

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
Orange and Rockland Utilities, Inc.
Case 07-E-0949
December 2007

Prepared Testimony of:

Michael J. Rieder
Utility Engineer 3
Office of Electric, Gas, and
Water

State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

1 Q. Please state your name and business address.

2 A. Michael J. Rieder. Three Empire State Plaza,
3 Albany, New York 12223.

4 Q. By whom are you employed and in what capacity?

5 A. I am employed by the New York State Department
6 of Public Service (Department) as a Utility
7 Engineer 3 in the Rates and Tariffs Section of
8 the Office of Electricity and Environment.

9 Q. Please briefly state your educational background
10 and professional experience.

11 A. I graduated from Clarkson University with a
12 Bachelor of Science degree in Electrical
13 Engineering in 1990. I began my employment with
14 the Department in November 1991. While with the
15 Department, I have prepared, analyzed, and
16 reviewed reports and studies involving operating
17 revenues, sales forecasts, operation and
18 maintenance expenses, marginal and embedded
19 costs, mortality and net salvage, revenue
20 allocation, and rate design. My current duties
21 include engineering analyses of electric utility
22 rate, pricing, and tariff proposals.

23 Q. Have you previously provided testimony before
24 the New York State Public Service Commission?

1 A. Yes. I have testified before the Commission in
2 numerous proceedings on issues related to
3 electric utility sales, revenues, expenses, cost
4 studies, depreciation, revenue allocation, and
5 rate design.

6 Q. What is the purpose of your testimony in this
7 proceeding?

8 A. My testimony will address Orange and Rockland
9 Utilities, Inc.'s (Orange and Rockland or the
10 Company) selection of average service lives, net
11 salvage factors, and h-curves for purposes of
12 calculating annual depreciation expense and the
13 computed reserve for depreciation.

14 Q. In your testimony, will you refer to, or
15 otherwise rely upon, any information produced
16 during the discovery phase of this proceeding?

17 A. Yes. I have relied upon and will refer to
18 Orange and Rockland's response to Staff
19 Information Request No. 100. I am submitting
20 this response as Exhibit ___(MJR-1).

21 Q. Please briefly summarize your recommendations
22 regarding depreciation.

23 A. Based on my proposed depreciation factors, I
24 recommend that the Company's proposed \$457,261

1 increase to its annual provision for deprecation
2 be decreased by \$599,739, resulting in an
3 overall \$142,478 net decrease in its annual
4 provision for depreciation. In addition, the
5 theoretical reserve for Common Plant
6 depreciation will have a surplus of \$11.4
7 million, or 20.6%. I recommend this surplus be
8 amortized over five years, rather than the 15
9 years proposed by the Company. My proposed 5-
10 year amortization equates to an annual \$2.28
11 million decrease in depreciation expense
12 compared to the Company's proposed annual
13 decrease of \$760,000.

14 Q. Do the expense adjustments you have just
15 summarized represent all of Staff's rate year
16 changes to the Company's depreciation expense?

17 A. No. The above amounts represent the changes in
18 depreciation expense at a single point in time,
19 December 31, 2006, but do not reflect changes in
20 forecasted plant balances or the allocation of
21 the common plant reserve variance that would
22 apply to the rate year. The total impact of
23 Staff's proposed depreciation expense forecast
24 for the rate year is included in the Staff

1 Accounting Panel's testimony.

2 Q. What is the purpose of depreciation?

3 A. As sanctioned by the National Association of
4 Regulatory Utility Commissioners (NARUC) and
5 noted in the Uniform System of Accounts for
6 Class A and Class B Electric Utilities, 1958,
7 rev., 1962: "[d]epreciation, as applied to
8 depreciable utility plant, means the loss in
9 service value not restored by current
10 maintenance, incurred in connection with the
11 consumption or prospective retirement of utility
12 plant in the course of service from causes which
13 are known to be in current operation and against
14 which the utility is not protected by insurance.
15 Among the causes to be given consideration are
16 wear and tear, decay, action of the elements,
17 inadequacy, obsolescence, changes in the art,
18 changes in demand, and requirements of public
19 authorities." Depreciation accounting is the
20 process of charging this loss of service value
21 to the customers over the property's useful
22 life. Regulatory depreciation differs in intent
23 from tax depreciation since, for the former, a
24 return is provided on the as yet undepreciated

1 portion of the investment.

2 Q. Please summarize the Company's proposal
3 regarding depreciation.

4 A. Company Witness Hutcheson proposes to change the
5 average service lives of twelve of the Company's
6 electric primary plant accounts or sub-accounts;
7 eight toward shorter lives and four toward
8 longer lives. He also proposes higher negative
9 net salvage factors for the majority of the
10 Company's primary plant accounts or sub-
11 accounts. Shortening service lives and
12 increasing negative net salvage factors both
13 increase the annual depreciation expense. The
14 cumulative effect of Company Witness Hutcheson's
15 proposed changes increases the Company's annual
16 depreciation expense by approximately \$457,261.

