STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Orange and Rockland Utilities, Inc. for Gas Service	Case 08-G-1398

DIRECT TESTIMONY AND

EXHIBIT

OF

TARIQ N. NIAZI

Dated: March 27, 2009
       Albany, New York

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Table of Contents

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

2   A.   Tariq N. Niazi, Acting Director of the Utility Intervention Bureau, New York

3   State Consumer Protection Board ("CPB"), Suite 2101, 5 Empire State

4   Plaza, Albany, New York 12223.

5

6   Q.   Mr. Niazi, please summarize your background and experience.

7   A.   I passed my candidacy examination, completed all required course work and

8   passed all comprehensive examinations in the Doctoral Program in Managerial

9   Economics at Rensselaer Polytechnic Institute. I have a Master's Degree in

10   Economics from the State University of New York at Albany. I also received a

11   Master's Degree in Public Administration from Punjab University in Pakistan

12   and a Bachelor's Degree in Economics and Political Science at Forman

13   Christian College in Pakistan.

14   I have been employed by the CPB since March 1981, first as an

15   economic consultant and then as a rate analyst. Later, I was promoted to the

16   position of Principal Economist. I served as Chief Economist for the CPB from

17   October 1990 to September 2008 and worked on numerous issues in electric,

18   gas, telephone and water proceedings. I was appointed to my present position

19   in October 2008. As acting Director of Utility Intervention, I am responsible for

20   all aspects of advocacy regarding the regulation of utilities on behalf of New

21   York consumers.

1　　　　　　I serve as the CPB's representative at the New York Independent

2　　System Operator ("NYISO"). The CPB has been designated by the NYISO as

3　　the statewide consumer advocate and is a formal voting member of the

4　　NYISO's decision making committees. For several years, I served on the New

5　　York State Energy Research and Development Authority's System Benefit

6　　Advisory Group and the Public Service Commission's ("PSC" or "Commission")

7　　Natural Gas Reliability group. I am also a member of the recently formed

8　　PSC's Evaluation Advisory Group. Additionally, I am an Adjunct Lecturer of

9　　Economics at the College of Saint Rose in Albany, New York.

10

11　Q.　Have you previously testified before the Commission?

12　A.　Yes, in numerous proceedings.

13

14　Q.　What is the purpose of your testimony?

15　A.　I determine the fair rate of return that Orange and Rockland Utilities, Inc.

16　　("O&R" or the "Company") should be permitted to earn on its equity capital. I

17　　show that O&R's requested return on equity of 11.0% for its gas business is

18　　overstated and that the Company's current cost of equity is 10.0%. My

19　　testimony also responds to several assertions made by the Company in

20　　support of its return estimate and identifies several errors in its presentation.

21　Q.　Have you prepared an exhibit for your testimony?

1   A.   Yes. I am sponsoring Exhibit ___ (TNN), consisting of 2 schedules.

2

3   **RATE OF RETURN ON EQUITY**

4

5   Q.   What return on common equity is O&R requesting for its electric operations?

6   A.   O&R is requesting a return on common equity of 11.0%. Its recommendation

7   is based on averaging the results of multiple estimates from 3 different

8   methods: 1) an average of 11.7% using the discounted cash flow method

9   ("DCF") based on 4 different estimates ranging from 9.22% to 13.16%; 2) an

10   average of 10.8% using the capital asset pricing model ("CAPM") based on 2

11   estimates of 10.6% and 10.9%; and, 3) an average of 10.3% using the Risk

12   Premium method based on 2 estimates of 10.3% and 10.2%. In addition, O&R

13   is recommending a 71 basis points stay out premium for committing not to

14   seek further rate increases for 3 years. As I discuss in my testimony, O&R's

15   equity returns based on the DCF and CAPM methods should be rejected,

16   while equity returns based on the Risk Premium method should be discarded

17   as the use of this method has been repeatedly rejected by the Commission.

18   Finally, a premium for an extended stay out, as I discuss later in my testimony,

19   should also be rejected at this time.

20

21   Q.   What is your recommended rate of return or capitalization rate for O&R?

22   A.   I recommend a total equity return of 10.0% for O&R. My equity cost estimate

3

1   is based on application of the DCF and CAPM methods to a proxy group of

2   electric and combination electric and gas companies with investment grade

3   debt ratings by Moody's and Standard & Poor's ("S&P"). This rating criterion is

4   different from the "A/A" rated proxy group for combination electric and gas

5   companies reflected in the Recommended Decision in the Generic Finance

6   Case (91-M-0509). As explained below, this change in the rating standard is

7   appropriate and necessary to arrive at a proxy group of sufficient size to obtain

8   reliable results.   In other respects, my approach is consistent with the

9   Recommended Decision in the Generic Finance Case and numerous other

10   decisions by the Commission, including several in the last 2 years.

11   The DCF approach applied to the proxy group results in a median

12   equity cost estimate of 10.16%. The CAPM approach applied to the same

13   proxy group produces an equity cost of 10.56% for the traditional CAPM and

14   11.22% for the zero-beta CAPM. The average of the 2 CAPM methods results

15   in an equity return of 10.89 %. The CAPM analysis is based on a 13.2%

16   market return, a .73 proxy group beta, a risk free rate of 3.41% and a risk

17   premium of 9.79%. Applying weightings of 2/3 to the median DCF result and

18   1/3 to the average of the CAPM results, in accordance with the Recommended

19   Decision in the Generic Finance case and the Commission's decision in

20   several recent cases (See most recently, Case 05-E-1222, New York State

21   Electric & Gas Corporation-Rates, Order Adopting Recommended Decision

4

1   with Modifications (issued August 23, 2006); Cases 02-E-0198 and 02-G-

2   0199, <u>Rochester Gas and Electric Corporation-Rates</u>, Order Adopting

3   Recommended Decision with Modifications, (issued March 7, 2003), p. 72;

4   and, Case 07-E-0523, <u>Consolidated Edison Company of New York, Inc.-</u>

5   <u>Rates</u>, Order Establishing Rates for Electric Service (issued March 25,

6   2008), I arrive at an equity return estimate of 10.4%. After applying a credit

7   quality adjustment of 47 basis points and an issuance allowance of 5 basis

8   points, my recommended equity return for O&R's gas operations is 9.98% or

9   10.0% rounded.

10

11   **A.   <u>Proxy Group</u>**

12

13   Q.   How did you select the companies for inclusion in the proxy group for your

14   analysis?

15   A.   As recommended in the Generic Finance case and following Commission

16   practice, I developed a proxy group of gas and electric companies, since O&R

17   is a combined gas and electric company. I used the following criteria in

18   selecting the combined gas and electric proxy group: 1) each company must

19   be listed by <u>Value Line</u> as an electric utility company composed of electric or

20   combination electric and gas distribution companies; 2) each company must

21   have investment grade debt rated by Moody's and Standard & Poor's; 3) over

22   70% of each company's total revenues must be derived from regulated utility

1   operations; and, 4) the company should not be involved in merger/acquisition

2   activity.

3   Based on the stated criteria, I started the selection of the proxy group by

4   looking at all 55 electric and combination electric and gas companies listed by

5   Value Line. I used the latest issues of the Value Line Investment Survey dated

6   November 28, 2008, December 26, 2008, and February 6, 2009, listing electric

7   utility companies in the Eastern, Central and Western states, respectively. In

8   step 2, I discarded any company that was rated below investment grade by

9   either Moody's or Standard & Poor's. As a result of this screen, 8 companies

10   rated below investment grade were discarded, leaving 47 companies in the

11   proxy group. Next, I reviewed the level of regulated operations of the 47

12   companies with an investment grade debt rating in the proxy group, excluding

13   companies with less than 70% of total annual revenues derived from regulated

14   utility operations. As a result of these criteria, an additional 11 companies

15   were excluded from the proxy group, leaving 36 companies. I further

16   discarded 3 companies from the proxy group. These were El Paso Electric, as

17   it is not paying any dividends; ITC Holding Corp., as it is a transmission-only

18   electric company; and, UIL Holding Corp, as its debt is rated only by Moody's

19   and not Standard & Poor's. After excluding companies that did not meet the

20   criteria for inclusion in the proxy group listed above, the proxy group I have

21   used for my analysis is comprised of 33 companies as shown in Exhibit__

1   (TNN-1), Schedule 1.

