

BEFORE THE
NEW YORK STATE
PUBLIC SERVICE COMMISSION

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Proceeding on Motion of the Commission as to the
Rates, Charges, Rules and Regulations of
Rochester Gas and Electric Corporation
for Electric Service

Case 09-E-_____

Proceeding on Motion of the Commission as to the
Rates, Charges, Rules and Regulations of
Rochester Gas and Electric Corporation
for Gas Service

Case 09-G-_____

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**DIRECT TESTIMONY OF
EARL M. ROBINSON**

September 17, 2009

EARL M. ROBINSON

1 Q. Please state your name, occupation and business address.

2 A. My name is Earl M. Robinson. I am a Principal and Director of AUS Consultants
3 ("AUS"). AUS is a public utility consulting firm specializing in preparing various
4 financial studies including depreciation, valuation, cost of service and other
5 analysis for the utility industry and regulatory agencies. AUS provides a wide
6 spectrum of consulting services through its various affiliated groups which
7 include Utility Services, Valuation Services, ICR Survey Research, and
8 Marketing Systems. My office is located at 792 Old Highway 66, Suite 200,
9 Tijeras, New Mexico 87059.

10 Q. Have you prepared an appendix that contains your qualifications and experience?

11 A. Yes. Appendix A to my direct testimony contains a summary of my
12 qualifications and experience.

13 Q. What is the purpose of your testimony?

14 A. The purpose of my testimony is to set forth the results of my review and analysis
15 of the electric and gas business plant-in-service of Rochester Gas and Electric
16 Corporation-Electric ("RG&E-Electric" or the "Electric Company") and
17 Rochester Gas and Electric Corporation-Gas & Common ("RG&E-Gas &
18 Common" or the "Gas Company" and together with RG&E-Electric, "RG&E" or
19 the "Company"), which I conducted in the process of preparing a depreciation
20 study of the Company's plant-in-service assets as of December 31, 2008. RG&E
21 Exhibit __ (RGEDEP-1) and Exhibit __ (RGEDEP-2).

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1 Q. Please summarize briefly the conclusions of your depreciation study.

2 A. Applying the proposed account level depreciation rates to RG&E's December 31,
3 2008 electric plant-in-service produces a composite annual depreciation rate of
4 2.46 percent as compared with the present composite depreciation rate of 2.28
5 percent, while applying the proposed account level depreciation rates to RG&E's
6 December 31, 2008 gas plant-in-service produces a composite annual depreciation
7 rate of 2.97 percent as compared with the present composite depreciation rate of
8 2.38 percent. Applying the proposed account level depreciation rates to RG&E's
9 December 31, 2008 common plant-in-service produces a composite annual
10 depreciation rate of 7.18 percent as compared with the present composite
11 depreciation rate of 6.86 percent.

12 Q. Please describe the process by which you conducted your depreciation study.

13 A. I investigated and analyzed the Company's historical plant data together with an
14 interpretation of RG&E's past experience and future expectations relative to each
15 of the property classes to determine the remaining lives of the Company's
16 property. The study utilized the resulting remaining lives, the results of my net
17 salvage analysis, RG&E's vintaged plant-in-service investment and depreciation
18 reserve in order to develop recommended average remaining life depreciation
19 rates and depreciation expense related to the Company's electric hydro production
20 plant-in-service. The depreciation rates for all other property groups were
21 developed using the whole-life technique, in accordance with the Commission's
22 directive.

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1 Q. How is depreciation defined?

2 A. Depreciation is defined in the 1996 National Association of Regulatory Utility
3 Commissioners "Public Utility Depreciation Practices" publication as follows:
4 "Depreciation, as applied to depreciable utility plant, means the loss in service
5 value not restored by current maintenance, incurred in connection with the
6 consumption or prospective retirement of utility plant in the course of service
7 from causes which are known to be in current operation and against which the
8 utility is not protected by insurance. Among the causes to be given consideration
9 are wear and tear, decay, action of the elements, inadequacy, obsolescence,
10 changes in the art, changes in demand, and requirements of public authorities."

11 Q. Why is depreciation important to the revenue requirements of a utility company?

12 A. Depreciation is important because, as the above definition indicates, depreciation
13 expense enables the Company to recover the capital costs related to its plant-in-
14 service that benefit the company's customers in a timely manner. The use of an
15 appropriate level of depreciation recovery in revenue requirements allows
16 recovery of a Company's investments in depreciable assets over a life that
17 provides for full recovery of those investments, less net salvage, and thus,
18 appropriately reflecting the cost to the Company's customers of the plant used to
19 serve those customers. Without appropriate recovery of depreciation costs, the
20 Company will not be able to meet its financial obligations related to continued
21 provision of safe and reliable service to its customers.

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1 Q. What is your professional opinion with regarding the results of the depreciation
2 study you performed?

3 A. The proposed electric and gas depreciation rates resulting from the completed
4 comprehensive depreciation studies are reasonable and appropriate, given that
5 they incorporate the service life and net salvage parameters currently anticipated
6 for each of the Company's property group investments over their average service
7 lives.

8 Q. What steps were involved in preparing the service life and salvage database that
9 you utilized?

10 A. My comprehensive depreciation analysis included a detailed analysis of RG&E's
11 fixed capital books and records through December 31, 2008. We entered the
12 Company's historical investment cost records for each account into a depreciation
13 database, upon which we performed a detailed service life and salvage analysis
14 using standard depreciation procedures.

15 Q. What is the purpose of the historical database?

16 A. The historical service life and net salvage database is a basic study tool assembled
17 to prepare a depreciation study. I use the historical database to make assessments
18 and judgments concerning the service life and salvage factors that have actually
19 been achieved to date. I then apply this of the historical data, along with
20 information about current and prospective factors to determine the appropriate
21 future lives over which to recover the Company's depreciable fixed capital
22 investments.

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1 According to this standard depreciation analysis process, we used the Company's
2 depreciation database compiled through December 31, 2008, which contains
3 detailed vintage level information, to develop observed life tables. I developed
4 the observed life tables from the historical information by grouping like-aged
5 investments within each property category and identifying the level of retirements
6 that occurred through each successive age. The resulting observed lives were
7 then fitted to standard Iowa Curves to estimate each property group's historically
8 achieved average service life. I will discuss the nature and purpose of Iowa
9 curves later in my testimony.

10 Likewise, I employed the net salvage database as a basis to identify historical
11 experience and trends, and to determine each property group's recommended net
12 salvage factors. This result was accomplished by preparing various three-year
13 rolling band analyses of salvage components, as well as a forecast based on the
14 Company's historical salvage experience.

15 Q. In preparing this depreciation study, did you utilize information from additional
16 sources to estimate service life and salvage parameters?

17 A. Yes. In addition to the historical data from the Company's books and records, I
18 obtained information from Company personnel with respect to current operations,
19 along with future expectations for each of the property groups. In the course of
20 completing the depreciation study, I also incorporated professional knowledge
21 obtained from my more than thirty-five (35) years of utility industry depreciation
22 experience.

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1 Q. Do you have a depreciation study report that summarizes the recommendations
2 resulting from your depreciation service life and salvage analysis?

3 A. Yes. RG&E Exhibit __ (RGEDEP-1), entitled "Rochester Electric and Gas
4 Corporation-Electric Depreciation Study as of December 31, 2008," summarizes
5 the results of my service life and salvage analysis relative to the Company's
6 electric plant-in-service. Exhibit __ (RGEDEP-2), entitled "Rochester Electric
7 and Gas Corporation-Gas & Common Depreciation Study as of December 31,
8 2008," summarizes the results of my service life and salvage analysis relative to
9 the Company's gas and common plant-in-service.

10 Q. Please briefly describe the information included in the depreciation study reports.

11 A. Exhibit __ (RGEDEP-1) is divided into eight sections and Exhibit __ (REGDEP-
12 2) is divided into seven sections. Two key portions of the reports are Sections 2
13 and 4 of each report. In each report, Section 2 includes the summary schedules
14 listing the present and proposed depreciation rates for each depreciable property
15 group, and other depreciation rate development schedules. Section 4 in each
16 report contains a summary of depreciation factors and statistics considered in
17 selecting service life parameters for the Company's property. The various other
18 sections of the reports contain detailed information and/or documentation
19 supporting the schedules contained in Sections 2 and 4. A table of contents lists
20 the complete contents of the report. In addition, Section 1 contains a brief
21 narrative summary of the entire report.

