of
3 removal.

4
5 **Q.** DOES THE INCLUSION OF THE ADJUSTMENT TO THE COST OF
6 REMOVAL PERCENT RESULT IN DOUBLE COUNTING INFLATION AS
7 SUGGESTED BY MR. KING ON PAGE 25, LINES 1 TO 17?

8 **A.** Absolutely not. The whole process is quite easy to understand.

9 First, one must remember that for each property group an average service
10 life has been estimated. That average service life of say 30 years indicates
11 that the entire current investment within the property account, on average,
12 will be retired at that age to attain an average service life of 30 years.

13 Secondly, historical retirements have occurred to date. Those retirements
14 have been analyzed to both identify the average retirement age to date (lets
15 assume 10 years) at which the retirements have occurred, and in addition
16 what percent of the original costs of retirements was experienced by the
17 Company for Cost of Removal. That is, relative to the cost of removal
18 percent if the Company had historically booked retirements with an original
19 cost of \$1,000 and it incurred \$500 of cost of removal to retire the asset it is
20 said that the cost of removal percent is 50% ($\$500/\$1,000$) (that also being
21 50% negative net salvage, if there was no corresponding gross salvage in
22 conjunction with the retirement). Lets also estimate that the overall long run

1 inflation rate is 2.75%.

2 Next, now that it is known that the retirements that generated the 50% cost
3 of removal occurred at 10 Years, the average service life of the property
4 within the asset group is 30 years, and that the long run inflation rate is
5 2.75%, one can readily estimate the anticipated future cost of removal
6 percent at the end of the property's average life. That is, it can be readily
7 extrapolated that the average retirement age will need to increase, on
8 average, another 20 years (30 Yrs ASL-10 years average retirement age)
9 before the property is retired, on average, at an age of 30 years.

10 In simple, non-compounded terms a 2.75% cost increase per year for 20
11 additional years is 55%. For this example, the original 50% cost of removal
12 plus the additional 55% totals to 105% cost of removal.

13 As one can easily see, counter to Mr. King's testimony, there is no double
14 counting of inflation. The initially experienced 50% cost of removal is
15 attributable to the actual cost of removal incurred through the 10 year
16 average age, while the additional 55% cost of removal is attributable to the
17 increased cost of removal during the subsequent additional 20 year period
18 (required for the property to be retired, on average, at average service life).

19
20 **Q.** ON PAGE 26 OF HIS TESTIMONY, MR. KING STATES THAT
21 EMPIRICALLY, THERE IS NOT A SHRED OF EVIDENCE THAT OVER
22 TIME POSITIVE GROSS SALVAGE RATIOS DECLINE AND NEGATIVE

1 REMOVAL COST RATIOS INCREASE. WHAT IS YOUR REACTION TO
2 THIS STATEMENT?

3 A. There is an unlimited number of examples where the age sensitivity of
4 gross salvage and cost of removal can be illustrated. In its simplest form I
5 doubt that anyone would be willing to pay me as much for a similar model of
6 a 5 year old used computer as a 2 month old used computer. Similarly if I
7 had a 6 year old used van, I wonder if anyone would pay me equally as
8 much for that vehicle as for a 2 month old van of the same type.

9 The same concept can be identified for cost of removal. As time passes all
10 employees seek and desire to have a higher salary, plus other costs also
11 increase. Hence as time passes the level of cost to complete a similar task
12 will increase. Working from the assumption that we are discussing
13 removing the same item that has the same original cost at different points in
14 time (at age 5 as opposed to age 1) the percent level of cost of removal
15 clearly will increase.

16
17 In his discussion on page 26 lines 8 to 13, Mr. King argues that the cost of
18 removal percent, as shown on his Exhibit CWK-6, supports his statement
19 that the cost of removal does not increase with age. Mr. King does not
20 understand. The reason that age sensitivity is not discernable within the
21 summary salvage data provided in Section 8 of the Company's Gas &
22 Common Plant depreciation studies is the fact that the retirements that

1 generated the net salvage is a mixture of various vintages of property.
2 Furthermore, the average age of retirements, in aggregate, that have been
3 occurring over time have not changed that significantly. If one were to
4 disaggregate such activity into separate vintage data it is clearly obvious
5 that both gross salvage and cost of removal would reflect levels of age
6 sensitivity.