2

3   Q.   Why did you not follow the criteria established in the Generic Finance Case for

4   the selection of the proxy group?

5   A.   It has become virtually impossible to follow the criteria for selecting proxy

6   groups established in the Generic Finance Case because there is not a large

7   enough sample on which to establish a reliable estimate. Since the date of the

8   issuance of the Return on Equity Consensus Document, which was prepared

9   by Signatory Members of the Electric and Gas Industry Group that included the

10   Department of Public Service and all New York utilities including Consolidated

11   Edison (dated June 2, 1993) and the Recommended Decision in the Generic

12   Finance Case (dated July 19, 1994), significant changes have occurred in the

13   electric industry in terms of debt ratings and the level of regulated utility

14   operations. When the Return on Equity Consensus Document was issued,

15   there were 33 electric and combination electric and gas companies that were

16   rated "A/A" by Moody's and Standard & Poor's. That number has now

17   dwindled to approximately 5 companies, 1 of which has regulated revenues of

18   less than 70% of total revenues. In other words, only 4 companies would

19   make the proxy group based on "A/A" rating as established in the Generic

20   Finance Case. That is not a large enough sample on which to establish a

21   reliable estimate of the cost of equity. In Case 07-E-0523, a recent

1   Consolidated Edison Company of New York, Inc. proceeding, the Judges

2   made the following observation (Recommended Decision, p. 135):

3   With respect to the use of proxy group results, it has become
4   increasingly difficult to find representative firms, in sufficient
5   numbers, for the electric combination and the natural gas utility
6   companies that operate in New York.
7   *   *   *
8   As long as the Generic Finance Case approach can be
9   sustained, we do not recommend that the Commission revert to
10   the approach that it previously used that relied predominantly on
11   the market data available for the company it was addressing in a
12   particular rate proceeding.
13

14   Q.   Did the Generic Finance Case establish a level of regulated operations for

15   inclusion in the electric proxy group?

16   A.   No. The only criteria established in the Generic Finance Case for the

17   combined electric and electric company proxy group was that all companies

18   included must have senior debt rated in the "A" category by Moody's and

19   Standard & Poor's. (Return on Equity Consensus Decimal, at page 6)

20   Presumably, most electric utilities at that time had exclusively regulated

21   operations; hence, the level of revenues derived from regulated operations

22   was not an issue. However, the Generic Finance Case did address the issue

23   of regulated versus unregulated operations in regards to the establishment of

24   the gas proxy group composed of "pure play" gas distribution companies. It

25   required that over 96% of each company's total revenues must be derived

26   from gas utility operations.

1   The proxy group of 33 companies I used for my analysis has an

2   average of 86.88% of its revenues coming from regulated operations.

3

4 **B.   Discounted Cash Flow Model**

5

6 Q.   How did you arrive at your DCF equity return estimate for O&R?

7 A.   I applied a two-stage DCF growth model to the proxy group. This is the same

8   model that was developed in the Generic Finance Proceeding and was

9   adopted by the ALJs in their Recommended Decision. This model has been

10   consistently relied upon by the Commission for over a decade, and was used

11   for 2008 Consolidated Edison Case 07-E-0523. As shown in Exhibit__ (TNN),

12   Schedule 1, page 3 of 3, this resulted in a median equity return of 10.16% for

13   O&R.

14

15 Q.   Could you please briefly describe the DCF method that you applied?

16 A.   Yes. The DCF method is a market based approach that determines the return

17   on equity from the investor's perspective. The familiar DCF formula is:

18

19
$$P_0 = \frac{D_1}{k-g}$$
20

21

22   This fundamental equation states that a rational investor equates the

23   current market price (P_0) of a stock to the expected future returns from that

1   stock. Future returns from the stock are the expected stream of dividends

2   discounted at the market-required return (k), net of the effect of growth (g).

3   D_1 is the first year dividend.

4   Since the capitalization rate is not directly observable, the basic idea of

5   the DCF approach is to derive the cost of equity from the observed share price

6   and an estimate of investor expected future dividends. This is based on the

7   intuitive concept that dividends plus capital appreciation reflect the investor's

8   total expected return.

9   The DCF formula can be rewritten by solving the above equation for the
10
11   cost of equity (k).
12
13
$$k = D_1/P_0 + g$$
14
15   In terms of the rewritten DCF formula, the cost of equity (k) is equal to the sum

16   of the expected dividend yield (D_1/P_0) and the expected growth rate of future

17   dividends (g).

18

19   Q.   What is the first component of the DCF formulation [(k = D_1/P_0 + g)]?

20   A.   The first component of the DCF formulation is the expected dividend yield

21   (D_1/P_0). It is the quotient of the expected future dividends and the current

22   stock price. A stock's dividend yield, in comparison with the dividend yield of

23   other stocks, indicates whether it is an income or a growth asset. For

1   example, bonds generally have high yields and low growth, and are hence

2   considered income assets. Conversely, common stocks of growing firms have

3   low yields and high growth, and are generally considered growth assets.

4

5   Q.   What is the growth term (g) in the standard DCF formula?

6   A.   The growth term in the DCF formula represents the growth in the value of the

7   firm's common stock as reflected through dividend and stock price increases.

8   The DCF approach assumes that the firm is operating in a "steady state." If

9   the steady state holds, then the growth rates in earnings per share, dividends

10   per share and book value per share are the same, and are a product of the

11   retention ratio and the expected return on equity.

12   In reality, it is not possible to achieve a "true" steady state. Thus, book

13   value per share, dividends per share and earnings per share generally grow at

14   different rates that may all differ from the growth rate indicated by the retention

15   ratio and expected return on equity.

16

17   Q.   How did you estimate the two-stage proxy group DCF equity returns for O&R?

18   A.   I estimated the two-stage proxy group DCF equity return, relying on the model

19   used in the Generic Finance Proceeding by the Electric and Gas Industry

20   Group. The 6-month average prices for the companies in the proxy group are

21   the average of the monthly high and low closing price of each stock. I used

1   the period September 1, 2008 to February 28, 2009. The other data, including

2   dividends per share, earnings per share, book value per share and the shares

3   of common stock, are all taken from the November 28, 2008, December 26,

4   2008, and February 6 2009, issues of the Value Line Investment Survey. As

5   shown in Exhibit__ (TNN), Schedule 1, page 3 of 3, the median equity return

6   based on this method is 10.16%.

7

8   **C.   Capital Asset Pricing Model**

9   Q.   What were the results of your application of the CAPM methodology to

10   estimate O&R's equity return?

