

Rebuttal Testimony and Schedules  
James M. Coyne

Before the South Dakota Public Utilities Commission  
State of South Dakota

In the Matter of the Application of Northern States Power Company,  
a Minnesota corporation  
for Authority to Increase Rates for Electric Service in South Dakota

Docket No. EL11-019  
Exhibit\_\_\_\_

**Rate of Return and  
Return on Equity**

April 27, 2012

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1                   **I.       INTRODUCTION AND QUALIFICATIONS**

2    Q.    PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3    A.    My name is James M. Coyne, and I am a Senior Vice President of Concentric  
4        Energy Advisors, Inc. (“Concentric”).

5  
6    Q.    ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?

7    A.    I am submitting this testimony on behalf of Northern States Power  
8        Company, a Minnesota corporation operating in South Dakota (“NSP” or  
9        the “Company”). NSP is a wholly owned subsidiary of Xcel Energy Inc.  
10       (“XEI”).

11  
12   Q.    PLEASE DESCRIBE YOUR EXPERIENCE IN THE ENERGY AND UTILITY  
13        INDUSTRIES AND YOUR EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS.

14   A.    I provide expert testimony before federal, state and Canadian provincial  
15        agencies on matters pertaining to economics, finance, and public policy in  
16        the energy industry. I regularly advise utilities, generating companies, public  
17        bodies and private equity investors on business issues pertaining to the  
18        utilities industry. This work includes calculating the cost of capital for the  
19        purpose of ratemaking and providing expert testimony and studies on  
20        matters pertaining to rate policy, valuation, capital costs, demand side  
21        management, low-income programs, fuels and power markets. In addition, I  
22        work for utilities, independent developers and public bodies on issues  
23        pertaining to the management and development of power generation,  
24        distribution and transmission facilities. I have authored numerous articles  
25        on the energy industry and provided testimony before the FERC and  
26        jurisdictions in Alberta, British Columbia, California, Connecticut,

1 Massachusetts, New Jersey, Ontario, Maine, Texas, Vermont, and  
2 Wisconsin.

3 Prior to joining Concentric, I was Senior Managing Director in the  
4 Corporate Economics Practice for FTI/Lexecon, and Managing Director for  
5 Arthur Andersen's Energy & Utilities Corporate Finance Practice. I was also  
6 Managing Director for Navigant Consulting and Senior Economist for the  
7 Massachusetts Energy Facilities Siting Council. I also served as State Energy  
8 Economist for the Maine Office of Energy Resources.

9 I hold a B.S. in Business Administration from Georgetown University  
10 and a M.S. in Resource Economics from the University of New Hampshire.  
11 My background is presented in more detail in Exhibit\_\_(JMC-1), Schedule 1  
12 and Exhibit\_\_(JMC-1), Schedule 2.

13  
14 **II. PURPOSE AND OVERVIEW OF TESTIMONY**

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

16 A. The purpose of my Rebuttal Testimony is to respond to the Direct  
17 Testimony of Basil L. Copeland Jr. on behalf of the South Dakota Public  
18 Utilities Commission (the "Commission") Staff with regards to the cost of  
19 capital, including the cost of equity, cost of debt, and capital structure. In  
20 responding to Mr. Copeland, I will discuss how his proposal fails to meet  
21 customary regulatory standards and will compound NSP's consistent  
22 inability to earn a fair return on equity ("ROE") from its South Dakota  
23 electric operations. My analysis and conclusions are supported by the data  
24 presented in Exhibit\_\_(JMC-1), Schedules 3 through 12, which have been  
25 prepared by me or under my direction.

26 The remainder of my testimony is organized as follows:

- 1 • In Section III, I summarize my key conclusions.
- 2 • In Section IV, I provide a comparison of Mr. Copeland's 9.00
- 3 percent ROE recommendation to other ROE awards, which
- 4 shows that his recommendation is an extreme outlier and a clear
- 5 departure from regulatory standards.
- 6 • In Section V, I discuss the issues and implications of earnings
- 7 attrition with respect to the regulatory compact and utility
- 8 investments and why the Commission should take those issues
- 9 into consideration.
- 10 • In Section VI, I demonstrate that Mr. Copeland's recommended
- 11 ROE will have an adverse impact on the Company's ability to
- 12 make investments and attract capital on fair and reasonable terms
- 13 and respond to Mr. Copeland's specific analysis of ROE.
- 14 • In Section VII, I will explain why Mr. Copeland's
- 15 recommendations with regard to capital structure and cost of debt
- 16 should not be accepted by the Commission.
- 17 • In Section VIII, I provide updated analyses and recommendations
- 18 regarding the Company's ROE, cost of debt and capital structure.
- 19 • Finally, in Section IX, I summarize my conclusions and
- 20 recommendations.