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1 Q. What was the source of the data utilized as a basis for the depreciation rates?

2 A. As previously discussed, I obtained all of the historical data utilized in the course
3 of performing the detailed service life and salvage study from the Company's
4 books and records. Historical vintaged data (additions, retirements, adjustments,
5 and balances) were gathered for each depreciable property group.

6 Q. Are there standard methods utilized to complete a service life analysis of a
7 company's historical property investments?

8 A. Yes. As discussed in Section 3 of the depreciation study report, the two most
9 common methods are the Retirement Rate and the Simulated Plant Record
10 Methods. The method chosen to study a company's historical data depends upon
11 whether aged or un-aged data is available. If specific aged data is available, the
12 Retirement Rate Method is used. If only un-aged data is available, the Simulated
13 Plant Record Method is used.

14 Q. Did you prepare your study utilizing one of those accepted standard methods?

15 A. Yes. RG&E maintains aged plant records. Therefore, I used the Retirement Rate
16 Method in the depreciation study of the Company's property. The process that I
17 followed using the Retirement Rate Method for RG&E is discussed later in my
18 testimony.

19 Q. Please describe the relationship of depreciation methods, procedures, and
20 techniques in the context of a depreciation study.

21 A. Every depreciation study must be based on a method, a procedure, and a
22 technique. Inherent in all depreciation calculations is an overall method, such as

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1 the Straight Line Method (which is the most widely used approach within the
2 utility industry) to depreciate property.

3 In addition, there are several procedures that can be used to arrange or group
4 property by sub-groups of vintages to develop applicable service lives. These
5 procedures include the Broad Group, the Equal Life Group and other procedures.

6 Regulatory commissions throughout the utility industry mostly use the Broad
7 Group Procedure as a basis for depreciation rates. Under the Broad Group
8 Procedure, the useful life and resulting depreciation rate are based upon the
9 overall average of the group.

10 Finally, the depreciable investment needs to be recovered over a defined period of
11 time (through use of a technique), such as the Whole Life or Average Remaining
12 Life of the property group. The distinction between the Whole Life and Average
13 Remaining Life Techniques is that under the Whole Life Technique, the
14 depreciation rate is based on the recovery of the investment and average net
15 salvage over the average service life of the property group. In comparison, under
16 the Average Remaining Life Technique, the resulting annual depreciation rate
17 incorporates the recovery of the investment (and future net salvage) less any
18 recovery experienced to date over the average remaining life of the property
19 group.

20 The depreciation methods, procedures, and techniques can be used
21 interchangeably. For example, one could use the Straight Line Method with the
22 Broad Group Procedure and the Whole Life Technique, or the Straight Line
23 Method with the Equal Life Group Procedure and Whole Life Technique, or other

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1 combinations thereof.

2 Q. Please identify the method, procedure, and technique you utilized to develop the
3 depreciation rates for the Company's property.

4 A. I developed the depreciation rates set forth in my depreciation study report
5 utilizing the Straight Line Method, the Broad Group Procedure, and the Whole
6 Life Technique, (except for RG&E's generating facilities where I used the
7 Average Remaining Life Technique). The depreciation study method, procedure,
8 and technique used in the development of the proposed depreciation rates are the
9 same as those underlying the current depreciation rates.

10 Q. Why did you use the indicated depreciation method, procedure and technique?

11 A. The Straight Line Method is widely understood, recognized, and utilized almost
12 exclusively for depreciating utility property.

13 The Broad Group Procedure recovers the Company's investments over the
14 average period of time in which the property is providing service to the
15 Company's customers. Given that there is dispersion within each property group,
16 there are variations of retirement ages for the many investments within each
17 property group. That is, some properties retire early (before average service life)
18 while others retire at older ages (after average service life), with the weighted
19 average retirement age of the total property group being the attained average
20 service life. I used the Broad Group Procedure because it is consistent with
21 depreciation methods and procedures routinely accepted by the New York State
22 Public Service Commission (the "Commission"), and is the approach underlying
23 the current depreciation rates.

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1 Finally, the amount of annual depreciation must be based upon the productive life
2 over which the un-depreciated capital investment is recovered (the Average
3 Remaining Life Technique or the Whole Life Technique).

4 As I have testified before many state utility commissions, including this
5 Commission, I prefer the Average Remaining Life Technique over the Whole Life
6 Technique, because the Average Remaining Life Technique incorporates all of
7 the current and future cost components in setting the proposed annual
8 depreciation rate, assuring that the Company's property investment is fully
9 recovered over the useful life of the property and that inter-generational inequities
10 are avoided, since current and future customers will pay their fair shares of
11 depreciation expense. In Case No. 05-E-122, however, the Commission directed
12 RG&E's sister utility, New York State Electric & Gas Corporation, to use the
13 Whole Life Technique to develop depreciation rates other than for generating
14 facilities. Accordingly, I use the Whole Life Technique to develop the
15 depreciation rates for the Company's plant-in service, other than its generating
16 facilities, which is based upon the Average Remaining Life Technique.

17 Q. Please explain any other methods that are used in the completion of the
18 depreciation study.

19 A. For the Company's Location type plant accounts I have utilized the Life Span
20 Method (which is also referred to as the Forecast Method). In the Life Span
21 Method, I determined an estimated probable retirement year for each location of
22 the property group. An example of this would be a production account, in which
23 the various segments of the account are "life spanned" to a probable retirement

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1 date. That date is determined after considering a number of factors, such as
2 management plans, industry standards, the original construction date, subsequent
3 additions, resultant average age and the current, as well as overall, expected
4 service life of the property being studied. If the property has experienced interim
5 retirements, they are studied to determine an appropriate interim retirement rate.
6 Otherwise, interim retirement rate parameters are estimated for properties that are
7 anticipated to experience such retirements. We then used the estimated interim
8 retirement rate parameters (Iowa curve and life) along with the vintage investment
9 and probable retirement year of the property to determine the average remaining
10 life as of the study date.

11 Q. Please explain your use of group depreciation procedures.

12 A. Because the number of utility operating property units is very large, utility
13 property is typically grouped into homogeneous categories, as opposed to being
14 depreciated on an individual unit basis. Group depreciation procedures are
15 utilized to depreciate property when more than one item of property is being
16 depreciated. Such an approach is appropriate because all of the items within a
17 specific group typically do not have identical service lives, but have lives that are
18 dispersed over a range of time. Utilizing a group depreciation procedure allows
19 for a uniform application of depreciation rates to groups of similar property in lieu
20 of performing extensive depreciation calculations on an item-by-item basis. For
21 the aforementioned reasons, I have used the Broad Group Procedure.
22 My depreciation calculations, as applied in this study, follow a group depreciation
23 approach. The group approach refers to the method of calculating annual

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1 depreciation based on the summation of the investment in any one plant group
2 rather than calculation of depreciation for each individual unit of plant. In theory,
3 each unit achieves average service life by the time of retirement. Accordingly,
4 the full cost of the investment will have been credited to plant-in-service by the
5 time retirement occurs, and likewise the depreciation reserve will be debited with
6 an equal retirement cost. No gain or loss is recognized at the time of property
7 retirement because of the assumption that the property was retired at the end of its
8 average service life.

9 Q. What factors influence the determination of the recommended annual depreciation
10 rates included in your depreciation study report?

11 A. The depreciation rates reflect four principal factors: (1) the plant-in-service by
12 vintage, (2) the book depreciation reserve, (3) the future net salvage, and (4) the
13 composite remaining life for the property group. Factors considered in arriving at
14 the service life are the average age, realized life and the survival characteristics of
15 the property. The net salvage estimate is influenced by both past experience and
16 future estimates of the cost of removal and gross salvage amounts.