11   A.   I used both the traditional and the zero-beta approaches to compute the

12   CAPM equity returns for O&R. The traditional CAPM produced a required

13   return on equity of 10.56% and the zero-beta CAPM approach of an equity

14   return of 11.22%. The average of the 2 CAPM approaches resulted in an

15   equity return of 10.89%. Exhibit__ (TNN), Schedule 2 provides a detailed

16   explanation of the calculations used to determine the equity return under the

17   CAPM.

18

19   Q.   Have you used the same CAPM methodology that was adopted in the Generic

20   Finance Case?

21   A.   Yes. The only difference is that I used Merrill Lynch data to ascertain the

1   expected return rather than the historic data from Ibbotson Associates used in

2   the Generic Finance Case. Once again, the Commission adopted this change

3   from the Generic Finance methodology over a decade ago and has

4   consistently relied upon it. In Case 05-E-1222, the Commission said the

5   following:

6   As for the CAPM, NYSEG's reliance on the historic Ibbotson
7   data and a DCF of the S&P 500 to estimate the market return is
8   rejected. The historic Ibbotson data is inconsistent with more
9   recent forward-looking Ibbotson estimates and the S&P 500
10   DCF relies upon the single growth DCF model which the
11   Commission has not employed for over a decade.
12
13   Order Adopting Recommended Decision with Modifications, Issued and

14   Effective August 23, 2006, at 96.

15

16   Q.   Please briefly describe the CAPM approach for estimating equity

17   returns.

18   A.   The CAPM formally describes the trade-off between risk and required return

19   for securities. The equation below illustrates that the rate of return required by

20   investors (Rc) consists of a risk-free return (Rf), plus a premium compensating

21   investors for bearing the risk commensurate with the stock's market risk (Beta)

22   and the market price of risk (Rm - Rf). The risk premium varies from stock to

23   stock. The traditional CAPM formula is stated as:

24            $$Rc = Rf + Beta (Rm - Rf)$$

1   A basic premise underlying the CAPM is that there is less risk

2   associated with an investment in a relatively stable stock than in the stock of a

3   small speculative venture. As a result, investors in a speculative venture stock

4   will require higher returns than investors in a stable stock, because they are

5   assuming additional risk. The CAPM quantifies the additional return investors

6   require for accepting this higher risk.

7

8   Q.   Please describe Exhibit__ (TNN), Schedule 2.

9   A.   Exhibit__ (TNN), Schedule 2 consists of 2 pages. Page 1 shows the traditional

10   CAPM formula used to derive the required return for the proxy group, while

11   page 2 shows the zero-beta CAPM application. The required return is the sum

12   of the risk-free rate and the market-risk premium adjusted using the proxy

13   group average beta.

14

15 Q.   How did you determine the risk free rate, market return and beta used in this

16   analysis?

17 A.   To determine the risk-free rate, I used a 6-month average ending February 28,

18   2008, of 30-year and 10-year Treasury Bond Yields as reported by the Federal

19   Reserve Board. (Federal Reserve Statistical Release, Historical Data) That

20   average is 3.41%.

21

1   The beta of 0.73 used to adjust the market risk-premium was derived

2   from the proxy group as the average of the individual company betas as

3   reported by <u>Value Line</u>. These are the same 33 electric and combination

4   electric and gas proxy group companies used for the DCF analysis.

5   The market return of 13.2% I used is based on the March 9, 2009, issue

6   of Merrill Lynch <u>Quantitative Profiles - Monthly Insights for Equity</u>

7   <u>Management</u>. The 13.2% estimate is the implied return for a portfolio of 1,202

8   firms.

9   The risk premium was derived by subtracting the risk-free rate of 3.41%

10   from the market return of 13.2%, resulting in a risk premium of 8.99%.

11   Incorporating all variables in the respective formulas results in a

12   required return of 10.56% for the traditional CAPM approach and 11.22% for

13   the zero-beta CAPM approach, as shown in Exhibit__ (TNN), Schedule 2,

14   page 1 and 2 respectively. The average of the 2 CAPM approaches results in

15   an equity estimate of 10.89% ((10.56% + 11.22%)/2).

16

17   **D.   Overall Recommendation**

18   Q.   What is your estimate of equity cost for O&R?

19   A.   I estimated the cost of equity by applying the 2/3 DCF – 1/3 CAPM weighting

20   consistently used by the Commission and also recommended by the Judges in

21   the Generic Finance case. My median DCF estimate is 10.16% and my

1　　average CAPM estimate is 10.89%. With the DCF estimate given 2/3 weight

2　　and the CAPM estimate given 1/3 weight, the resulting return before any

3　　adjustment is 10.40%.

4

5　Q.　Did you make any adjustments to the estimated equity return for O&R?

6　A.　Yes. I adjusted the estimated return of 10.40% for credit quality. O&R is rated

7　　A- by Standard & Poor's and A2 by Moody's. The median bond ratings of the

8　　proxy groups I have used are Baa2 by Moody's and BBB by Standard &

9　　Poor's, both in the middle of the "B" rating category. To account for the

10　　differences in the bond ratings of the proxy group and O&R, I looked at the

11　　difference in A-rated and Baa/BBB-rated long term utility bond yields. Over the

12　　one-year period from March 2008 to February 2009, A-rated utility bond yields

13　　averaged 6.30%, while Baa/BBB-rated utility bond yields over the same period

14　　averaged 6.76%.

15　　　　The 46 basis point spread between A-rated and Baa/BBB-rated bond

16　　yields reflects the difference in the cost of debt. As discussed in the Generic

17　　Finance Case, this spread should be increased to reflect the fact that the

18　　change in the cost of equity is greater than the change in the cost of debt.

19　　(Return on Equity Consensus Document, p. 13.) In order to make that

20　　adjustment, I calculated the ratio of the proxy group equity cost (10.4%) to its

21　　cost of debt (6.76%) that resulted in a ratio of 1.5385%. I then multiplied the

1   1.5385% ratio with the 46 basis point bond yield spread to arrive at a 71 basis

2   points equity adjustment.   I took two-thirds of the 71 basis points equity

3   adjustment (or 47 basis points) as the basis of my credit quality adjustment. I

4   did not use the entire equity adjustment recognizing that O&R is rated on the

5   low end of the "A" rated category by Standard & Poor's. Subtracting 47 basis

6   points from my earlier estimate of 10.4%, results in an equity return estimate

7   for O&R of 9.93% after applying the credit quality adjustment.

8

9   Q. Are you proposing an issuance adjustment for the costs of equity issuance

10   during the rate year?

11 A. Yes. Company Exhibit G-4, Schedule 10, shows that the company will be

12   issuing $10 million of equity during the rate year.   Based on the method

13   approved in the Generic Finance Case and relied upon by the Commission in

14   subsequent proceedings, I estimated an equity issuance allowance of 5 basis

15   points. Based on issuance costs of approximately 3.0% that is consistent with

16   previous company equity financing, I have estimated an issuance cost of $0.3

17   million. The amount of common equity reported by the Company in Exhibit G-

18   7, Schedule 2 is approximately $554 million. The $0.3 million issuance cost is

19   approximately 0.05% of the $554 million common equity balance.

20   Adding 5 basis points to my equity return estimate after credit quality

21   adjustment of 9.93% results in a final equity estimate of 9.98% or 10.0%

17

1   rounded. I recommend that the issuance adjustment be updated at the time of

2   the Commission's Order, based on the approved capital structure and the

3   actual amount of the equity issuance.

4

5   Q.   Have you made an adjustment to your equity return recommendation for a

6   multi-year rate plan?

7   A.   No, not at this time. I recommend that the Commission establish an equity

8   return for 1 year. The CPB is not willing to suggest a longer-term return rate

9   based on O&R's filed plan, which it does not support as presented, and cannot

10   speculate about the duration of any plan that may ultimately result from this

11   proceeding. Should a comprehensive and balanced multi-year rate plan be

12   addressed in negotiations, the CPB would be willing to discuss the

13   appropriateness of an adjustment to its calculated equity return for a multi-year

14   stay out.

15

16   Q.   Have you estimated the revenue impact of your 10.0% equity return

17   recommendation as compared to the Company's 11.0% equity allowance

18   request?