### 21 22 **III. SUMMARY OF KEY CONCLUSIONS**

23 Q. WHAT ARE YOUR KEY CONCLUSIONS?

24 A. My key conclusions are:

- 1 • The Company currently does not have a reasonable opportunity to  
2 earn its authorized ROE for its South Dakota electric operations,  
3 and Mr. Copeland’s recommendations would put even greater  
4 strain on the Company’s financial health at a time of increasing  
5 capital investments.
- 6 • A primary cause of the Company’s inability to earn its authorized  
7 ROE is regulatory lag, which causes a permanent loss of earnings  
8 and inadequate ongoing revenue in a period of increasing costs.
- 9 • Mr. Copeland’s recommended 9.00 percent ROE is lower than any  
10 ROE awarded in the U.S. for integrated electric utilities over the  
11 past three years, is inconsistent with the standards of *Hope* and  
12 *Bluefield*, and would create obstacles to investment in South  
13 Dakota.

14  
15 Q. ARE YOU PROVIDING AN UPDATED ASSESSMENT REGARDING THE  
16 APPROPRIATE COST OF CAPITAL FOR THE COMPANY?

17 A. Yes, I am. I have updated the Constant Growth Discounted Cash Flow  
18 (“DCF”) analysis, and the Bond Yield Plus Risk Premium analysis presented  
19 by Company witness Daniel S. Dane in his Direct Testimony, as well as  
20 performed certain additional analyses in response to Mr. Copeland. Based  
21 on those analyses, it is my view that the ROE for the Company has  
22 decreased moderately since the filing of the Company’s petition in June  
23 2011. Specifically, my revised recommendation for the Company’s ROE is  
24 10.65 percent, within a range of 10.40 percent to 10.90 percent.

25  
26 Q. PLEASE SUMMARIZE THE UPDATED COST OF CAPITAL FOR THE COMPANY.

1 A. The updated cost of capital is summarized in Table 1. The capital structure  
2 and cost of debt reflect updated amounts through December 31, 2011:<sup>1</sup>

3 **Table 1: Capital Structure and Cost of Capital**

	Percent	Cost Rate	Weighted Cost
Common Equity	52.90%	10.65%	5.63%
Long-term debt	47.10%	6.13%	2.89%
Total Capitalization	100.00%		8.52%

4  
5 **IV. COMPARISON TO PREVAILING LEVELS OF AUTHORIZED**  
6 **ROES**

7 Q. DO THE ROES AUTHORIZED IN OTHER JURISDICTIONS PROVIDE A  
8 PRACTICAL BENCHMARK FOR ASSESSING ROE RECOMMENDATIONS?

9 A. Yes. While the ROEs authorized in other jurisdictions do not determine the  
10 appropriate ROE in this proceeding, those ROEs provide a useful  
11 benchmark to assist in assessing overall reasonableness.

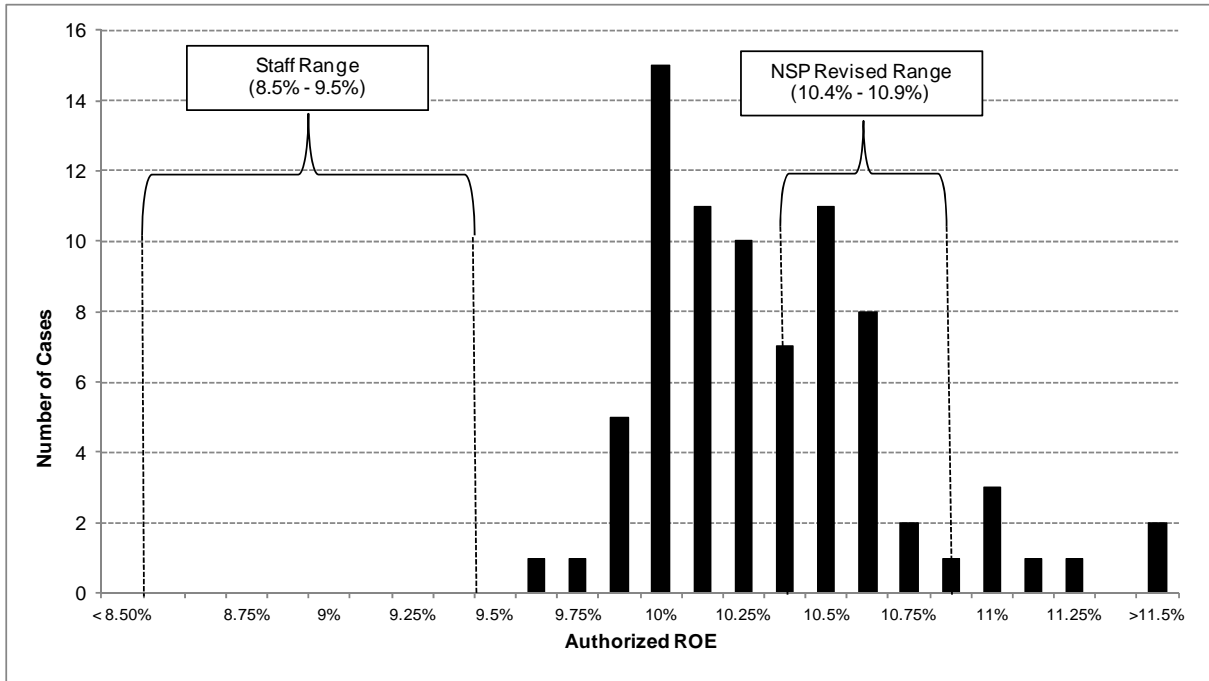
12  
13 Q. HOW DOES MR. COPELAND’S RECOMMENDATION COMPARE TO OTHER  
14 AUTHORIZED ROES?