7 Furthermore, counter to Mr. King's discussion at the bottom of Page 26,
8 Lines 24 to 31 where he argues that Company annual retirements, on
9 average and in aggregate, will not trend towards average life, this is simply
10 a non issue. It is not about whether in any one year, on average and in
11 aggregate, the retirements reach average service life. The bottom line is
12 that those individual retirements will have to occur at old ages if the average
13 service life is to occur. If, for example, Mr. King is arguing that the average
14 age of retirements will, in total, occur at younger ages, then the estimated
15 average service life for each of the property groups is far too long.

16
17 **Q.** AT THE BOTTOM OF PAGE 27 OF HIS TESTIMONY MR KING
18 SUMMARIZES WHAT HE INDICATES ARE HIS ESTIMATED NEGATIVE
19 NET SALVAGE RATES BASED UPON HIS ANALYSIS AND WHAT HE
20 REFERS TO AS THE "CONVENTIONAL PROCEDURE". WHAT ARE
21 YOUR COMMENTS?

22 **A.** In developing his negative net salvage on what he calls a conventional

1 procedure for 3 of the 4 accounts listed he simply bases his estimate on the
2 average of 33 years historical experience irrespective of the fact that many
3 of the earlier years experience significantly lower levels of negative net
4 salvage while more recent years experience higher levels of negative net
5 salvage.

6 One must recognize that with regard to estimating future net salvage for the
7 average remaining life depreciation rate, it is not about what has occurred in
8 the past, but what will occur in future years. That is, the development of the
9 average remaining life depreciation rate is based upon recovering the un-
10 recovered original cost adjusted for the estimated future positive or negative
11 net salvage over the average remaining life.

12
13 **Q.** ON PAGES 28 AND 29 OF HIS TESTIMONY, MR. KING ESSENTIALLY
14 DISCUSSES ANALYZING COST OF REMOVAL ON A CONSTANT
15 DOLLAR BASIS, THAT IS, ELIMINATING ANY INCREASES IN COST
16 OVER TIME CAUSED BY INFLATIONARY PRESSURES. IS HIS
17 CALCULATION CONCEPT RATIONAL, AND/OR IN ANY WAY
18 ACCEPTED OR SUPPORTED BY DEPRCIATION PROFESSIONALS,
19 ACADEMIA, OR REGULATORS?

20 **A.** Absolutely not. We do not live in a constant dollar world and it is extremely
21 unlikely that we ever will. It will essentially always cost more to remove
22 facilities from service 30 or 40 years hence than it would today because,

1 among other reasons, labor rates increase inasmuch as all employees seek
2 to obtain a higher level of pay with the passage of time. Also, by the very
3 nature of the property, retirement cost (cost of removal) must occur at the
4 end of life. Therefore the cost of removal, which is an end of life cost, must
5 be added to the initial installed cost to define the true total life cost of
6 property which must be recovered ratably over the life of the asset from the
7 customers receiving service from the property's use. The combination of
8 the initial cost and end of life cost is no different than having constructed an
9 initial facility (say a structure) during 1950; then adding to that structure
10 during 1960, 1970, and 1980 and finally retiring the facility in 1990. The
11 sum of all those costs along with any cost of removal must be recovered
12 ratably over the life of the property.

13 The method utilized in the development of the Company current estimates
14 of negative net salvage and resulting depreciation rates is consistent with
15 standard practices and procedures within the depreciation profession, their
16 development is consistent with basic accounting matching principles and
17 follow the long time and well founded practices of ratemaking principles.
18 Conversely, Mr. King is advancing a new theory of cost recovery that clearly
19 results in inappropriate deferral of cost recovery.

1 Q. ON PAGE 30, LINES 11 TO 21, MR. KING ASSERTS THAT IT IS
2 CHEAPER TO THE CUSTOMERS TO DEFER THE RECOVERY OF THE
3 RETIREMENT COST. IS HE CORRECT?

4 A. No. Anytime recovery of plant related costs are deferred, the net embedded
5 costs remain at a higher level than otherwise would be the case.
6 Accordingly, as a result of such a practice, additional carrying costs to
7 finance the investments as well as return is required while those costs are
8 retained on the Company's books and records for longer periods of time.
9 The bottom line is that the deferral of cost recovery costs the ratepayer
10 additional amounts in customer rates.
11

12 Q. ON THE BOTTOM OF PAGE 30 TO 33 OF HIS TESTIMONY, MR. KING
13 DISCUSSES THE USE OF THE SFAS 143 APPROACH TO RECOVER
14 RETIREMENT COSTS (COST OF REMOVAL). DO YOU HAVE A
15 RESPONSE TO THIS PROPOSAL?