17 Q. Have you prepared an exhibit for this proceeding
18 that summarizes your proposed changes?

19 A. Yes. I have prepared and am sponsoring Exhibit
20 ___(MJR-2) titled "New York State Department of
21 Public Service; Orange and Rockland Utilities,
22 Inc. - Case 07-E-0949; Staff Proposed
23 Depreciation Rate Changes for Electric and
24 Common Utility Plant." This exhibit summarizes

1 for each electric and common plant account the
2 average service lives and net salvage factors
3 currently employed by the Company, proposed by
4 the Company, and as modified in this testimony,
5 and the resulting annual depreciation expense.

6 Q. What effect do your proposed changes to average
7 service lives and net salvage factors have on
8 the Company's annual depreciation expense?

9 A. The proposed changes herein decrease the
10 Company's proposed \$27.4 million total provision
11 for annual depreciation expense by approximately
12 \$0.6 million.

13 Q. Do you agree with Company Witness Hutcheson's
14 proposed changes to the existing average service
15 lives?

16 A. Of the 12 plant accounts for which the Company
17 proposes shorter lives, I agree with all but
18 one, Account 353000 - Station Equipment. Of the
19 22 accounts that the Company is proposing longer
20 lives, I agree with the Company's proposed
21 longer lives with the exception of two accounts,
22 Account 355000 - Poles and Fixtures - Wood, and,
23 Account 355100 - Poles and Fixtures - Steel. Of
24 the remaining accounts for which the Company

1 proposes no change to the current average
2 service lives, I am proposing to extend the
3 average service lives of five accounts.

4 Q. Please describe how you arrived at your
5 conclusions.

6 A. I began with the summarized property mortality
7 study provided in Company Exhibit ___(E-10),
8 Schedule 2. This exhibit is described as
9 "computer generated average service lives,
10 equivalent h-curves, and other statistical data
11 indicated by the rolling and shrinking band
12 analysis of the Company's mortality experience
13 with respect to Electric and Common Utility
14 Plant from 1952, or the earliest available date,
15 through 2004" as stated on page 9 of Company
16 Witness Hutcheson's testimony. The data is
17 organized into various groupings referred to as
18 rolling or shrinking bands. These retirement
19 bands are groups of years over which the
20 retirement experience is analyzed. Rolling
21 bands used in this study are retirement bands of
22 constant 10-year width (e.g., 1993-2002, 1994-
23 2003, 1995-2004). Shrinking bands are
24 retirement bands that initially aggregate all

1 retirement years and then subtract one year at a
2 time, beginning with the earliest year, until a
3 one-year retirement band is developed.

4 Normally, as the width of the shrinking
5 retirement band increases, the pattern exhibited
6 by the observed mortality data becomes more
7 uniform, i.e., the vintage variations are
8 smoothed out.

9 Q. What factors do you consider when determining
10 the most appropriate average service life?

11 A. The "degree of best fit" is an important factor
12 to consider when determining the most
13 appropriate average service life for a plant
14 account. Company Exhibit ___(E-10), Schedule 2,
15 contains a column labeled "Fit Index." The Fit
16 Index is a measure of the test of fit in the
17 least squares' fitting process. The degree of
18 best fit is the column with the lowest fit
19 index. This degree statistically contains the
20 most mathematically reliable indications of
21 average service lives. I also consider trends
22 within the rolling and shrinking bands, as well
23 as the results of the most recent rolling bands
24 and widest shrinking bands. When the fit

1 indices are not materially different, I compare
2 the results and trends of those degrees to
3 formulate an opinion of the most appropriate
4 average service life.

5 Q. Did you rely on any other documents or studies
6 to formulate your opinions regarding average
7 service lives?

8 A. Yes. I also relied on the workpapers entitled
9 Orange & Rockland - Electric ASL Analysis based
10 on 2004 Mortality, supplied by Company Witness
11 Hutcheson, that contain his analysis,
12 observations, and conclusions with respect to
13 the average service lives for the plant accounts
14 based on the 2004 Plant Mortality Studies.

15 Q. You stated that of the 12 plant accounts for
16 which Company Witness Hutcheson proposes shorter
17 lives, you agree with all but one of his
18 proposed lives. Please explain the account with
19 which you disagree.

20 A. Company Witness Hutcheson proposes that the
21 average service life for Account 353000 -
22 Station Equipment, be lowered from 45 years to
23 35 years. Based on the property mortality study
24 results, I agree that the average service life

1 for this account should be shortened, but only
2 by 5 years and not by 10 years as proposed. The
3 most recent 1st degree rolling bands have all but
4 one band fitting and shows lives ranging between
5 35 years and 59 years with a slight downward
6 trend. However, all but six of the 1st degree
7 rolling bands are in excess of my proposed 40
8 years. The shrinking bands show the 1st degree
9 as best fit with all bands fitting and the 2nd
10 degree as not materially different. The widest
11 bands for these degrees are 42 and 41 years,
12 respectively, with relatively flat trends.
13 These study results support an average service
14 life of 40 years, not 35 years as proposed by
15 the Company.