15 A. Data from Regulatory Research Associates (“RRA”) shown on Chart 1  
16 (below) demonstrates that Mr. Copeland’s ROE recommendation is well  
17 below the bottom of the range of authorized ROEs between January 1, 2010  
18 and March 31, 2012. Moreover, during that period, there have been no  
19 authorized ROEs of 9.00 percent or lower for integrated electric utilities, and  
20 the average authorized return has been 10.39 percent.

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<sup>1</sup> See, Response to SDPUC DR2-12, January 5, 2012.

1 **Chart 1: Authorized ROEs for Integrated Electric Utilities**  
 2 **January 1, 2010 – March 31, 2012<sup>2</sup>**



3  
 4  
 5 Q. ARE AWARDED ROES SIGNIFICANT TO INVESTORS?

6 A. Yes. The authorized ROE sends an important signal to investors regarding  
 7 whether there is regulatory support for financial integrity, dividends, and  
 8 financial growth.

9  
 10 Q. DO THE ROES AWARDED BY DIFFERENT JURISDICTIONS HAVE AN EFFECT  
 11 ON INVESTORS' ABILITY AND WILLINGNESS TO MAKE INVESTMENTS?

12 A. Yes. The cost of capital represents an opportunity cost to investors. If  
 13 higher returns are available for other investments of comparable risk,  
 14 investors have the incentive to divert their capital to those investments.  
 15 Thus, an ROE that is significantly below authorized ROEs in other

<sup>2</sup> Source: Regulatory Research Associates.



1 jurisdictions can be an impediment to the Company's ability to attract capital  
2 for investment in South Dakota.

3  
4 **V. IMPLICATIONS OF EARNINGS ATTRITION**

5 Q. HAS NSP BEEN ABLE TO EARN ITS AUTHORIZED ROE FOR ITS SOUTH  
6 DAKOTA ELECTRIC OPERATIONS?

7 A. No. The Direct Testimony of Company witness Laura McCarten discussed  
8 how the Company has experienced an actual ROE of 3.38 percent in 2009  
9 (4.23 percent weather normalized), and 2.95 percent in 2010 (2.64 percent  
10 weather normalized) from its South Dakota operations. Those actual ROE  
11 results reflect earnings attrition.

12  
13 Q. WHAT IS EARNINGS ATTRITION?

14 A. Earnings attrition arises when there are systematic conditions that make it  
15 difficult for a regulated utility to earn a its authorized return. For NSP's  
16 South Dakota electric operations, these conditions include: (1) the use of an  
17 historical average test year, which leads to regulatory lag; (2) the leveling off  
18 of sales growth in the last few years, as reflected in Ms. McCarten's Rebuttal  
19 Testimony; and (3) the fact that rate base is growing at a much faster rate  
20 than revenues, as also reflected in Ms. McCarten's Rebuttal Testimony.

21  
22 Q. WHAT IS REGULATORY LAG?

23 A. As noted above, regulatory lag refers to the delay between the time when a  
24 utility incurs costs to serve its customers (*e.g.*, when it places new plant in  
25 service) and when it later begins to recover the associated costs through  
26 rates. In spite of its name, regulatory lag does not refer merely to a delay in

1 the recovery of costs. Costs that are not recovered through rates as a result  
2 of regulatory lag are lost forever to the utility. These costs are incurred when  
3 new plant is placed in service and include both the return of invested capital  
4 (depreciation expense) and the return on invested capital.

