

STATE OF TENNESSEE
BEFORE THE TENNESSEE REGULATORY AUTHORITY
DOCKET NO. 08-00039

REBUTTAL TESTIMONY OF
JOHN J. SPANOS

ON BEHALF OF
TENNESSEE AMERICAN WATER COMPANY

1 Q. Please state your name and business address.

2 A. My name is John J. Spanos. My business address is 207 Senate Avenue, Camp
3 Hill, Pennsylvania.

4 Q. Have you previously submitted testimony in this proceeding?

5 A. Yes. My pre-filed testimony was submitted on March 14, 2008.

6 Q. What is the purpose of your rebuttal testimony?

7 A. The purpose of this testimony is to rebut the pre-filed direct testimony of
8 Consumer Advocate and Protection Division witness Mr. Charles W. King and
9 Consumer Advocate Division of the Attorney General witness, Mr. Terry Buckner.

10 Q. What is the subject of your rebuttal testimony?

11 A. The subject of my rebuttal testimony is the appropriate net salvage percents to
12 be utilized in the determination of depreciation accrual rates. I will also address
13 the correct recovery of all assets discussed by Mr. Buckner.

14 Q. Can you describe the concept of depreciation?

15 A. Depreciation, in public utility regulation, is the loss in service value not restored
16 by current repairs or covered by insurance.

17 Depreciation as used in accounting is a method of distributing fixed capital
18 costs, less net salvage, over a period of time by allocating annual amounts to
19 expense. Each annual amount of such depreciation expense is part of that
20 year's total cost of providing utility service. Normally, the period of time over
21 which the fixed capital cost is allocated to the cost of service is equal to the
22 period of time over which an item renders service, that is, the item's service life.
23 The most prevalent method of allocation is to distribute an equal amount of cost

1 to each year of service life. This method is known as the straight line method of
2 depreciation.

3 Q. What is the significance of the words "service value" in the definition of
4 depreciation?

5 A. There is a significant difference between original cost recovery and service value
6 recovery for ratemaking purposes. Original cost recovery is the systematic
7 recovery of the installation cost of an asset. The service value of an asset
8 includes, not only the installation cost, but the cost to remove the asset minus the
9 scrap value of the asset.

10 Q. Can you give an example between the difference in original cost and service
11 value of assets?

12 A. Yes, I can. The original cost is the full material and installation cost of an asset
13 that is booked to utility plant in service. For example, in the year 1955, a fire
14 hydrant was installed on Main Street for \$550. The \$550 was placed into plant in
15 service and recovered systematically for 55 years or \$10 per year. However,
16 when the fire hydrant is retired in the year 2010, it will cost \$180 to remove and
17 the utility will receive \$15 of scrap value. Therefore, the total service value of the
18 1955 fire hydrant is \$550 original cost, plus \$180 of cost of removal minus \$15 of
19 scrap value or a total of \$715. This results in annual recovery of the service
20 value over the life of the hydrant to be \$13 annually. Thus the difference
21 between the original cost and the service value is \$165 or the net salvage
22 component of 30%.

23 Q. Does Mr. King disagree with this difference in recovery?

24 A. No, he does not.

1 Q. Does Mr. King disagree with the recovery of the net salvage component of the
2 asset within a depreciation rate?

3 A. No, he does not. As shown on page 6, line 18 through page 7, line 26, of Mr.
4 King's testimony, he describes the exact concept of service value in his
5 development of a depreciation rate. In Mr. King's example, the original cost is \$1
6 million and the net negative salvage is \$100,000 (negative 10% of \$1 million) for
7 a total service value of \$1.1 million. The example also shows full recovery of the
8 service value to \$1.1 million (\$400,000 of past recovery and \$700,000 of future
9 recovery) and a remaining rate of 7.0% that recovers the \$700,000 over 10
10 years.

11 Q. Is Mr. King's example on page 6 and 7 of his testimony the exact concept of
12 recovery presented in your study?

13 A. Yes, it is. This example is consistent with my depreciation rates and the
14 methodology utilized by almost all other utilities in the United States and Canada.
15 This is the most common recovery practice and traditionally used for decades by
16 utilities including Tennessee American Water Company.