19   A.   Yes. Based on the Company's response to USG Interrogatory No. 2, an

20   increase/decrease of 100 basis points in equity return has a revenue

21   requirement impact of approximately $2.1 million. Since the difference

1   between my equity return estimate of 10.0% and O&R's request of 11.0% is

2   100 basis points, O&R's gas customers would save approximately $2.1 million

3   if my recommendation is adopted.

4

5 **E.**   **Analysis of O&R Equity Return Proposal**

6 Q.   Please briefly describe how the Company estimated its proposed cost of equity

7   of 11.0%.

8 A.   Company Witness Dr. Roger Morin recommends an equity return of 11.0%

9   based on the use of 3 different methods. The 3 methods he uses are DCF,

10   CAPM, and Risk Premium. As shown in Exhibits RAM-4, RAM-5, RAM-6 and

11   RAM-7, Dr. Morin estimated 4 separate DCF equity returns using different

12   combinations of proxy groups and growth rates. Dr. Morin's DCF calculations

13   resulted in equity returns ranging from 9.01% to 12.92%. He then added 21 to

14   24 basis points for flotation costs to his DCF estimates resulting in equity

15   return estimates ranging from 9.22% to 13.16%. Second, he used the CAPM

16   approach that produced equity returns of 10.3% and 10.6% for the traditional

17   and zero-beta CAPM, respectively. Dr. Morin then added 30 basis points for

18   flotation costs, bringing his CAPM estimates to 10.6% and 10.9% for the

19   traditional and zero-beta CAPM respectively. Third, Dr. Morin used 2 Risk

20   Premium analyses, resulting in estimates of 10.2% and 10.3% equity return.

21

1 Q. Do you agree with the Company's approach in estimating its equity return?

2 A. No. The Company's estimates should not be relied upon. Dr. Morin's selection

3   of proxy groups is arbitrary, flawed and inconsistent with the intent of the

4   Generic Finance Case. His DCF analysis is also not consistent with the

5   Recommended Decision in the Generic Finance Case, as well as the

6   numerous PSC decisions based on that methodology. This approach results

7   in estimates that are overstated. Similarly, the inputs to Dr. Morin's CAPM

8   estimates should not be relied upon, as I discuss later in my testimony, even

9   though his average CAPM estimate of 10.8% is relatively close to my average

10   CAPM estimate of 10.89%. Finally, the use of the Risk Premium method was

11   rejected by the ALJs in the Generic Finance Case and has been repeatedly

12   rejected by the Commission.

13

14 Q. Please briefly describe how Dr. Morin selected his proxy groups.

15 A. Dr. Morin utilizes 2 different proxy groups, the first comprised of investment

16   grade, dividend paying companies designated as natural gas distribution

17   utilities by <u>Value Line</u>, and the second comprised of investment grade,

18   dividend paying companies designated as combination gas and electric utilities

19   by AUS Utility Reports and covered by Value Line. The natural gas distribution

20   based proxy group (Company Exhibit RAM-4 and RAM-5) includes 9

21   companies, all with a market value in excess of $500 million and at least 50%

1   of revenues derived from regulated gas operations. The AUS Utility Report

2   based proxy group of combination gas and electric utilities (Company Exhibit

3   RAM-6 and RAM-7) is comprised of 24 companies, all with at least 50% of

4   revenues derived from regulated operations. As described in his testimony,

5   Dr. Morin used the following criteria to establish his proxy groups: 1) utilities

6   must be investment grade; 2) utilities must pay dividends; 3) utilities must have

7   at least 50% of revenues derived from regulated operations; and, 4) utilities

8   should be covered by Value Line.

9

10   Q.   Please comment on Dr. Morin's selection of proxy groups.

11   A.   Dr. Morin's first proxy group comprised of only natural gas distribution utilities

12   should not be relied upon because O&R is a combination gas and electric

13   utility with significant electric operations. In the Generic Finance Case, it was

14   agreed that a proxy group of combination gas and electric companies would be

15   used for combined gas and electric utilities. The Generic Finance Case

16   required a proxy group comprised of only natural gas distribution companies

17   for pure gas only utilities.

18   With regards to the second proxy group comprised of combination

19   electric and gas companies, Dr. Morin does not explain why he starts his proxy

20   group selection with the companies listed in the AUS Utility Reports.

21   Moreover, he does not address the criteria used by AUS Utility Reports for

21

1   inclusion in their list. The selection of companies included in Dr. Morin's

2   second proxy group is completely arbitrary. It includes some combination

3   electric and gas utilities while excluding others without any proper basis. If Dr.

4   Morin had applied his own criteria to all the electric and combination electric

5   and gas utilities for which Value Line provides data, he would have included an

6   additional 21 combination electric and gas utilities to his second proxy group.

7

8   Q.   Are you suggesting that Dr. Morin should have included all the 21 companies

9   he left out of his second proxy group comprised of combination gas and

10   electric companies?

11   A.   Yes. Based on his own criteria, he should have included an additional 21

12   companies in his proxy group. All the companies that were left out of his proxy

13   groups meet his own criteria for inclusion in the proxy group; they all have

14   investment grade rating, they all have Value Line coverage and they all have

15   more than 50% revenues from regulated operations.

16

17   Q.   Going back to Dr. Morin's second proxy group comprised of combination gas

18   and electric companies; did you find other problems with this selection?

19   A.   Yes. There is another serious problem with the selection of his second proxy

20   group. Dr. Morin has included 5 companies that are rated below investment

21   grade directly violating his own criteria for inclusion in the proxy group. CMS

1   Energy Corporation, PNM Resources, Puget Energy Incorporated, Sierra

2   Pacific Resources (now NV Energy Incorporated) and UniSource Energy are

3   rated below investment grade by either or both Moody's or Standard & Poor's.

4   Additionally, Dr. Morin and I have used different criteria regarding the

5   level of revenues derived from regulated operations for inclusion in the proxy

6   group. I have used at least 70% of revenues from regulated operations as a

7   basis of inclusion in the proxy group while Dr. Morin has used 50%.

8

9   Q.   What is your conclusion regarding Dr. Morin's proxy group selection?

10   A.   As shown above, the selection of Dr. Morin's proxy groups is arbitrary. Instead

11   of establishing a selection criteria and then applying it across the electric and

12   gas utility industry, he started with a predetermined list of companies used by

13   AUS Utility Reports that excluded numerous companies that should have been

14   included based on his own criteria of being investment grade, having Value

15   Line coverage, and meeting a threshold for revenues from regulated

16   operations. In contrast, the process established in the Generic Finance Case

17   and used by the CPB is based on the logic of starting with all electric and

18   combination electric and gas utilities that are covered by Value Line and then

19   applying an agreed-upon criteria to all those companies to arrive at a

20   reasonable proxy group. There seems to be no rational basis for excluding

21   certain utilities from Dr. Morin's proxy group. For instance FPL Group, Inc.,

23

1   with relatively similar rating as O&R ("A2" by Moody's and "A" by S&P for FPL

2   Group, Inc. versus "A2" by Moody's and "A-"by S&P for O&R), was excluded

3   from both of Dr. Morin's proxy groups. Similarly, Southern Company, ALLETE

4   Incorporated and Vectren Corporation, which were A-rated by either Moody's

5   or Standard & Poor's and met Dr. Morin's other criteria, were excluded from his

6   proxy group. The only possible explanation for excluding these companies is

7   that they were not included in the initial list provided by AUS Utility Reports.