16 Q. Of the 22 plant accounts that Company Witness
17 Hutcheson proposes longer lives, you agree with
18 all but two of his proposed lives. Please
19 explain the accounts with which you disagree.

20 A. Company Witness Hutcheson proposes that the
21 average service lives for Account 355000 - Poles
22 and Fixtures - Wood, and, Account 355100 - Poles
23 and Fixtures - Steel, be extended from 45 years
24 to 50 years. The average service lives for

1 these accounts are derived from the results of a
2 single study that combines the retirement data
3 for both plant accounts. Based on the study
4 results, I agree the average service lives
5 should be extended, but by 10 years and not by 5
6 years as proposed by the Company. For the
7 rolling bands, all three degrees have similar
8 fits, with the most recent 1st degree having
9 lives in excess of 90 years. The most recent 2nd
10 degree rolling bands range between 48 and 70
11 years and the most recent 3rd degree rolling
12 bands range between 48 and 64 years. The
13 shrinking bands show the 3rd degree as best fit
14 and the 2nd as not materially different. The 3rd
15 degree widest band is at 55 years with a
16 slightly increasing trend until the most recent
17 band. However, all bands are at or over my
18 proposed 55 years. The 2nd degree widest band is
19 at 58 years and also trends toward slightly
20 longer lives. Based on these study results, a
21 55-year average service life for Accounts 355000
22 and 355100 is appropriate.

23 Q. Turning now to the accounts for which the
24 Company proposes maintaining the current average

1 service lives, please explain the first account
2 for which you propose to increase the average
3 service life.

4 A. I propose the average service life for Account
5 352000 - Structures and Improvements, be
6 increased from 60 years to 65 years. Rolling
7 bands indicate the 1st degree as best fit with
8 most recent bands ranging from 65 years to 73
9 years. The 2nd degree is not materially
10 different, with the most recent bands ranging
11 from 62 years to 70 years. The shrinking bands
12 indicate a slight trend toward shorter service
13 lives, with the 1st degree being the best fit and
14 not materially different than the 2nd degree.
15 The 1st degree widest band is at 81 years and all
16 but four bands are over my proposed 65 years.
17 The 2nd degree widest band is 75 years, with all
18 but six bands over 65 years. Again, based on
19 the study results, an average service life of 65
20 years is appropriate for this account.

21 Q. Please explain the other accounts for which you
22 are proposing an average service life increase.

23 A. I propose the average service lives for Account
24 368100 - Line Transformers - Overhead, Account

1 368200 - Line Transformers - Overhead Installs,
2 Account 368300 - Line Transformers -
3 Underground, and Account 368400 - Line
4 Transformers - Underground Installs, be
5 increased from 35 years to 40 years. Similar to
6 the Poles and Fixtures accounts, the Line
7 Transformer and Installs accounts have average
8 service lives derived from a single study that
9 combines the retirement data of the four plant
10 accounts.

11 Q. Please continue.

12 A. For this group of accounts, the most recent 1st
13 degree rolling bands range between 40 years and
14 58 years and have a trend toward longer lives.
15 The 2nd degree most recent rolling bands range
16 between 36 years and 55 years, with three bands
17 not fitting. The shrinking bands indicate the
18 1st degree is best fit by default and its widest
19 band is at 43 years. This degree has a slight
20 trend toward increasing lives until the most
21 recent five bands, however all but five of the
22 most recent bands show average service lives in
23 excess of my proposed 40-year life. Thus, based
24 on the study results, a 40-year average service

1 life for these accounts is appropriate.

2 Q. Are you proposing any changes to the h-curve
3 selections or net salvage factors proposed by
4 Company Witness Hutcheson?

5 A. No, I am not. I reviewed the proposed h-curves
6 and net salvage factors and concur with the
7 Company's selections.

8 Q. Please describe the cumulative effect your
9 proposed changes would have on the computed
10 accumulated reserve for depreciation?

11 A. My proposed changes reduce the Company's
12 proposed Electric Plant computed reserve surplus
13 by \$23.6 million. The resulting surplus is \$2.9
14 million and the reserve variation percentage is
15 1.34%. The affect of my proposed changes
16 increase the Company's proposed Common Plant
17 computed reserve surplus by \$0.5 million. The
18 resulting surplus is \$11.4 million and the
19 reserve variation percentage is 20.6%. Because
20 the resulting reserve variation is outside a
21 plus or minus 10% bandwidth, I propose that the
22 surplus be recovered from customers over a five-
23 year period, rather than over fifteen years as
24 proposed by the Company.

1 Q. Why are you proposing a five-year amortization?

2 A. Using a five-year amortization lessens the
3 overall rate impact of the Company's proposed
4 filing and coincides with the amortization
5 period of other (deferred) costs, such as
6 pension and other employee benefit costs and
7 environmental site remediation costs, as
8 addressed in the testimony of the Staff
9 Accounting Panel.

10 Q. Does this conclude your testimony?

11 A. Yes, it does.