17 Q. What are the net salvage factors included in the determination of depreciation
18 rates?

19 A. Net salvage is the difference between gross salvage, or the proceeds received
20 when an asset is disposed of, and the cost of removing the asset from service. Net
21 salvage is said to be positive if gross salvage exceeds the cost of removal. If the
22 cost of removal exceeds gross salvage, the result is negative salvage. Many
23 retired assets generate little, if any, positive salvage. Conversely, numerous

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1 Company asset groups generate negative net salvage at the end of their lives
2 because of the cost of removal. The cost of removal includes costs such as
3 demolishing, dismantling, tearing down, disconnecting or otherwise retiring or
4 removing plant. Net salvage includes both the cost of removal as well as any
5 proceeds received from any sale of plant (i.e., gross salvage).

6 Q. Please describe generally how net salvage is determined.

7 A. Net salvage or retirement cost experience is studied to determine trends that have
8 occurred in the past. These trends are considered, together with any changes that
9 are anticipated in the future, to determine the future net salvage factor for
10 remaining life depreciation purposes. The net salvage percentage is determined
11 by comparing the total net positive or negative salvage with the book cost of the
12 property investment retired.

13 The method used to estimate the retirement cost is a standard analysis approach
14 that is used to identify a company's historical experience with regard to the end of
15 life cost relative to the cost of the plant when it was first placed into service. This
16 information, along with knowledge about the average age of the historical
17 retirements that have occurred to date, allows an estimation of the level of
18 retirement cost that the Company will incur at the end of each property group's
19 useful life. The study methodology utilized has been extensively set forth in
20 depreciation textbooks and has been the accepted practice by depreciation
21 professionals for many decades. Furthermore, the cost of removal analysis is the
22 current standard practice used for assets by essentially all depreciation
23 professionals to estimate net salvage to identify the applicable depreciation rate

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1 for a property group. There is a direct relationship between the installation of
2 specific plant and its corresponding removal. The installation is its beginning of
3 life cost while the removal is its end of life cost. Also, it is important to note that
4 Average Remaining Life depreciation rates incorporate future net salvage, which
5 is typically more representative of recent versus long-term historical average net
6 salvage.

7 Q. Are there additional general principles with respect to property retirements and
8 related net salvage that should be noted?

9 A. Yes. As property continues to age, assets that typically generate positive salvage
10 when retired will generate a lower percentage of positive salvage as compared
11 with the original cost of the property. By comparison, if the class of assets is one
12 that typically generates negative net salvage (i.e., a higher cost of removal) with
13 increasing age at retirement, the negative net salvage percentage as compared
14 with original cost will typically be greater. This situation is routinely driven by
15 the higher labor costs that occur with the passage of time.

16 Q. Please provide an example of the need to temper historical results in estimating
17 net salvage to be included in depreciation rates.

18 A. A simple example will aid in understanding the above net salvage analysis and the
19 required adjustment to the historical results. Assume the following scenario: A
20 company has two back-up generators, Generator #1 and Generator #2, each
21 purchased for \$20,000. Generator #1 is retired after 2 years and Generator #2, is
22 retired after 10 years. Accordingly, the average life of the two generators is six

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1 (6) years. Generator #1 generates 75% salvage or \$15,000 when retired and
 2 Generator #2 generates 5% salvage or \$1,000 when retired.

	<u>Unit Cost</u>	<u>Ret. Age (Yrs)</u>	<u>% Salv.</u>	<u>Salvage Amount</u>	
3					
4					
5	Generator #1	\$20,000	2	75%	\$15,000
6	<u>Generator #2</u>	<u>20,000</u>	10	5%	<u>1,000</u>
7	Total/Avg.	40,000	6	40%	16,000

8 Assume an analysis of the experienced net salvage at year three (3). Based upon
 9 the Generator #1 retirement, which was retired at a young age (2 yrs.) as
 10 compared with the average six (6) year life of the property group, the analysis
 11 indicates that the property group would generate 75% salvage. This indication is
 12 incorrect, however, because it is the result of basing the estimate on incomplete
 13 data. That is, the estimate is based upon the salvage generated from a retirement
 14 that occurred at an age that is far less than the average service life of the property
 15 group. The actual total net salvage that occurred over the average life of the
 16 assets (which experienced a six (6) year average life for the property group) is
 17 40%, as opposed to the initial incorrect estimate of 75%.

18 Similarly, based upon the Generator #2 retirement, which occurred at an old age
 19 (10 years) as compared with the average six-year service life of the property
 20 group, the analysis indicates that the property group would generate 5%. This
 21 result is also incorrect, because the actual total net salvage for the property group
 22 is 40%, as explained above.

23 The experience of Generator #1 is exactly the situation that occurs with the

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1 majority of the Company's historical net salvage data, except that most of the
2 Company's property groups routinely experience negative net salvage (cost of
3 removal) as opposed to positive salvage.

4 Q. What did you conclude about RG&E's net salvage from your review of the
5 company's historical experience?

6 A. I analyzed the Company's historical net salvage experience to identify the
7 historical net salvage factor for each applicable property group. This analysis
8 routinely shows that historical retirements have occurred at average ages that are
9 significantly shorter than the property group's average service life. The
10 occurrence of historical retirements at an age that is significantly younger than the
11 average service life of the property category demonstrates that the historical data
12 does not appropriately recognize the true level of retirement cost at the end of the
13 property group's useful life. An additional level of cost to retire will occur as a
14 result of the passage of time until all the current plant is retired at the end of its
15 life. That is, the level of retirement costs will increase over time until the average
16 service life is attained. The additional inflation in the estimate of retirement cost
17 is related to those additional years' cost increases (primarily, the result of higher
18 labor costs over time) that will occur prior to the end of the property group's
19 average life.

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1 Q. Please explain what factors affect the length of the average service life that the
2 Company's property may achieve.

3 A. Several factors contribute to the length of the average service life that the property
4 achieves. The three major factors are: (1) physical; (2) functional; and (3)
5 contingent casualties.

6 The physical factor includes such things as deterioration, wear and tear, and
7 action of the natural elements. The functional factor includes inadequacy,
8 obsolescence and requirements of governmental authorities. Obsolescence occurs
9 when it is no longer economically feasible to use the property to provide service
10 or when technological advances have provided a substitute with superior
11 performance. The remaining factor, contingent casualties, includes retirements
12 caused by accidental damage or construction activity of one type or another.

13 Service lives are affected by many different factors, some of which can be
14 determined from studying past experience, while others of which rely heavily on
15 future expectations. When physical characteristics are the controlling factor in
16 determining the service life of property, historical experience is a useful tool in
17 selecting service lives. In cases where there are changes in technology, regulatory
18 requirements, Company policy or the development of a less costly alternative,
19 historical experience is of lesser or little value. However, even when considering
20 physical factors, the future lives of various properties may vary from those
21 experienced in the recent past.

22 In performing the life analysis for any property being studied, therefore, both past
23 experience and future expectations must be considered in order to fully evaluate

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1 the circumstances that may have a bearing on the remaining life of the property.

2 This ensures the selection of an average service life which best represents the
3 expected life of each property investment.

4 Q. What study procedures were utilized to determine service lives for the Company's
5 property?

6 A. I used several study procedures to determine the prospective service lives
7 recommended for the Company's plant-in-service. These study procedures
8 included the review and analysis of historical, as well as anticipated, retirements;
9 current and future construction technology; historical experience, and future
10 expectations of salvage and the cost of removal.

11 Q. How did you use the retirement rate method to analyze RG&E's historical average
12 service life?

13 A. While a number of methods are available to study historical data, the two methods
14 most commonly utilized to determine average service lives for a company's
15 property are the Retirement Rate Method and the Simulated Plant Record Method.
16 Given that the Company maintains vintaged investment records, I employed the
17 Retirement Rate Method to analyze the historical data. With this method of
18 analysis, I used the Company's actuarial service life data, which is sorted by age
19 to develop a survivor curve (observed life table). This survivor curve is the basis
20 upon which smooth curves (i.e., standard Iowa Curves) are matched or fitted to
21 then determine the average service life of the property account under study.
22 Computer processing allows for review of various experience bands throughout
23 the life of the account to observe trends and changes. For each experience band

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1 (i.e., period of years) analysis, an "observed life table" is constructed using the
2 exposure and retirement experience within the selected band of years.