8   This begs the question as to the criteria used by AUS Utility Reports for

9   inclusion in their list. Since the formation of Dr. Morin's proxy groups are

10   completely arbitrary and lacking in logical basis, the application of DCF and

11   CAPM methods to these proxy groups leads to unreliable results.

12

13   Q.   Please briefly describe Dr. Morin's DCF analysis.

14   A.   Dr. Morin uses a single-stage model to perform 4 separate DCF analyses. He

15   uses 2 different proxy groups and 2 different estimates of growth rates to

16   perform these analyses.   His first proxy group, based on companies

17   designated as natural gas distribution companies by Value Line (natural gas

18   proxy group), is composed of 9 utilities, while his second proxy group based on

19   companies in the AUS Utility Reports (AUS proxy group) is composed of 24

20   companies. For both proxy groups, Dr. Morin estimates the DCF equity return

21   alternatively using Value Line estimates of earnings per share growth and

1   long-term earnings growth estimates developed by Zack's Investment

2   Research, Inc. (Zack's). For the natural gas proxy group, he estimates returns

3   of 9.22% and 11.07% for the Value Line and Zack-based growth rates

4   respectively. For the AUS proxy group, Dr. Morin estimates DCF equity

5   returns of 12.04% and 13.16% for the Value Line and Zack-based growth

6   rates, respectively.

7   For all his proxy groups, Dr. Morin computes the average proxy group

8   equity return. However, he discards the 13.16% average equity return for the

9   AUS proxy group based on Zack's growth rates, and, instead computes a

10   median return of 12.09%. Presumably, the 13.16 equity return was considered

11   too high even by Dr. Morin. Further, in computing the average DCF equity

12   return for the 4 proxy groups, Dr. Morin arbitrarily drops the lowest estimate of

13   9.22%. The average of his 3 remaining DCF equity cost estimates is 11.7%.

14

15   Q.   Please comment on the Company's DCF analysis.

16   A.   Dr. Morin's DCF analysis in this proceeding is similar to the analysis he

17   presented in Case 07-E-0523, the Consolidated Edison proceeding I referred

18   to earlier. As in that proceeding, he relies in this case on analysts' long-term

19   forecasts of earnings growth instead of expected dividend growth.

20   Alternatively applying Value Line and Zack's earnings growth forecasts to the

21   natural gas and AUS based proxy groups, Dr. Morin arrives at 4 different DCF

1　equity cost estimates. The Judges, in rejecting Dr. Morin's approach in Case

2　07-E-05223, said the following:

3　We do not find any need in this case to adopt any alternatives or
4　variants for the components [of] the DCF and the CAPM
5　methods. We believe that the Commission should adhere to the
6　calculation of these methods as specified in the Generic
7　Finance Case.

8
9　Case 07-E-0523, Recommended Decision, pp.134-135.

10

11　The Commission in upholding the Recommended Decision said the

12　following:

13　We find no merit in Con Edison's claim that the DCF method
14　and the Generic Finance Case approach are flawed and should
15　not be used without an upward adjustment applied to the
16　indicated equity return allowance.
17　　　　　*　　　　　　*　　　　　　*
18　We are satisfied that the DCF method remains a valid and
19　proper method in these circumstances and we are not inclined
20　to modify it for the reasons presented by Con Edison.

21
22　Case 07-E-0523, Order Establishing Rates for Electric Service, p.123.

23

24　Q.　Is Dr. Morin's DCF analysis consistent with that adopted in the Recommended

25　Decision in the Generic Finance Case?

26　A.　No. Dr. Morin's DCF analysis makes a major departure from the methodology

27　specified in the Generic Finance Proceeding. Dr. Morin rejects the use of the

28　two-stage DCF model as recommended in the Generic Finance Case and

29　consistently relied upon by the Commission and instead uses a single-stage,

1   DCF model. He discusses at length why he uses analysts' forecasts of growth

2   contained in Zack's and Value Line while rejecting other measures of growth

3   like sustainable growth. The question of whether to use a single-stage or two-

4   stage DCF model along with numerous other issues, many of which have been

5   raised by Dr. Morin, were discussed in great detail in the Generic Finance

6   Proceeding and a consensus methodology was agreed upon.   After

7   considering other methods, Dr. Stewart Myers of MIT concluded the following:

8   Dr. Myers concluded that if dividend growth is expected to vary
9   in the future, rather than remain constant, then the simplifying
10   assumption that underlies the constant growth DCF model does
11   not work. Hence, the single stage DCF model overestimates the
12   cost of equity if immediate and near term growth is temporarily
13   high, and underestimates the cost of equity if immediate and
14   near term growth is temporarily low.
15   *   *   *
16   The Myers Report concluded that for companies that have not
17   settled into steady state, there is no general rule for choosing
18   the most accurate growth rate forecasting method. He did note,
19   however, that the use of a two-stage DCF, or even a long form
20   variable growth dividend discounting model could do a better job
21   of capturing this type of situation than a single-stage model.
22   Therefore, errors in estimated investors' forecasts of future
23   growth are inevitable, and will occur even if all the DCF
24   method's assumptions are satisfied.
25
26   Return on Equity Consensus Document, issued June 2, 1993,
27   Appendix A at 3, 4.
28

29   Overall, all of Dr. Morin's DCF estimates are overstated and should be

30   rejected.

31   Q.   Please comment further on Dr. Morin's DCF approach.

27

1 A.   I have previously discussed in detail the problems with the formation of the

2   proxy groups used by Dr. Morin to estimate its cost equity. His first proxy

3   group comprised of natural gas distribution companies should not be relied

4   upon because O&R is a combination gas and electric company and as

5   decided in the Generic Finance Case, a natural gas distribution proxy group

6   should be used only for pure natural gas distribution companies. His second

7   AUS Utility Reports-based proxy group has numerous problems including 5

8   utilities that are rated below investment grade, which violates his own selection

9   criteria. Further, as discussed above, in computing the average DCF equity

10   return for his 4 proxy groups, Dr. Morin arbitrarily drops the lowest DCF proxy

11   group estimate. Including this estimate (9.22%) would reduce Dr. Morin's

12   average DCF return from 11.7% to 11.1%. This reduces his overall equity

13   return recommendation from 11.0% to 10.7%. In sum, it appears that Dr.

14   Morin's analysis is result driven rather than based on a logical criteria applied

15   uniformly throughout the analysis.

16

17 Q.   Please comment on Dr. Morin's flotation cost allowance.

18 A.   Dr. Morin has added 21 and 24 basis points flotation cost adjustment to his 4

19   DCF equity cost estimates and 30 basis points to his 2 CAPM equity cost

20   estimates. There are 2 problems with this approach. First, there is no reason

21   why Dr. Morin computes 2 different amounts for issuance costs, i.e., 21 and 24

1   basis points added to the DCF estimates and 30 basis points added to the

2   CAPM estimates. Second, issuance costs should be permitted when they are

3   incurred based on the amount of issuance and not on an on-going basis. The

4   Commission in Cases 02-E-0198 and 02-G-0199 said the following:

5   We agree with the Judge's recommendation to exclude a
6   separate adjustment for selling and issuance costs, because our
7   policy has been to allow recovery of such expenses when they
8   are incurred …
9.
10   Order issued March 7, 2003, p. 71.

11
12   I recommend that the Commission not allow a flotation cost adjustment

13   in the manner proposed by Dr. Morin.

14

15   Q.   Please briefly describe Dr. Morin's CAPM analysis.

16   A.   Dr. Morin estimates 2 sets of equity returns based on the traditional and zero-

17   beta CAPM approaches. For risk premium, he uses 7.4% as an average of an

18   Ibbotson Associates-based calculation and a DCF analysis applied to the

19   aggregate equity market using Value Line data. For the risk free rate, Dr.

20   Morin uses the U.S. Treasury 30-year bond yield of 4.2% from early November

21   2008. Finally, for beta, he uses .82, the average of the 2 proxy groups that he

22   has utilized for his DCF analysis. Based on these inputs, Dr. Morin computes

23   a traditional CAPM of 10.3% and an empirical or Zero-Beta CAPM of 10.6%.