16 A. Mr. King goes on for several pages to espouse the supposed virtues of the
17 SFAS 143 procedure (which is generally equivalent to a sinking fund
18 approach). There are numerous fallacies with Mr. King's proposed
19 adoption of the SFAS procedure. First, in developing the applicable
20 recovery of the retirement cost one is not seeking to define the current
21 value of the future expenditure, but instead the task is to define the
22 allocable portion of that cost of removal that should be charged to the
23 current rate payer.

1 Secondly, if one were to use the SFAS procedure, the methodology
2 produces an added level of complexity into the calculation. Under such a
3 scenario not only does the amount of end of life costs need to be estimated
4 but also the applicable discount rate must be determined.

5 Next, given changing financial conditions, it is extreme likely that the
6 discount rate would vary widely during the property's life adding significantly
7 to the level of recovery variation throughout the life of the property.

8 Furthermore, there is an added fallacy with using a discounting approach
9 for capital recovery. For example, the SFAS procedure states that the
10 calculation should be prepared with the Company's risk free rate. This type
11 of calculation has little or nothing to do with the possible discount rate
12 attributable to the many diverse customers that the Company serves. Also,
13 it seems rather odd that a higher risk company (or an individual, if an
14 individual discount rate were utilized) with a higher return rate would
15 allocate less to recover future retirement costs than a lower risk Company.

16 There is simply no valid basis for giving Mr. King's proposed SFAS
17 approach any consideration for capital recovery purposes.

18
19 **Q.** ON PAGE 34, LINES 13 TO 31 AND PAGE 35, LINES 1 TO 12 OF HIS
20 TESTIMONY, MR. KING DISCUSSES ADDING THE COST OF REMOVAL
21 TO THE NEW CONSTRUCTION COST OF THE REPLACEMENT PLANT.
22 HE ALSO DISCUSSES CURRENT EXPENSING OF COST OF REMOVAL

1 FOR PLANT NOT REPLACED. DO EITHER OF THESE TWO
2 PROPOSALS HAVE ANY MERIT?

3 A. Absolutely not. First, the proposal to charge the cost of removal to the cost
4 of the new construction has no rational basis, is counter to any and all
5 accounting matching principles, and is not in compliance with the Uniform
6 System of Accounts. As can be seen in my Exhibit No.- ___(EMR-4), which
7 is a page from the FERC Gas Uniform System of Accounts, it states
8 equivocally on Page 529 that "cost of removal" shall be charged to the
9 depreciation (reserve) account.

10 Mr. King's proposal to add the retirement cost (cost of removal) attributable
11 to the current plant in service to the next generation of replacement plant
12 fails any test of reasonableness. The retirement cost (cost of removal)
13 relative to the current plant in service has absolutely no connection or
14 nothing to do with the next generation of plant in service. In this regard, Mr.
15 King's proposal fails the most basic of accounting tests (the matching
16 principle). He is proposing to add the cost from one generation of asset and
17 push its recovery off onto the customers who use the next generation's
18 assets. This is simply an effort to defer cost recovery. The cost recovery
19 system (depreciation) should capture, and appropriately and fairly apportion
20 the total capital cost ratably over the useful life of the asset to the
21 customers benefiting from the service provided by those assets.

1 Likewise, the proposal to currently expense cost of removal at the end of
2 life for assets not replaced is simply another attempt to defer the
3 appropriate recovery of the estimated cost of removal rather than recover
4 the cost on a time basis from the appropriate customers who benefit from
5 the use of the property.

6
7 **Q.** WHAT STATEMENT DO YOU HAVE REGARDING MR. KING'S POSITION
8 ON PAGE 35, LINES 17 to 31 OF HIS TESTIMONY IN WHICH HE STATES
9 THE EXISTENCE OF CURRENT FERC RULES SUPPORTING HIS
10 PROPOSAL TO INCLUDE RETIREMENT COSTS (COST OF REMOVAL)
11 WITH THE NEW REPLACEMENT PLANT?