3 In some cases, the total life cycle of the property has not been achieved and the
4 experienced life table, when plotted, results in a "stub curve." It is the "stub
5 curve," or the total life curve, if the total life curve is achieved, that is matched or
6 "fitted" to the standard Iowa Curves. The matching process is performed both by
7 computer analysis, using a least squares technique, and by overlaying the
8 observed life tables on the selected smooth curves for visual reference. The fitted
9 smooth curve is a benchmark that provides a basis to determine the estimated
10 average service life for the property group under study.

11 Q. Please describe generally the nature and purpose of Iowa, or smoothed, survivor
12 curves.

13 A. The preparation of a depreciation study typically incorporates smoothed curves to
14 represent the experienced or estimated survival characteristics of the property.
15 The "smoothed" or standard survivor curves are the "Iowa" family of curves
16 developed at Iowa State University, and are widely used and accepted throughout
17 the utility industry. The shape of the curves within the Iowa family depends upon
18 whether the maximum rate of retirement occurs before, during or after the average
19 service life. If the maximum retirement rate (i.e., the most units retired) occurs
20 earlier in life, it is a left (L) mode curve; if it occurs at average life, it is a
21 symmetrical (S) mode curve; and if it occurs after average life, it is a right (R)
22 mode curve. In addition, there is the origin (O) mode curve for plant that has
23 heavy retirements at the beginning of life.

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1 At any particular point in time, actual Company plant may not have completed its
2 life cycle. Therefore, the survivor table generated from the Company data is not
3 complete. This situation requires that an estimate be made regarding the
4 incomplete segment of the property group's life experience. Further, actual
5 Company survival experience often varies from age interval to age interval,
6 resulting in somewhat erratic survival patterns and making its utilization for
7 average service estimation difficult. Accordingly, the Iowa Curves are used to
8 both extend Company experience to zero percent surviving and smooth actual
9 Company data.

10 Q. What is the principal reason for completing the detailed historical life and salvage
11 analysis?

12 A. The detailed historical analysis is prepared as a tool from which to make informed
13 assessments as to the appropriate service life and salvage parameters over which
14 to recover the Company's plant investment. However, in addition to the available
15 historic data, consideration must be given to current events, RG&E's ongoing
16 operations, Company management's future plans, and general industry events that
17 are anticipated to impact the lives that will be achieved by plant-in-service.

18 Q. What is the basis for RG&E's current electric and gas depreciation rates?

19 A. The current electric and gas depreciation rates were developed using plant
20 investment data as of December 31, 2000 for RG&E's plant-in-service, together
21 with the Whole Life Technique or the Average Remaining Life Technique for
22 electric generation assets. The current account level of Electric Company
23 depreciation rates produces a composite annual depreciation rate of 2.28 percent

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1 when applied to each of the December 31, 2008 electric plant-in-service account
2 balances. Exhibit __ (RGEDEP-1), page 2-2. By comparison, the current account
3 level of Gas Company gas plant and common plant depreciation rates produce a
4 composite annual depreciation rate of 2.38 percent and 6.86, respectively, when
5 applied to each of the December 31, 2008 gas and common plant-in-service
6 account balances. Exhibit __ (RGEDEP-2), page 2-2 and 2-3.

7 Q. Do you compare the analysis of the Company's actual historical data with the
8 service life parameters you are proposing as a basis for your recommended annual
9 depreciation rates?

10 A. Yes. The Company's historical plant account records included vintaged
11 retirement data and, therefore, were studied using the Retirement Rate Method.
12 The resulting observed life tables and plottings of the selected Iowa Curves are
13 contained in the depreciation study report in Section 5.

14 Q. What are the most notable changes in annual depreciation rates and expense
15 between the present and proposed depreciation rates as set forth in Section 2 of
16 the depreciation study (Exhibit __ (RGEDEP-1), page 1-4 to 1-6)?

17 A. With regard to RG&E's plant-in-service, several of the proposed rates reflect
18 marked changes (as outlined in Section 1 of the Electric and Gas depreciation
19 study) from the current depreciation rates.

20 Q. Electric Plant Account Depreciation Rate Changes
21 The electric plant accounts for which the most notable depreciation expense
22 changes occurred in comparison to the current depreciation rates include Account

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1 364-Poles, Towers, and Fixtures, and Account 367-Underground Conduit &
2 Devices.

3 Q. Please describe the change in Account 364-Poles, Towers & Fixtures.

4 A. The current estimate of average service life for Account 364-Poles, Towers &
5 Fixtures is 52 years, while the average service life underlying the current
6 depreciation rate of the property group is 45 years. This change in average
7 service life together with the increase of estimated future net salvage from
8 negative 10 percent to negative 75 percent are the drivers underlying the increase
9 in depreciation expense from 2.44 percent to 3.37 percent. The estimated average
10 service life and negative net salvage percent was developed through an analysis of
11 the Company's historical data and consideration of future expectations, along with
12 a historical and forecast analysis of the Company's net salvage data. More recent
13 experience identifies increasing levels of negative net salvage.

14 Q. Please describe the change in Account 367-Underground Conductors & Devices.

15 A. The depreciation rate for Account 367-Underground Conductors & Devices
16 increased from 1.89 percent to 2.60 percent. The proposed depreciation rate
17 increase is the result of applying the estimated applicable depreciation parameters.
18 The proposed average service life of the property group is 50 years as compared
19 to the 45 years underlying the current depreciation rate. By comparison, the
20 proposed future net salvage, which gives consideration to the current and
21 anticipated end of life cost, changed from the current positive 15 percent to
22 negative 30 percent. Net salvage has turned negative during the past decade. The
23 recognition of the required higher level of negative net salvage is further

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1 supported by the fact that the current level of the Company's book depreciation
2 reserve is significantly less than its theoretical depreciation reserve.

3 Q. Gas Plant Account Depreciation Rate Changes

4 A. The accounts for which the most notable depreciation expense changes occurred
5 in comparison to the current depreciation rates include Account 376.10- Mains-
6 Steel, Account 376.20 - Mains-Plastic, Account 378.11 - Meas. And Reg. Station
7 Equipment-Outside, Account 380.10-Services-Steel, Account 380.20-Services-
8 Plastic, and Account 381-Meters.

9 Q. Please describe the change in account 376.10-Mains-Steel.

10 A. The proposed average service life for Account 376.10 – Mains-Steel is 67 years
11 while the average service life underlying the current depreciation rate of the
12 property group is 80 years. This change in average service life together with the
13 increase of estimated future net salvage from negative 65 percent to negative 70
14 percent are the drivers underlying the increase in depreciation expense from 2.06
15 percent to 2.54 percent. The estimated average service life and negative net
16 salvage percent was developed through an analysis of the Company's historical
17 data and consideration of future expectations along with a historical and forecast
18 analysis of the Company's net salvage data.

19 Q. Please describe the change in account 376.20-Mains-Plastic.

20 A. The proposed average service life for Account 376.20 – Mains-Plastic is 60 years
21 while the average service life underlying the current depreciation rate of the
22 property group is 80 years. This change in average service life together with the
23 increase of estimated future net salvage from negative 65 percent to negative 70

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1 percent are the drivers underlying the increase in depreciation expense from 2.06
2 percent to 2.83 percent. The estimated average service life and negative net
3 salvage percent was developed through an analysis of the Company's historical
4 data and consideration of future expectations, along with a historical and forecast
5 analysis of the Company's net salvage data.

6 Q. Please describe the change in account 378.11- Meas. And Reg. Station
7 Equipment-Outside.

8 A. The depreciation rate for Account 378.11 – Meas. And Reg. Station Equipment-
9 Outside increased from 2.50 percent to 5.45 percent. The proposed depreciation
10 rate increase results from applying the estimated applicable depreciation
11 parameters. The proposed average service life of the property group is 22 years
12 while the current underlying average service life is 50 years. With regard to future
13 net salvage, the estimate is negative 20 percent, which gives consideration to the
14 current and anticipated future end of life cost. The proposed percentage of
15 negative 20 percent is a decrease from a current negative 25 percent net salvage.

16 Q. Please describe the change in account 380.10-Services-Steel.

17 A. The proposed average service life for Account 380.10 – Services-Steel is 35
18 years, while the average service life underlying the current depreciation rate of the
19 property group is 44 years. This change in average service life, together with the
20 increase of estimated future net salvage from negative 15 percent to negative 25
21 percent are the drivers underlying the increase in depreciation expense from 2.61
22 percent to 3.57 percent. The estimated average service life and negative net
23 salvage percent was developed through an analysis of the Company's historical

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1 data and consideration of future expectations along with a historical and forecast
2 analysis of the Company's net salvage data.