17 Q. What are net salvage and negative net salvage?

18 A. Net salvage is the gross salvage value of retired property less the cost of
19 removal of such property. If cost of removal exceeds salvage value, the net
20 salvage is negative, hence, negative net salvage.

21 Q. Do authoritative texts on depreciation support your proposal related to net
22 salvage?

23 A. All authoritative texts on the subject of depreciation support my proposal to
24 accrue for net salvage in the traditional manner presented in my study. The two

1 depreciation texts most often cited by depreciation experts as authoritative
2 support the traditional approach that I have proposed. Public Utility Depreciation
3 Practices, published in 1996 by the National Association of Regulatory Utility
4 Commissioners states:

5 Closely associated with this reasoning is the accounting principle
6 that revenues be matched with costs and the regulatory principle
7 that utility customers who benefit from the consumption of plant pay
8 for the cost of that plant, no more, no less. The application of the
9 latter principle also requires that the estimated cost of removal of
10 plant be recovered over its life.¹

11 Depreciation Systems, another widely accepted text states the concept in
12 this manner:

14 The matching principle specifies that all costs incurred to produce a
15 service should be matched against the revenue produced.
16 Estimated future costs of retiring of an asset currently in service
17 must be accrued and allocated as part of the current expenses²

18
19 Q. What treatment of net salvage do you propose?

20 A. I propose, consistent with the authoritative texts and the policy of the very large
21 majority of regulatory commissions, the traditional incorporation of net salvage in
22 the determination of depreciation. The traditional approach has been used by
23 this Commission in establishing the Companies' ratemaking allowances for
24 depreciation for decades. The traditional approach collects net salvage costs
25 ratably over the life of plant from the customers served by the plant. This
26 approach is equitable and conforms to the definition of depreciation as the loss in
27 service value, where service value is the difference between original cost and net
28 salvage.

1 Public Utility Depreciation Practices. Page 157. National Association of Regulatory Utility Commissioners. 1996.

2 Depreciation Systems, Wolf, Frank K. and W. Chester Fitch. Page 7. Iowa State University Press. 1994.

1 Q. You stated that it is more appropriate and equitable to recognize net salvage
2 costs during the life of the related plant. Please explain.

3 A. The net salvage cost of an item of plant is a part of its service value and,
4 therefore, it is a part of the item's cost of providing service. The cost of the item
5 providing service should be collected from the customers that receive the
6 service. Thus, an allocable portion of the net salvage cost should be recovered
7 each year from the customers receiving the value of the service rendered by the
8 item of plant in the same way that an allocable portion of the item's original cost
9 is recovered from such customers each year. This approach is equitable in that
10 customers are responsible for the costs of plant that provide service to them.
11 This is a sound ratemaking principle.

12 Q. Does Mr. King discuss in his testimony why he deviates from the traditional
13 manner of recovery to his new methodology?

14 A. Yes, he discusses his revised calculations of net salvage, however, he does not
15 discuss that this method will not recover the full service value. He reduces the
16 net salvage percent for five major accounts because he does not like the results
17 based on the combined historic net salvage statistics over the last 33 years and
18 judgment I have used. However, his proposed method for these five accounts
19 will not be consistent in theory with the rest of the accounts, so it seems quite
20 random in an attempt to reduce depreciation expense.

21 Q. What is the main basis for his reason for change for these five accounts?

22 A. Mr. King states the reason for adjusting the net salvage percents for these
23 accounts is because the comparison of the retirement to the cost of removal are
24 at different times. This is not a good reason for changing net salvage estimates

1 because reality is that service value equals the summation of the original cost
2 plus the end of life cost. These two costs, regardless of when they occur during
3 the life of the asset, need to be recovered. Therefore, Mr. King has created a
4 unique method for establishing a net salvage percent based on a unit
5 methodology that randomly creates a net salvage percent that does not establish
6 full recovery of the service value of each asset, but achieves his intent of
7 lowering depreciation rates. This is not sound ratemaking methodology that is
8 fair to ratepayer and utility.

9 Q. Why is Mr. King's concern of time comparison not reasonable?

10 A. The fact that the cost to remove an asset at the end of its life will not change.
11 The fact that history is the best indicator of the future that we have to establish
12 future indications will not change. Therefore, future net salvage cost and the
13 determination of an asset service value will not change in the future, so the
14 traditional method used in this proceeding and almost all other proceedings is the
15 best measure for net salvage.