24   He adds 30 basis points for flotation to these estimates to arrive at final

1   estimates of 10.6% and 10.9% for the traditional and zero-beta CAPM with an

2   average CAPM estimate of 10.8%.

3

4   Q.   Do you agree with Dr. Morin's CAPM analysis?

5   A.   No. Dr. Morin's risk premium of 7.4% is the average of a 7.1% Ibbotson

6   Associates and a 7.7% DCF derived risk premium. His first risk premium of

7   7.1% is taken from the Ibbotson Associates study, <u>Stocks, Bonds, Bills and</u>

8   <u>Inflation, 2008 Yearbook,</u> and is based on the spread between common stock

9   returns and the income component of returns on long-term government bonds.

10   Since risk premium is the difference between market return and the risk free

11   rate, Dr. Morin's assumed market return is 11.3% based on the risk free rate of

12   4.2% he used in his CAPM analysis...

13   I recommend that even though the risk premium derived from the

14   Ibbotson Associates study is below the market risk premium based on the

15   Merrill Lynch market return in this instance, that it not be relied upon. The

16   Commission in Case 95-G-1034, Central Hudson Gas & Electric Corporation,

17   said the following:

18   ...the Judge's market return calculation based on Merrill Lynch
19   estimate is a reasonable method of deriving a risk premium; and
20   it avoids the problems of stale data in the Ibbotson estimate, or
21   the circularity of the implied risk premium approach in relying on
22   other commissions' return allowances
23
24   Opinion No. 96-28, October 3, 1996, p. 14.

1   Q.   Are there other flaws in Dr. Morin's CAPM analysis?

2   A.   Yes.   Dr. Morin has not used the approach recommended in the Generic

3   Finance Case and relied upon by the Commission for computing the risk free

4   rate. The Generic Finance Case recommended an average of 10-year and

5   30-year Treasury bond yields over a 6-month period as the basis for

6   computing the risk-free rate. Dr. Morin used only the 30-year Treasury bond

7   yield based on a single observation in early November 2008 as the basis of his

8   risk free rate.   Ignoring the 10-year bond yield, instead of averaging the 2

9   estimates over a 6-month period, as recommended in the Generic Finance

10   Case, leads to an inflated estimate of the risk free rate. The average of the 10-

11   year and 30-year Treasury bond yields over the most recent 6-month period as

12   I discuss earlier in my testimony is 3.41%. Dr. Morin's estimate relying solely

13   on single observation of the 30-year bond yield is 79 basis points higher. I

14   recommend that the Commission reject his sole reliance on the 30-year bond

15   yield.

16

17   Q.   Please comment on the Risk Premium approach used by Dr. Morin.

18   A.   The Commission has repeatedly rejected the use of the Risk Premium

19   approach as used by Dr. Morin. In Cases 94-G-0885 and 93-G-0765, the

20   Commission referenced the Recommended Decision and rejected the risk

21   premium approach:

1   ... the Judge rejected two additional methods: the company's
2   risk premium approach (whose results he deemed too volatile),
3   and comparable earnings (presented by staff because it was
4   included in the generic finance case consensus proposal).

5
6   Opinion No. 95-16, National Fuel Gas Distribution Corporation-Rates

7   (issued September 15, 1995), page 44.

8
9   More recently, in Case 05-E-1222, the Recommended Decision that

10   was adopted by the Commission said the following:

11   To begin, we find that, to the extent that the Company had
12   departed from the generally accepted approach produced by the
13   Generic Finance Case, it has not advanced the consideration of
14   such matters in this proceeding. We recommend that very little
15   weight, if any, be given to NYSEG's risk premium analyses and
16   comparable earnings analysis that clearly depart from the
17   Generic Financing Case approach. We also recommend that the
18   Commission continue to use the DCF and CAPM methods as its
19   principal means to determine the allowed equity returns for the
20   utility companies it regulates.
21
22   Recommended Decision at 62, 63.
23

24   Q.   Does this conclude your testimony at this time?

25   A.   Yes.

EXHIBIT___(TNN)

SCHEDULES 1 and 2

ORANGE AND ROCKLAND UTILITIES, INC.

Two-Stage DCF Growth Model

(PROXY GROUP OF COMBINATION ELECRIC & GAS UTILITIES)

COMPANY NAME	BETA	6 MONTH PRICE *	Dividends Per Share				11-13 (=2012)	08/09	09/10	10/11	11/12
			2008	2009	2010	2011					
		(A)	(B)	(C)	(C')	(C'')	(D)	(D')	(D'')	(D''')	(D'''')
ALLETE, Inc.	0.75	34.63	1.72	1.76	1.81	1.85	1.90	1.74	1.78	1.83	1.88
Alliant Energy	0.70	29.38	1.40	1.50	1.63	1.77	1.92	1.45	1.56	1.70	1.84
Ameren Corporation	0.80	33.40	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54
American Elec Power Co., Inc.	0.75	32.37	1.64	1.66	1.74	1.82	1.90	1.65	1.70	1.78	1.86
Avista Corp.	0.70	18.99	0.69	0.78	0.89	1.01	1.15	0.74	0.83	0.95	1.08
Black Hills Corp.	0.80	26.39	1.40	1.42	1.45	1.47	1.50	1.41	1.43	1.46	1.49
Cleco Corporation	0.80	22.49	0.90	0.95	1.12	1.32	1.55	0.93	1.03	1.22	1.43
Consolidated Edison, Inc.	0.65	40.26	2.34	2.36	2.38	2.40	2.42	2.35	2.37	2.39	2.41
DPL Inc.	0.65	22.15	1.10	1.16	1.22	1.28	1.34	1.13	1.19	1.25	1.31
DTE Energy Company	0.70	35.77	2.12	2.18	2.30	2.42	2.55	2.15	2.24	2.36	2.49
Duke Energy Corporation	0.60	15.70	0.90	0.94	0.98	1.02	1.06	0.92	0.96	1.00	1.04
Edison International	0.80	33.87	1.23	1.25	1.30	1.35	1.40	1.24	1.27	1.32	1.37
Empire District Elec. Co.	0.75	18.18	1.28	1.28	1.32	1.36	1.40	1.28	1.30	1.34	1.38
Entergy Corp.	0.75	81.14	3.00	3.00	3.10	3.20	3.30	3.00	3.05	3.15	3.25
FirstEnery Corp.	0.85	54.41	2.25	2.45	2.64	2.84	3.05	2.35	2.54	2.74	2.94
FPL Group, Inc.	0.80	48.72	1.78	1.88	1.98	2.09	2.20	1.83	1.93	2.03	2.14
Great Plains Energy, Inc.	0.65	19.15	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Hawiian Electric Industries, Inc.	0.70	23.76	1.24	1.24	1.26	1.28	1.30	1.24	1.25	1.27	1.29
IDACORP, Inc.	0.80	28.23	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
MGE Energy, Inc.	0.70	32.88	1.43	1.45	1.47	1.48	1.50	1.44	1.46	1.47	1.49
Northeast Utilities	0.75	23.36	0.83	0.88	0.95	1.02	1.10	0.86	0.91	0.98	1.06
NSTAR	0.70	33.56	1.43	1.53	1.63	1.74	1.85	1.48	1.58	1.68	1.79
PG&E Corporation	0.65	37.23	1.56	1.68	1.79	1.91	2.04	1.62	1.74	1.85	1.98
Pinnacle West Capital Corp.	0.70	31.74	2.10	2.10	2.13	2.17	2.20	2.10	2.12	2.15	2.18
Portland General Electric Co.	0.65	19.70	0.97	1.01	1.07	1.13	1.20	0.99	1.04	1.10	1.17
Progress Energy	0.60	39.49	2.46	2.48	2.50	2.52	2.54	2.47	2.49	2.51	2.53
Sempra Energfy	0.95	44.50	1.37	1.60	1.72	1.86	2.00	1.49	1.66	1.79	1.93
Southern Company	0.55	35.19	1.66	1.73	1.82	1.91	2.00	1.70	1.77	1.86	1.95
Teco Energy, Inc.	0.75	12.93	0.80	0.82	0.85	0.87	0.90	0.81	0.83	0.86	0.89
Vectren Corporation	0.85	25.23	1.31	1.35	1.39	1.43	1.47	1.33	1.37	1.41	1.45
Westar Energy, Inc.	0.80	19.91	1.16	1.24	1.28	1.32	1.36	1.20	1.26	1.30	1.34
Wisconsin Energy Corp.	0.65	42.48	1.08	1.35	1.53	1.73	1.95	1.22	1.44	1.63	1.84
Xcel Energy	0.70	18.44	0.94	0.97	1.00	1.03	1.06	0.96	0.98	1.01	1.04