3 Q. Please describe the change in account 380.20-Services-Plastic.

4 A. The depreciation rate for Account 380.20 – Services-Plastic increased from 2.61
5 percent to 2.95 percent. The proposed depreciation rate increase results from
6 applying the estimated applicable depreciation parameters. The proposed average
7 service life of the property group remained at 44 years. By comparison, the
8 proposed future net salvage, which gives consideration to the current and
9 anticipated future end of life cost, increased from negative 15 percent to an
10 estimated proposed negative 30 percent.

11 Q. Please describe the change in account 381.00-Meter.

12 A. The proposed average service life for Account 381.00-Meters is 26 years while
13 the average service life underlying the current depreciation rate of the property
14 group is 33 years. This change in average service life together with the increase
15 of estimated future net salvage from 0 percent to negative 6 percent are the drivers
16 underlying the increase in depreciation expense from 3.03 percent to 4.08 percent.
17 The increase in negative net salvage for the Meters account is the product of the
18 Company's accounting change for Meter Installations. The Company is now
19 incorporating all cost and work effort for installing and removing Meter
20 Installations with its Meter account. The estimated average service life and
21 negative net salvage percent was developed through an analysis of the Company's
22 historical data and consideration of future expectations along with a historical and
23 forecast analysis of the Company's net salvage data.

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- 1 Q. Has the Company changed its accounting practice for Account 382-Meter
2 Installations and Account 384-House Regulator Installations? Please describe the
3 change.
- 4 A. Yes. Account 382 contains the Company's investments related to December 31,
5 2008 embedded labor and over head costs associated with the installation of the
6 gas meters at the customers' locations. Likewise, Account 384 contains the
7 Company's investments related to December 31, 2008 embedded labor and
8 overhead costs associated with the installation of the house regulators at the
9 customer's location. During subsequent periods, the Company is changing its
10 accounting practice and policy to include the installation costs together with the
11 costs of the Meters and House Regulators, respectively. Therefore, all future
12 installation costs and retirements related to Meter Installations will be booked in
13 Account 381- Meters, and all future installation costs and retirements related to
14 House Regulator Installations will be booked in Account 383- House Regulators.
15 As a result of this accounting change and the lack of future retirements from this
16 property group, the historical embedded installation cost, contained within these
17 accounts, will be amortized over the average remaining life of each of the
18 applicable property groups. Generation arrangements containing the calculation
19 of the annual amortization amounts (on a vintage level based) are included as
20 Table 7 and Table 8 in Section 2 of this depreciation study report.

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1 Q. What is the net change in annual depreciation expense under the proposed rates as
2 opposed to present depreciation rates?

3 A. When applied to RG&E's electric plant-in-service investment as of December 31,
4 2008, the change in annual depreciation rates results in a net increase in
5 annualized depreciation expense of \$2,362,293 (Exhibit __ (RGEDEP-1), Table 1,
6 Section 2, page 2-2) for the Company's electric plant-in-service when compared
7 with the depreciation expense produced by the electric current depreciation rates.
8 The change in annual depreciation rates results in a net increase in annualized
9 depreciation expense of \$3,620,189 (Exhibit __ (RGEDEP-2), Table 1, Section 2,
10 page 2-2) for the Company's gas plant-in-service when compared with the
11 depreciation expense produced by the current gas depreciation rates. Likewise,
12 the change in annual depreciation rates results in a net increase in annualized
13 depreciation expense of \$203,435 (Exhibit __ (RGEDEP-2), Table 1, Section 2,
14 page 2-2) for the Company's common plant-in-service when compared with the
15 depreciation expense produced by the current common plant depreciation rates.
16 (Exhibit __ RGEDEP-2), Table 1, Section 2, page 2-3).

17 Q. What are the resulting proposed composite level depreciation rates?

18 A. Applying the proposed account level depreciation rates to RG&E's December 31,
19 2008 electric plant-in-service produces a composite annual depreciation rate of
20 2.46 percent, in contrast to the current composite depreciation rate of 2.28
21 percent. Applying the proposed account level depreciation rates to RG&E's
22 December 31, 2008 gas plant-in-service produces a composite annual depreciation
23 rate of 2.97 percent, in contrast to the current composite depreciation rate of 2.38

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1 percent. Applying the proposed account level depreciation rates to RG&E's
2 December 31, 2008 common plant-in-service produces a composite annual
3 depreciation rate of 7.18 percent, in contrast to the current composite depreciation
4 rate of 6.86 percent.

5 Q. What is your recommendation to the Commission?

6 A. The proposed depreciation rates set forth in my depreciation study should be
7 uniformly and prospectively adopted by the Commission for regulatory purposes
8 as well as by the Company for accounting purposes.

9 Q. Does this conclude your direct testimony?

10 A. Yes, it does.

11 B126085.2

**PROFESSIONAL QUALIFICATIONS
OF
EARL M. ROBINSON, CDP
AUS CONSULTANTS**

Experience includes approximately 40 years of service in the public utility field. Mr. Robinson has performed services in the areas of depreciation, original cost, valuation, cost of service, and bill analysis within numerous regulatory jurisdictions and property tax agencies throughout the Eastern, Midwestern, Southwestern, and Pacific regions of the United States, Canada plus various areas of the Caribbean.

EXPERIENCE

1977 to Date

AUS Consultants. Various positions - currently Principal & Director. Mr. Robinson has prepared studies and coordinated analysis related to valuation, depreciation, original cost, trended original cost, cost of service, bill analysis, as well as analysis of expenses, revenues and income for various municipal and an extensive number of investor-owned electric, gas, water, wastewater, and telecommunications utilities.

Studies prepared have required the review of company records, inspection of property, the preparation of property inventories and original costs, preparation and review of mortality studies, selection of proper service lives, life characteristics and analysis of salvage, and analysis of capital recovery impact of changing depreciation methods.

During his many years of experience, Mr. Robinson has been involved in and/or responsible for an extensive quantity of comprehensive depreciation studies. Numerous early year's depreciation studies were prepared manually without the convenience of computer software systems. Subsequent, during the mid/late 1970's, Mr. Robinson became responsible for the completion of the many depreciation studies performed for the firm's clients. As part of that responsibility, Mr. Robinson was involved in not only performing the studies, but also in assisting AUS Consultants' MIS department in developing and testing various computer depreciation models. The studies performed by Mr. Robinson or under his direction have included all types of utilities, including electric, gas, water, wastewater, and telecommunications. During Mr. Robinson's career he has been involved in the preparation of more than a hundred depreciation related projects.

A Certified Depreciation Professional (CDP), Mr. Robinson, as a Principal & Director of AUS Consultants provides services to the firm's clients with regard to depreciation and cost based valuation issues. With more than forty (40) years' experience, he began his career as a staff member of the Plant Accounting Department of United Telephone (now Sprint) Eastern Group Headquarters subsequent to which he has spent the past thirty-five (35) plus years, as a consultant, preparing depreciation and valuation studies for gas, pipeline, electric, telecommunications, water, and wastewater utilities. In conjunction with the provision of these services, Mr. Robinson has testified on many occasions before numerous regulatory agencies (including state, federal, and property tax agencies throughout the U.S., Canada, and the Caribbean in support of the many studies completed for his diverse list of clients. In addition he has negotiated depreciation rates with various state regulatory agencies, the FCC Staff, and the FERC Staff. Mr. Robinson has also participated in several FCC, State, Company three-way depreciation re-prescription meetings.

With regard to valuation matters Mr. Robinson has been involved with the development of cost indexes from the earliest part of his career through the present. During his earlier years, he assisted and/or developed and utilized cost indexes to prepare reproduction cost and related fair value determinations for various of the firm's regulated utility clients. Subsequently, he attained extensive experience in preparing custom indexes, replacement cost, and depreciated replacement cost studies, having been responsible for preparing many such cost studies relative to various clients within the telecommunications industry during

**PROFESSIONAL QUALIFICATIONS
OF
EARL M. ROBINSON, CDP
AUS CONSULTANTS**

the past twenty (20) plus year period.