12 **A.** Mr. King's testimony in this regard is in error. Within his testimony, Mr. King
13 states that FERC has instituted an accounting change to incorporate retirement
14 cost (cost of removal) into the cost of the new replacement facilities.
15 Furthermore, in his testimony he quotes a definition from the FERC Uniform
16 System of Accounts (USOA), Paragraph 32 of the GAS USOA: **"Replacing or**
17 **replacement, when not otherwise indicated in the context, means the**
18 **construction or installation of gas plant in place of property retired,**
19 **together with the removal of the property retired."**

20 **Exhibit No. - ___(EMR-4)** is all the selected pages that could be found
21 within the USOA that make any reference to the terms "Replacing or
22 Replacement". I have highlighted the area in each of the included USOA
23 pages where the applicable reference occurs. It is rather obvious from

1 even a quick review of the applicable pages that Mr. King's assertion and
2 interpretation is incorrect.

3 Mr. King goes on to infer, and actually states **"if the definition of**
4 **replacement provided above applies, the addition of a replacement**
5 **unit should include the cost of removing the property retired."** Mr.
6 King's statement is totally incorrect. A search of the USOA to view the
7 context in which the words 'Replacing" and "Replacement" are used in the
8 USOA clearly reveals that in no way does FERC state that "retirement cost
9 (cost of removal)" should be charged to the costs of the new plant that is
10 replacing the retired plant. In fact "Paragraph 10 of Page 529 of the USOA
11 specifically states "When a retirement unit is retired from gas plant, with or
12 without replacement, the book cost thereof shall be credited to the gas plant
13 account in which it is included.....If the retirement unit is of a
14 depreciable class, the book cost of the unit retired and credited to gas plant
15 shall be charged to the accumulated provision for depreciation applicable to
16 such property. **"The cost of removal and the salvage shall be charged**
17 **or credited, as appropriate, to such depreciation account."**
18 It could not be spelled out any clearer; the cost of removal is to be charged
19 to the depreciation reserve, not to the replacement property's original cost
20 as indicated by Mr. King.

21 **Q.** DO YOU HAVE ADDITIONAL COMMENTS REGARDIGN MR. KING'S
22 POSITION AND STATEMENT CONCERNING FERC'S ALLEGED

1 SUPPORT OF HIS PROPOSAL TO CHARGE PLANT RETIREMENT
2 COSTS (COST OF REMOVAL) TO THE COST OF THE NEW
3 REPLACEMENT PLANT?

4 A. Yes. In the recently released FERC Final Rule in Docket No. RM02-7-000,
5 Order No. 61 (Issued April 9, 2003) concerning changes enacted to the
6 FERC (Gas) Uniform System of Accounts, FERC specifically indicated in
7 Paragraph 36 that removal cost that are not asset retirement obligations are
8 included as a component of depreciation expense and recorded in
9 accumulated depreciation. Furthermore FERC noted in Paragraph 36 that
10 one (1) commenter, the National Association of State Utility Consumer
11 Advocates (NASUCA) recommended that "the Commission exclude costs
12 of removal that does not qualify as a legal retirement obligation from the
13 depreciation accrual and instead capitalize any removal cost related to the
14 asset replaced as part of the costs replacing the utility plant and if no plant
15 replacement occurs, the cost of removal for non-legal retirement obligations
16 should be expensed in the income statement."

17 FERC rejected that request in saying that the Commission did not propose
18 any changes to its existing accounting requirements for cost of removal for
19 non-legal retirement obligations. FERC went on to say that "the purpose of
20 this rule is to establish uniform accounting requirements for the **recognition**
21 **of liabilities for legal obligations** associated with the retirement of long
22 lived assets."

23 This FERC rule is simply a mechanism for defining the liabilities associated
24 with future legal retirement obligations and in no way supports Mr. King's

1 proposal. In fact, as noted above, a mirror image of his proposal was
2 specifically rejected.
3

4 **Q.** WHAT STATEMENT DO YOU HAVE REGARDING MR. KING'S
5 POSITION (PAGE 36) THAT THE COMMISSION SHOULD CHANGE ITS
6 PRACTICE TO ADOPT HIS RECOMMENDATION?

7 **A.** Mr. King's SFAS 143 (cost of removal recovery) proposal is unsupported by
8 basic accounting and ratemaking concepts and procedures. Furthermore,
9 Mr. King's proposal to charge removal cost to new construction is in direct
10 conflict with and is specifically inconsistent with the Uniform System of
11 Accounts as just previously discussed.

12

13 **Q.** DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY?

14 **A.** Yes, it does.