PROXY GROUP
SUMMARY STATISTICS

# of Companies	33	33	33	33	33	33	33	33	33	33	33
AVERAGE	0.73	31.38	1.50	1.56	1.62	1.70	1.77	1.53	1.59	1.66	1.73
STANDARD DEVIATION	0.08	13.15	0.56	0.55	0.61	0.63	0.58	0.60	0.61	0.62	0.64
MINIMUM	0.55	12.93	0.69	0.78	0.00	0.00	0.90	0.00	0.00	0.00	0.00
MAXIMUM	0.95	81.14	3.00	3.00	3.10	3.20	3.30	3.00	3.05	3.15	3.25

SOURCE: Value Line Investment Survey
November 28, 2008
December 26, 2008
February 6, 2009

* September 2008 to February 2009

COMPANY NAME	Earnings Per Share			BVPS			SHARES			DPS GROWTH 08-12	2012 RET RATIO
	2008	2009	11-13	2008	2009	11-13	2008	2009	11-13		
	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
ALLETE, Inc.	2.85	2.20	2.75	25.45	26.20	28.50	32.50	35.00	39.50	2.52%	30.91%
Alliant Energy	2.65	2.35	3.30	25.70	26.75	31.50	110.50	111.50	115.00	8.22%	41.82%
Ameren Corporation	2.90	3.20	3.75	31.45	32.10	35.50	213.00	216.00	223.00	0.00%	32.27%
American Elec Power Co., Inc.	2.95	3.20	3.75	27.05	28.65	34.25	404.00	409.00	419.00	3.75%	49.33%
Avista Corp.	1.45	1.50	1.75	18.25	19.00	21.00	55.00	56.00	57.50	13.62%	34.29%
Black Hills Corp.	0.45	2.05	2.50	31.95	32.95	35.50	38.50	38.75	39.50	1.74%	40.00%
Cleco Corporation	1.65	1.85	2.50	17.75	18.75	21.75	61.00	62.00	65.00	14.56%	38.00%
Consolidated Edison, Inc.	2.95	3.15	3.30	34.20	34.85	37.70	274.00	278.00	284.00	0.84%	26.67%
DPL Inc.	2.10	2.20	2.35	8.70	9.60	12.10	116.00	118.00	124.00	5.06%	42.98%
DTE Energy Company	2.80	3.30	3.75	37.00	38.10	41.75	163.00	163.00	163.00	4.73%	32.00%
Duke Energy Corporation	1.05	1.30	1.45	16.95	17.35	18.50	1267.00	1290.00	1300.00	4.18%	26.90%
Edison International	3.65	3.85	4.75	27.50	29.70	37.50	325.81	325.81	325.81	3.29%	70.53%
Empire District Elec. Co.	1.25	1.55	2.00	16.60	17.25	18.50	34.00	38.50	38.50	2.27%	30.00%
Entergy Corp.	6.65	7.20	8.00	43.15	45.95	60.75	189.00	182.00	182.00	2.41%	58.75%
FirstEnery Corp.	4.30	4.95	6.50	31.30	33.80	43.25	304.85	304.85	304.85	7.90%	53.08%
FPL Group, Inc.	3.95	4.15	5.00	27.85	30.10	37.50	410.00	412.00	418.00	5.44%	56.00%
Great Plains Energy, Inc.	1.30	1.50	1.75	20.60	20.45	20.75	119.00	131.00	137.00	0.00%	5.14%
Hawiian Electric Industries, Inc.	1.25	1.60	1.75	15.70	16.05	17.50	90.50	91.00	92.50	1.19%	25.71%
IDACORP, Inc.	2.25	2.25	2.65	27.80	28.85	32.15	45.60	47.00	51.50	0.00%	54.72%
MGE Energy, Inc.	2.45	2.50	2.75	19.80	20.65	21.05	23.00	23.00	25.00	1.20%	45.45%
Northeast Utilities	1.85	1.90	2.25	19.55	20.80	25.75	156.00	168.00	200.00	7.29%	51.11%
NSTAR	2.25	2.40	3.00	16.80	17.70	21.00	106.81	106.81	106.81	6.65%	38.33%
PG&E Corporation	3.60	3.20	4.00	26.05	27.80	34.25	358.50	362.00	383.00	6.94%	49.00%
Pinnacle West Capital Corp.	2.80	2.60	3.00	36.00	36.40	38.75	101.00	101.50	110.00	1.17%	26.67%
Portland General Electric Co.	1.50	1.85	2.25	21.55	22.10	24.75	62.60	74.00	79.00	5.46%	46.67%
Progress Energy	2.95	3.10	3.40	33.30	34.00	36.45	264.00	268.00	280.00	0.80%	25.29%
Sempra Energfy	3.95	4.15	6.00	33.05	35.70	45.25	243.00	243.00	230.00	9.92%	66.67%
Southern Company	2.27	2.45	3.00	17.20	18.35	21.50	777.00	793.00	815.00	4.77%	33.33%
Teco Energy, Inc.	0.85	1.40	1.75	9.55	10.15	12.50	213.00	214.00	217.00	2.99%	48.57%
Vectren Corporation	1.70	2.10	2.25	16.05	18.25	19.55	81.00	81.20	81.80	2.92%	34.67%
Westar Energy, Inc.	1.30	1.60	2.00	20.75	22.95	27.50	108.50	109.00	112.00	4.06%	32.00%
Wisconsin Energy Corp.	2.90	3.10	4.25	28.05	29.50	35.25	117.00	117.00	117.00	15.92%	54.12%
Xcel Energy	1.46	1.50	2.00	15.30	15.90	18.25	449.05	451.50	458.00	3.05%	47.00%

PROXY GROUP
SUMMARY STATISTICS

	2008	2009	11-13	2008	2009	11-13	2008	2009	11-13	08-12	RATIO
# of Companies	33	33	33	33	33	33	33	33	33	33	33
AVERAGE	2.43	2.64	3.20	24.18	25.35	29.33	221.63	224.89	230.13	4.69%	40.85%
STANDARD DEVIATION	1.21	1.21	1.47	8.15	8.45	10.61	242.99	246.71	249.54	4.06%	13.44%
MINIMUM	0.45	1.30	1.45	8.70	9.60	12.10	23.00	23.00	25.00	0.00%	5.14%
MAXIMUM	6.65	7.20	8.00	43.15	45.95	60.75	1267.00	1290.00	1300.00	15.92%	70.53%