He is also responsible for developing and publishing the firm's AUS Telephone Plant Index (successor to the Handy Whitman and C A Turner Telephone Construction Cost Index), a reproduction cost index subscribed to by various operating companies, regulatory agencies, and consultants.

Mr. Robinson is a founding member and past President of the Society of Depreciation Professionals, a professional organization that provides depreciation training, as well as provides a forum for discussion of depreciation issues. He is also a member of the American Gas Association (AGA) Accounting Services Committee and past chairman of the Statistics, Bibliography, Court Regulatory Sub-Committee of the AGA Depreciation Committee. As a member of that organization, he co-authored a publication entitled "An Introduction to Net Salvage of Public Utility Plant". Mr. Robinson has completed various previous presentations on the subject of depreciation studies as well as depreciated replacement cost to industry organizations and to property tax appraiser staffs.

1975 to 1977

Gannett, Fleming, Corrdry & Carpenter, Inc. Valuation Analyst in the Valuation Division where his duties and responsibilities included the classifications, analysis and coordination of data in the development of depreciation rates for various companies including telephone, gas, water and electric utilities.

1971 to 1975

Weber, Fick & Wilson (Acquired by AUS Consultants), Public Utility Analyst engaged in the unitization and subsequent application of costs in the pricing of inventories for original cost determination, depreciation and salvage studies to determine proper annual depreciation rates and trended original cost studies used in the determination of utility rate base.

1966 to 1971

United Telephone Company of Pennsylvania (now Sprint/United Telephone Company of Pa.). As a staff member of the Plant Accounting Department, his duties and responsibilities included various plant accounting ledgers, unitization of location and mass property accounts, as well as special studies related to insurance and tax valuations of utility plant in service.

TESTIMONY

Jurisdictions testified in include Alberta, Arizona, California, Connecticut, Delaware, District of Columbia, FERC, Florida, Indiana, Illinois, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Montana, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, and Virgin Islands. Extensive expert testimony has been presented on the subjects including Depreciation, Capital Recovery, Plant in Service Measures of Value, Depreciated Reproduction Cost, and Depreciated Replacement Cost. Numerous additional depreciation studies have been completed and filed in various different jurisdictions for which testimony appearances were not required.

**PROFESSIONAL QUALIFICATIONS
OF
EARL M. ROBINSON, CDP
AUS CONSULTANTS**

PERSONAL

Education:

Graduate of Harrisburg Area Community College with an Associate of Arts Degree in Accounting, and has undertaken further studies at University Center of Harrisburg. Successfully completed numerous programs related to service life and salvage estimation, forecasting, and evaluation sponsored by Depreciation Programs, Inc. at Calvin College Campus, Grand Rapids, Michigan. In addition, Mr. Robinson successfully completed cost of service seminars sponsored by the American Water Works Association. He received his CDP (Certified Depreciation Professional) designation by Exam during 1996.

List of Clients Served

CATV

Storer Broadcasting Company
(DE, MD, MN)

Cable Television Consortium

ELECTRIC

Atlantic City Electric d/b/a Conectiv Power Delivery
Borough of Butler - Electric Dept.
Conectiv Power Delivery
Consolidated Edison Co of NY
Consolidated Hydro, Inc.
Delmarva Power and Light Company
Delaware
Maryland
Duquesne Light Company
Hershey Electric Company
Kentucky Utilities
Lockhart Power Company
Louisville Gas & Electric Co. - Elec. Div.
Montana – Dakota Utilities Co – Elec. Div

Nantahala Power and Light Company
New York State Electric and Gas Corp
Northern Indiana Public Service Co
Pennsylvania Power Company
Philadelphia Electric Company
Potomac Electric Power Company
Maryland
Washington DC
Progress Energy - Carolinas
Progress Energy - Florida, Inc
Public Service Company of New Mexico
Rochester Gas and Electric Corporation
Wellsboro Electric Company
Vermont Electric Power, Inc

GAS

ATCO Gas
ATCO Pipelines
Atlanta Gas Light Company
Bay State Gas Company
C & T Enterprises, Inc.
Valley Cities Waverly Gas Company
Canadian Western Natural
Gas Company Limited
Citizens Gas & Coke Utility
Columbia Gas of Pennsylvania, Inc.
Connecticut Natural Gas Corporation

North Carolina Gas Service
North Penn Gas
Northern Indiana Public Service Co.
Northern Utilities, Inc.-Maine
Northern Utilities, Inc.-New Hampshire
Oklahoma Natural Gas Company
Pacific Gas & Electric Company
Paiute Pipeline
Pennsylvania Gas & Water Company
PG Energy Inc.
Pennsylvania and Southern Gas Company

**PROFESSIONAL QUALIFICATIONS
OF
EARL M. ROBINSON, CDP
AUS CONSULTANTS**

Consolidated Edison Co of New York	Valley Cities Division
East Ohio Gas	Waverly Division
Elkton Gas Service	Pipeline Industry Group
Granite State Gas Transmission, Inc.	Providence Gas Company
Great Plains Natural Gas Co.	Public Service Electric & Gas Co
Kansas Gas Service	Public Service Company of New Mexico
Louisville Gas & Electric Co. - Gas Division	Roanoke Gas Company
Montana Dakota Utilities - Gas Division	Rochester Gas and Electric Corporation
National Fuel Gas Distr. Corp., NY	Saxonburg Heat & Light Company
National Fuel Gas Supply	Southern Connecticut Gas Company
NICOR Gas Company	Southwest Gas Corporation
Northeast Heat & Light Company	T.W. Phillips Gas & Oil Company
	Williams Companies

GENERAL CLIENTS

Arthur Andersen	Ernst & Young
Pricewaterhouse Coopers	Standard & Poors

REGULATORY AND GOVERNMENTAL

Arizona Corporation Commission	Diamond State Telephone Company
Mountain States Telephone & Telegraph	Kansas Corporation Commission
Southwest Gas Corporation	Southwest Bell
Baltimore County, MD	Public Service Comm. of Nevada
Bensalem Township - Water	Nevada Bell
Bethlehem Authority - Water	Town of Waterford, CT
Borough of Butler, NJ	Northeast Utilities
Borough of Media Water Works	Washington, D.C. - PSC
City of New Orleans, LA	C&P Telephone Company
Delaware Public Service Commission	Potomac Electric Power Company
Delaware River Port Authority	

TELECOMMUNICATIONS

Ace Telephone Association - IA & MN	Paging Industry Study Group
Air Touch Communications	AirTouch Paging
ALLTEL Pennsylvania, Inc.	Mobile Comm
AT&T-Advance Solutions, Inc-CA	Paging Network, Inc.
BellSouth Telecommunications	Skytel
Buffalo Valley Telephone Company	USA Mobile Communications
Cellular Industry Study Group	Quaker State Telephone Company
AT&T Wireless	Qwest Communications Corporation
BellSouth Communications	Qwest – Arizona
GTE Mobilnet	Qwest – Iowa
Bighthouse Networks-Citrus County	Qwest -- Montana
Cable & Wireless	Qwest -- Washington
Chenango & Unadilla Telephone Company	RCA Global Communications, Inc.
Cingular Wireless	SBC Ameritech Corporation
Cingular Wireless – California	SBC -- Arkansas
Cingular Wireless – Houston	SBC -- Kansas

**PROFESSIONAL QUALIFICATIONS
OF
EARL M. ROBINSON, CDP
AUS CONSULTANTS**

Cingular Wireless - Massachusetts
Commonwealth Telephone Company
CTC of Michigan
CTC of Virginia
Denver & Ephrata Telephone & Telegraph Co.
D & E Network
D & E System
Embarq Florida, Inc.
Empire Telephone Corporation
Illinois Consolidated Telephone Co.
Jamestown Telephone Corporation
Leesport Telephone Company
Lewisberry Telephone Company
Los Angeles Cellular Telephone Co.
MCI International, Inc.
MCI Telecommunications Corp.
MFS Communication Company, Inc.
Marianna & Scenery Hill Tel. Co.
Mid State Telephone Company
Motorola, Inc.
Nevada Bell
New Jersey Telephone Company
The North-Eastern Pennsylvania Tel. Co.
Pacific Bell
Pactel Cellular

SBC -- Michigan
SBC -- Missouri
SBC -- Ohio
SBC -- Oklahoma
SBC -- Wisconsin
SBC -- West -- California
SBC -- West -- Nevada
Southwestern Bell Telephone Company
Standard Telephone Company
Telecommunications d'Haiti
Telephone Utilities of Pennsylvania
United Telephone Company of New Jersey
Verizon Wireless
Verizon -- California
Verizon -- Kentucky
Verizon -- Massachusetts
Verizon -- Montana
Verizon -- South Carolina
Verizon -- Utah
Verizon -- Washington
Verizon -- Wyoming
Verizon -- Total Company
Virgin Islands Telephone Corporation
Williams Communication
WilTel, Inc.