16 Q. Mr. King, on page 10 of his testimony, continues his concern about the age and
17 value difference between retirement and removal. Can you explain why this is
18 not a reason for changing methodology?

19 A. Mr. King expresses his concern on lines 22 through 29 of page 10, about the
20 difference in time period of removal to original installation cost. He mentions
21 some hypothetical main retirements in 2004 being 50 years and the next year
22 possibly being 30 years. Let's use some actual ages of retirements to show that
23 the net salvage percents in the future will most likely become more negative
24 instead of creating ways to inappropriately under-recover by reducing net

1 salvage levels. We will use Account 376, Mains, as an example since it is the
2 largest depreciable account and hypothetically discussed by Mr. King. We know
3 from the historical data from 1955 through 2007 that the average age of
4 retirements has been 28.4 years. We also know the average age of retirements
5 from 1975 through 2007, which is the period of time we have performed our net
6 salvage analysis, has been 29.5 years. This average age is less than half the
7 average service life, 70 years, of the mains account. Therefore, for this account
8 to achieve an average service life of 70 years, then future retirements must be
9 considerably greater than 70 years and possibly as great as 2 times longer.
10 Thus, the cost to remove mains in the future will actually become a much higher
11 percentage of the dollars retired, regardless of the impact of inflation.

12 In addition, the utilization of 33 years of analyses, 1975-2007, takes into
13 account all the variability of the age differences from year to year. These
14 statistical analyses for mains are set forth on pages III-131 and III-132 of the
15 depreciation study. These pages set forth the actual company records for the
16 period, 1975-2007, as well as the three-year moving average and most recent
17 five-year average. The most recent five-year average results in a negative 45
18 percent net salvage and the overall period is negative 30 percent net salvage.
19 Thus, the negative 30% net salvage percent utilized by the Company for mains is
20 statistically supported.

21 Q. Can you comment on Mr. Buckner's testimony, related to depreciation expense?

22 A. Yes, I can. On page 56, lines 6 and 7 of Mr. Buckner's testimony, he states,
23 "accounting for depreciation expense is no more no less than the cost of the
24 asset". Once again we must emphasize the true depreciation expense including

1 not only the cost of the asset but cost to remove the asset at retirement.
2 Therefore, the true net book value is original cost minus the net salvage
3 component minus the accumulated depreciation. So, when the net salvage
4 percent is negative then depreciation expense is more than the cost of the asset.

5 Q. Does the Depreciation Study propose depreciation expense for assets with a net
6 book value of zero as implied by Mr. Buckner?

7 A. No, it does not. Mr. Buckner discusses this issue on page 55 of his testimony;
8 however, as set forth on pages III-4 and III-5 of the depreciation study, all
9 accounts with a net book value of zero have no depreciation expense.

10 The accounts with an accrual rate of zero for the existing plant in service
11 as of November 30, 2007 are 339.20, 339.60, 342.00 and 345.00. However, for
12 those accounts any new additions will need to be depreciated when placed in
13 service. Consequently, a depreciation rate for new asset in these accounts have
14 been established and presented on page III-5 of the depreciation study.

15 Q. Does this conclude your rebuttal testimony?

16 A. Yes it does.

17

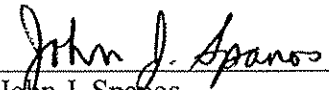
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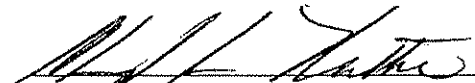
COUNTY OF CUMBERLAND

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared John J. Spanos, being by me first duly sworn deposed and said that:

He is appearing as a witness on behalf of Tennessee-American Water Company before the Tennessee Regulatory Authority, and if present before the Authority and duly sworn, his testimony would set forth in the annexed transcript consisting of 9 pages.


John J. Spanos

Sworn to and subscribed before me
this 12th day of August 2008.


Notary Public

My commission expires February 20, 2011

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Cheryl Ann Rutter, Notary Public
East Pennsboro Twp., Cumberland County
My Commission Expires Feb. 20, 2011
Member, Pennsylvania Association of Notaries