COMPANY NAME	2012 AVE ROE	B*R	GROWTH IN SHARES	CURRENT MBR	S FACTOR	V FACTOR	SV FACTOR	SUSTAINABLE GROWTH RATE	LONG FORM ROE	SORTED
	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)
ALLETE, Inc.	9.78%	3.02%	5.00%	136.07%	6.80%	26.51%	1.80%	4.83%	9.56%	7.89%
Alliant Energy	10.76%	4.50%	1.00%	114.32%	1.15%	12.53%	0.14%	4.64%	10.07%	7.95%
Ameren Corporation	10.74%	3.47%	1.15%	106.20%	1.23%	5.84%	0.07%	3.54%	10.48%	8.04%
American Elec Power Co., Inc.	11.27%	5.56%	0.92%	119.67%	1.10%	16.43%	0.18%	5.74%	10.61%	8.11%
Avista Corp.	8.47%	2.90%	1.12%	104.05%	1.16%	3.90%	0.05%	2.95%	8.04%	8.27%
Black Hills Corp.	7.13%	2.85%	0.64%	82.60%	0.53%	-21.07%	-0.11%	2.74%	7.95%	8.35%
Cleco Corporation	11.78%	4.48%	1.60%	126.70%	2.03%	21.08%	0.43%	4.90%	10.28%	8.38%
Consolidated Edison, Inc.	8.87%	2.36%	0.90%	117.72%	1.06%	15.05%	0.16%	2.52%	8.11%	8.62%
DPL Inc.	20.17%	8.67%	1.68%	254.60%	4.28%	60.72%	2.60%	11.27%	15.61%	8.62%
DTE Energy Company	9.12%	2.92%	0.00%	96.68%	0.00%	-3.44%	0.00%	2.92%	9.25%	8.81%
Duke Energy Corporation	7.92%	2.13%	0.64%	92.63%	0.60%	-7.96%	-0.05%	2.08%	8.27%	9.07%
Edison International	13.16%	9.28%	0.00%	123.16%	0.00%	18.81%	0.00%	9.28%	12.41%	9.25%
Empire District Elec. Co.	10.94%	3.28%	3.16%	109.52%	3.46%	8.69%	0.30%	3.58%	10.43%	9.27%
Entergy Corp.	13.78%	8.10%	-0.94%	188.04%	-1.77%	46.82%	-0.83%	7.27%	10.53%	9.56%
FirstEnery Corp.	15.65%	8.30%	0.00%	173.83%	0.00%	42.47%	0.00%	8.30%	12.57%	9.68%
FPL Group, Inc.	13.82%	7.74%	0.48%	174.94%	0.85%	42.84%	0.36%	8.10%	11.60%	10.07%
Great Plains Energy, Inc.	8.45%	0.43%	3.58%	92.96%	3.33%	-7.57%	-0.25%	0.18%	8.81%	10.16%
Hawiian Electric Industries, Inc.	10.14%	2.61%	0.55%	151.34%	0.83%	33.92%	0.28%	2.89%	7.89%	10.23%
IDACORP, Inc.	8.39%	4.59%	3.09%	101.55%	3.14%	1.52%	0.05%	4.64%	8.38%	10.24%
MGE Energy, Inc.	13.11%	5.96%	2.11%	166.06%	3.50%	39.78%	1.39%	7.35%	11.06%	10.28%
Northeast Utilities	9.05%	4.62%	6.41%	119.49%	7.66%	16.31%	1.25%	5.87%	9.68%	10.43%
NSTAR	14.69%	5.63%	0.00%	199.76%	0.00%	49.94%	0.00%	5.63%	10.16%	10.48%
PG&E Corporation	12.08%	5.92%	1.67%	142.92%	2.38%	30.03%	0.72%	6.64%	11.01%	10.53%
Pinnacle West Capital Corp.	7.82%	2.09%	2.16%	88.17%	1.90%	-13.42%	-0.26%	1.83%	8.35%	10.61%
Portland General Electric Co.	9.26%	4.32%	5.99%	91.42%	5.48%	-9.39%	-0.51%	3.81%	9.07%	10.70%
Progress Energy	9.44%	2.39%	1.48%	118.59%	1.76%	15.67%	0.28%	2.66%	8.62%	11.01%
Sempra Energfy	13.78%	9.19%	-1.37%	134.64%	-1.84%	25.73%	-0.47%	8.72%	12.08%	11.06%
Southern Company	14.32%	4.77%	1.20%	204.59%	2.46%	51.12%	1.26%	6.03%	10.70%	11.60%
Teco Energy, Inc.	14.49%	7.04%	0.47%	135.39%	0.63%	26.14%	0.17%	7.20%	12.83%	12.08%
Vectren Corporation	11.64%	4.04%	0.25%	157.20%	0.39%	36.39%	0.14%	4.18%	9.27%	12.41%
Westar Energy, Inc.	7.49%	2.40%	0.80%	95.95%	0.76%	-4.22%	-0.03%	2.37%	8.62%	12.57%
Wisconsin Energy Corp.	12.41%	6.72%	0.00%	151.44%	0.00%	33.97%	0.00%	6.72%	10.23%	12.83%
Xcel Energy	11.21%	5.27%	0.49%	120.52%	0.60%	17.03%	0.10%	5.37%	10.24%	15.61%

| | | | | | | | | | MEDIAN | 10.16% |

PROXY GROUP
SUMMARY STATISTICS

# of Companies	33	33	33	33	33	33	33	33	34	34
AVERAGE	11.25%	4.77%	1.40%	133.11%	1.68%	19.16%	0.28%	5.05%	9.79%	10.09%
STANDARD DEVIATION	2.83%	2.30%	1.75%	38.94%	2.09%	20.54%	0.68%	2.47%	2.38%	1.67%
MINIMUM	7.13%	0.43%	-1.37%	82.60%	-1.84%	-21.07%	-0.83%	0.18%	0.00%	7.89%
MAXIMUM	20.17%	9.28%	6.41%	254.60%	7.66%	60.72%	2.60%	11.27%	15.61%	15.61%

ORANGE AND ROCKLAND UTILITIES, INC.

TRADITIONAL CAPM

Formula: $Rc = Rf + b (Rm - Rf)$

Where:

Rc = Required Return for the Company.

Rf = Risk Free Return = 3.41%, six-month average ending February 2009 of 30-Year and 10-Year Treasury Bond Yields, <u>Federal Reserve Statistical Release,</u> (Historical Data).

Rm = Market Return = 13.2%, <u>Quantitative Profiles-Monthly Insights for Equity Management, Merrill Lynch,</u> (March 9, 2009).

b = Beta = .73, Proxy Group Average Beta for Combination Electric and Gas Utilities (<u>The Value Line Investment Survey, Ratings and Reports,</u> (November 28, 2008; December 26, 2008; February 6, 2009).

Required Return:

$$10.56\% = 3.41 + .73(13.2 - 3.41)$$

ORANGE AND ROCKLAND UTILITIES, INC.

ZERO-BETA CAPM

Formula: $Rc = Rf + 3/4(b)(Rp) + 1/4(Rp)$

Where:

Rc = Required Return for the Company.

Rf = Risk Free Return = 3.41%, six-month average ending February 2009 of 30-Year and 10-Year Treasury Bond Yields, Federal Reserve Statistical Release, (Historical Data).

Rm = Market Return = 13.2%, Quantitative Profiles-Monthly Insights for Equity Management, Merrill Lynch, (March 9, 2009).

b = Beta = .73, Proxy Group Average Beta for Combination Electric & Gas Utilities (The Value Line Investment Survey, Ratings and Reports, (November 28, 2008; December 26, 2008; February 6, 2009).

Rp = Risk Premium = 9.79 Market Return minus Risk free rate.

Required Return:

$11.22\% = 3.41 + .75(.73)(9.79) + .25(9.79)$