WATER

Artesian Water Company
City of Auburn
Bethlehem Authority - Water
California Water Service Company
California-American Water Company
Citizens Water - California
Citizens Water - Arizona
Clinton Water Company
Columbia Water Company
Commonwealth Water Company
Consumers New Jersey Water Company
Dauphin Consolidated Water Supply Co.
Dominguez Water Company
Elizabethville Water Company
City of Fairfax
Garden State Water Company
Hackensack Water Company
Hershey Water Company
Illinois-American Water Company
Indian Rock Water Company
Indianapolis Water Company
Iowa-American Water Company
Keystone Water Company
Manufacturers Water Company
Masury Water Company
Middlesex Water Company

New Mexico-American Water Company, Inc.
Newtown Artesian Water Company
New York-American Water Company
Ohio-American Water Company
Palm Coast Utility Corporation
Pennichuck East Utility
Pennichuck Water Works
Pennsylvania-American Water Company
Pennsylvania Gas and Water Company
Pennsylvania Water Company
Erie & Sayre Divisions
Philadelphia Suburban Water Company
Pinelands Water Company
Public Service Water Company
Riverton Consolidated Water Company
Roaring Creek Water Company
Rock Springs Water Company
Shenango Valley Water Company
Southern California Water Company
Spring Valley Water Company
Tidewater Utilities, Inc.
United Water - Delaware
United Water - Toms River
United Water - New Jersey
United Water - Pennsylvania
United Water - Virginia

**PROFESSIONAL QUALIFICATIONS
OF
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Monarch Utilities, Inc
Monmouth Consolidated Water Company
New Haven Water Company
New Jersey Water Company

Virginia American Water Company
Western Pennsylvania Water Company
York Water Company

STEAM

Consolidated Edison Co of New York

WASTEWATER

California - American Water Company
Citizens Sewer – Arizona
Illinois-American Company – Wastewater
Monarch Utilities, Inc
New Jersey Water Company
Sewer Districts

Palm Coast Utility Corporation
Pinelands Sewer Company
Wynnewood Sewer Company

PROFESSIONAL QUALIFICATIONS

CDP (Certified Depreciation Professional) by Exam during October, 1996

PROFESSIONAL AFFILIATIONS

American Water Works Association
American Gas Association
American Railway Engineering Association
Pennsylvania Gas Association
Pennsylvania Municipal Authorities Association
Member AGA Accounting Services Committee
Society of Depreciation Professionals-Founding Member, Chairman Coordinating and Membership Committees,
Treasurer, President, and Past President

PUBLICATIONS

AGA/EEI Depreciation Accounting Committee, Contributing Author 1989, "An Introduction to Net Salvage of Public Utility Plant"

"Replacement Cost and Service Life Studies", *Journal of Property Tax Management*, Fall 1994, Volume 6, Issue 2

SPEECHES AND PRESENTATIONS

"*Depreciated Replacement Cost*", Institute of Property Taxation - 18th Annual Conference, San Francisco, CA

"*RCNLD Issues for Utilities*", The National Association of Railroad & Public Utilities Tax Representative, 1997 Annual Conference, North Lake Tahoe, NV

"*Useful Service Lives of Cellular Industry Assets*", State of Florida, Department of Revenue, Industry/Government Task Force (April 1997)

"*Appraisal and Valuation Issues Associated with Technology Changes within the Wireless*

**PROFESSIONAL QUALIFICATIONS
OF
EARL M. ROBINSON, CDP
AUS CONSULTANTS**

Industry, 30th Annual Wichita Program - Appraisal for Ad Valorem Taxation of Communications, Energy, and Transportation Program, Wichita State University - July 30-August 3, 2000

"Physical/Functional Obsolescence, Residual Values/Floors (Net Salvage)", 32th Annual Wichita Program - Appraisal for Ad Valorem Taxation of Communications, Energy, and Transportation Program Wichita State University - July 28-August 1, 2002

"Depreciation Study Preparation", AGA Accounting Services Committee/EEI Property Accounting & Valuation Committee, Lake Tahoe, Nevada - October 28, 2002

"Use of Replacement Cost to Value High Tech Equipment" Southeastern Association of Tax Administrators, 53rd. Annual Conference, Savannah, Georgia - July 14-July 16, 2003

"Property Tax: Use of Replacement Cost in the Appraisal of Telecommunications Companies", Western States Association of Tax Representatives (WSATR), WSATA 2003 Annual Meeting, Austin, TX - Sept. 9, 2003

"Replacement Cost & Depreciated Replacement Cost Presentation", Southwestern Bell Telephone Company – Arkansas PSC – Tax Division - August, 2003

"Valuation of Assets", AGA Accounting Services Committee/EEI Property Accounting & Valuation Committee, Scottsdale, Arizona - December 9, 2003

"Property Tax: Use of Replacement Cost in the Appraisal of Telecommunications Companies", Oklahoma State Board of Equalization Public Service Valuation Guidelines Subcommittee – Oklahoma City, OK – Feb 5, 2004

"Net Salvage Issues In Rate Cases", AGA Accounting Services Committee/EEI Property Accounting & Valuation Committee, San Antonio, Texas - May 17, 2004

"Current Depreciation Issues: Point-Counterpoint", AGA Accounting Services Committee/EEI Property Accounting & Valuation Committee, Savannah, Georgia – November 14, 2006

"Depreciation & Cost of Removal", AGA Accounting Services Committee/EEI Property Accounting & Valuation Committee, Tucson, Arizona – October 24, 2007

"Whole Life versus Remaining Life", AGA Accounting Services Committee/EEI Property Accounting & Valuation Committee, San Francisco, California – May 21, 2008

"Obsolescence-Measuring the Impact for Industries Experiencing Change" *"Depreciation & Cost of Removal"*, IPT 32nd Annual Conference, Atlanta, Georgia, June 23, 2008

"An Alternative to IFRS Unit Depreciation", AGA Accounting Services Committee/EEI Property Accounting & Valuation Committee, Baltimore, Maryland – May 18, 2009

**PROFESSIONAL QUALIFICATIONS
OF
EARL M. ROBINSON, CDP
AUS CONSULTANTS**

SUMMARY OF TESTIMONY APPEARANCES – HEARINGS & DEPOSITIONS (PLUS DECLARATIONS)

<u>Jurisdiction</u>	<u>Client</u>	<u>Docket/Application</u>	<u>Subject</u>
Alberta	Canadian Western Natural Gas Company Limited	980413	Depreciation
	ATCO Pipelines	1292783	Depreciation
Arizona	Arizona Corp. Comm./ Mtn. Bell	9981-E-1051	RCN/RCND *
	Arizona Corp. Comm./ Southwest Gas Corp.	U-1551-80-70	RCN/RCND *
	Qwest Corporation-Arizona	TX2001-000662	Property Tax Valuation Deposition
California (PUC & State Board of Equalization)	MCI Telecommunications Corporation	274 SAU87-38 SAU91-101	Replacement Cost/ Depr. Repl. Cost Replacement Cost/ Depr. Repl. Cost Replacement Cost/ Depr. Repl. Cost
	SBC-California	SAU 279	Property Tax Valuation Declaration
	SBC-California	January 31, 2005	Property Tax Valuation Declaration
	Southern California Water Company	ABJ-4	Depreciation
Connecticut	Connecticut Natural Gas Corp	08-12-06	Depreciation
	Southern Connecticut Gas Co.	89-09-06 08-12-07	P.I.S. Measures of Value and Depreciation Depreciation
Delaware	Artesian Water Company	82-20 87-3	Depreciation Depreciation
	United Water - Delaware	96-164 98-98	Depreciation Depreciation
	Delaware Public Service Comm./ Diamond State Telephone Co.	81-8	P.I.S. Measures of Value and Depreciation
	Delmarva Power & Light Company	05-304	Depreciation

**PROFESSIONAL QUALIFICATIONS
OF
EARL M. ROBINSON, CDP
AUS CONSULTANTS**

<u>Jurisdiction</u>	<u>Client</u>	<u>Docket/Application</u>	<u>Subject</u>
	Tidewater Utilities, Inc/ Public Water and Supply, Inc	99-466	Depreciation
District of Columbia	Potomac Electric Power Co.	F.C. 869	Depreciation
	Washington, DC PSC/C&P Tel Corp.	F.C. 777	Depreciation
	Washington, DC PSC/ Potomac Electric Power Co.	F.C. 785 F.C. 813	Capital Recovery/ Depreciation
FERC	Granite State Gas Transmission, Inc.	RP91-164-000	Depreciation
	Paiute Pipeline	RP96-306-000	Depreciation
Florida (County of Duval)	BellSouth Telecommunications	Petitions 1795-1800	Replacement Cost/ Depr. Repl. Cos
(County of Lee)	Sprint-Florida, Inc (Embarq)	Case No. 02-CA-013330-1	Replacement Cost
(County of St. Lucie)	BellSouth Telecommunications	1999 Petitions	Replacement Cost/ Depr. Repl. Cost
(County of Citrus)	Embarq	Case No. 2003-CA4473, 2004-CA4565, 2005-CA5010	Property Tax Valuation Deposition
(County of Lee)	Embarq	Case No. 02-13330 CA-WCM	Property Tax Valuation Deposition
	Progress Energy – Florida	050078-EI	Depreciation
Illinois	Illinois - American Water Company	00-0340 02-0690 07-0507	Depreciation Depreciation Depreciation
	Illinois Consolidated Telephone Co.	81-0264 82-0623	RCN/RCND * RCN/RCND *
Indiana	Northern Indiana Public Service Company	Cause No. 41746	Depreciation
Iowa (Dept of Rev)	Qwest Corporation-Iowa	883	Property Tax Valuation Deposition

**PROFESSIONAL QUALIFICATIONS
OF
EARL M. ROBINSON, CDP
AUS CONSULTANTS**

<u>Jurisdiction</u>	<u>Client</u>	<u>Docket/Application</u>	<u>Subject</u>
Kansas	Kansas Gas Service	03-KGSG-602-RTS	Depreciation
Kentucky	Kentucky Utilities	Case No. 2003-00434	Depreciation
	Louisville Gas & Electric Electric Gas	Case No. 2003-00433	Depreciation
Maryland	Delmarva Power & Light Company	9093	Depreciation
	Potomac Electric Power Company	9092	Depreciation
Massachusetts	Bay State Gas Company	92-111 DTE 05-27	Depreciation Depreciation
Montana	Montana-Dakota Utilities Co-Elec	Docket # 2007.7.79	Depreciation
	Qwest Corporation-Montana	06DORFC001 06DOTFC017	Property Tax Valuation Deposition
Nevada	Southwest Gas Corporation	04-3011	Depreciation
New Jersey	Atlantic City Electric d/b/a Conectiv Power Delivery	ER03020110	Depreciation
	Borough of Butler/ Butler Elec. Dept.	792-84	Valuation of Plant in Service Customer Revenue and Purchase Power
	Commonwealth Water Co.	842-100	Depreciation
	Consumers NJ Water Company	WR00030174	Depreciation
	Garden State Water Co.	WR91091483	Depreciation
	Middlesex Water Company	WR8602-240 WR90080884J WR96110818	Depreciation Depreciation Depreciation
	Monmouth Cons. Water Co.	8312-1113	Depreciation
	New Jersey Water Company	834-292	Depreciation
	Public Service Electric & Gas	GR05100845	Depreciation

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<u>Jurisdiction</u>	<u>Client</u>	<u>Docket/Application</u>	<u>Subject</u>
	United Water Resources (formerly Hackensack Water Co.)	8506-663 WR90080792J WR95070303	Depreciation Depreciation Depreciation
	Toms River Water Company	WR95050219	Depreciation
New Hampshire	Northern Utilities, Inc.	DR91-081	Depreciation
New Mexico	New-Mexico American Water Company, Inc.	2813 03-00206-UT	Depreciation Depreciation
New York	New York-American Water Co.	28911	Depreciation
	New York State EI & Gas Corp. Electric Business & Common Plt	05-E-1222	Depreciation
	Spring Valley Water Co., Inc.	89-W-1151 92-W-0645	Depreciation Depreciation
North Carolina	Nantahala Power and Light Co.	E-13, SUB157	Depreciation
North Dakota	Montana-Dakota Utilities Co-Gas	Case No. PU-399-02-183	Depreciation
Oklahoma (State Board of Equalization)	SWBT-Oklahoma	EQ-2004-10	Property Tax Valuation Deposition
Pennsylvania	Borough of Media Water Works	R-912150	Depreciation
	Columbia Gas of Penna.	R-80031129	Depreciation and Valuation
	Commonwealth Telephone Co.	I-00920020	Depreciation
	Keystone Water Company	R-842755 R-842756 R-842759	Capital Recovery/Depreciation Capital Recovery/Depreciation Capital Recovery/Depreciation
	Mid Penn Tel. Corp.	R-80071264	Depreciation
	Penna.-American Water Co.	R-891208	Depreciation
	Penna. Gas & Water Co. - Gas Division	R-821961 R-832475	Depreciation Depreciation

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<u>Jurisdiction</u>	<u>Client</u>	<u>Docket/Application</u>	<u>Subject</u>
	Penna. Gas & Water Co. - Water Division	R-822102 R-850178 R-870853	Depreciation Capital Recovery/Depreciation Capital Recovery/Depreciation
	Penna. Gas & Water Co. - Scranton Division	R-901726 R-922482	PIS Meas. of Value/Depreciation Depreciation
	Penna. Gas & Water Co. - Spring Brook Division Nesbitt Service Area Crystal Lake Service Area	R-911966 R-922404	PIS Meas. of Value/Depreciation PIS Meas. of Value/Depreciation
	Ceasetown/Watres Service Area	R-93266	Depreciation
	Penna. Power Company	R-811510 R-821918 R-832409 R-842740 R-850267 R-870732	PIS Meas. of Value/Depreciation PIS Meas. of Value/Depreciation PIS Meas. of Value/Depreciation PIS Meas. of Value/Depreciation PIS Meas. of Value/Depreciation PIS Meas. of Value/Depreciation
	Pennsylvania & Southern Gas Company	R-870686	Depreciation
	PG Energy Inc.	R-963612 R-984280 R-00061365	PIS Meas. Of Value/Depr PIS Meas. Of Value/Depr PIS Meas. OF Value/Depr
	Philadelphia Suburban Water Company	R-911892 R-922476 R-932868	Depreciation PIS Meas. of Value/Depreciation PIS Meas. of Value/Depreciation
	Riverton Consolidated Water Co.	R-842675	Capital Recovery/Depreciation
	United Water - Pennsylvania	R-00973947	Depreciation
	Western Pennsylvania Water Company	R-842621 R-842622 R-842623 R-842624 R-842625	Capital Recovery/Depreciation Capital Recovery/Depreciation Capital Recovery/Depreciation Capital Recovery/Depreciation Capital Recovery/Depreciation

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<u>Jurisdiction</u>	<u>Client</u>	<u>Docket/Application</u>	<u>Subject</u>
	Wellsboro Electric Company	R-00016356	Depreciation
Rhode Island	Providence Gas Company	1914 2286	Depreciation Depreciation
South Carolina	Lockhart Power Company	87-435-E	Depreciation
Tennessee (Board of Equalization)	Bellsouth – Tennessee	67-5-903	Property Tax Valuation Deposition
Utah	Verizon Wireless	05-0826, 05-0829	Property Tax Valuation Deposition & Hearing
Virgin Islands	Virgin Islands Tel. Corp.	264 314 316	Depreciation Depreciation Depreciation

* Reproduction Cost New/Reproduction Cost New Depreciated.