5  
6 Q. HOW WOULD ADOPTING MR. COPELAND'S ROE RECOMMENDATION OF 9.00  
7 PERCENT AFFECT NSP'S ABILITY TO MAINTAIN ITS FINANCIAL INTEGRITY  
8 AND TO EARN ITS AUTHORIZED RETURN IN SOUTH DAKOTA?

9 A. Adopting Mr. Copeland's 9.00 percent ROE recommendation, in  
10 conjunction with the persistent regulatory lag and earnings attrition in South  
11 Dakota, would be detrimental to the Company's financial integrity during a  
12 period in which it must make substantial capital expenditures in order to  
13 maintain system reliability and meet its service obligations.

14  
15 Q. WHAT CIRCUMSTANCES IS NSP FACING IN SOUTH DAKOTA?

16 A. As explained in Ms. McCarten's Direct Testimony, NSP's current request for  
17 rate relief is driven by the need to:

- 18 • Maintain, improve, and replace infrastructure;
- 19 • Manage cost increases at a time of anticipated sales decline; and
- 20 • Comply with new and increasing regulatory requirements.<sup>3</sup>

21 As also discussed in Mr. Dane's Direct Testimony, the Company is  
22 currently investing in a very significant capital program.<sup>4</sup> The Company  
23 estimates that it will invest approximately \$5.9 billion during the period 2012  
24 to 2016.<sup>5</sup>

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<sup>3</sup> Direct Testimony of Laura McCarten, at 3.

<sup>4</sup> Direct Testimony of Daniel Dane, at 31.

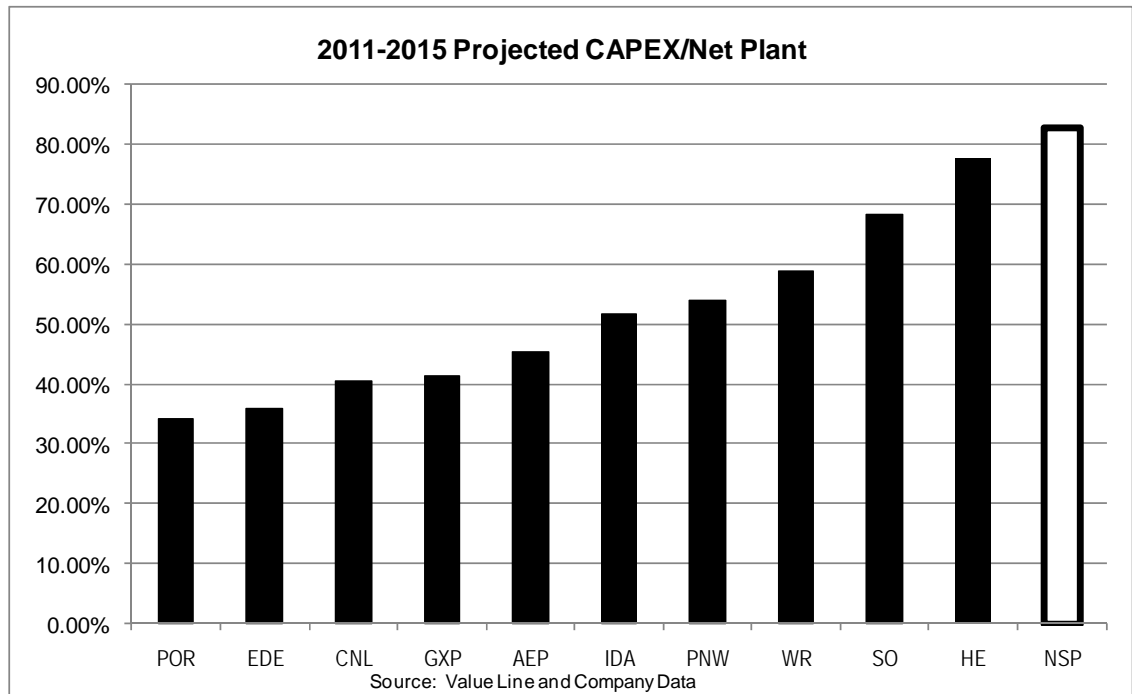
<sup>5</sup> Xcel Energy Investor Presentation, March 21, 2012.

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Q. HOW DO THE COMPANY'S INVESTMENT LEVELS COMPARE TO OTHER UTILITIES?

A. The Company is investing at a very high level as reflected in Chart 2 from Mr. Dane's Direct Testimony, which I have included here for convenience:

**Chart 2: Comparison of Capital Expenditures<sup>6</sup>**



7  
8

Q. HOW DO RATES OF RETURN RELATE TO UTILITY INVESTMENTS?

A. The rates of return awarded by regulators must be compensatory and fair in relation to investments of comparable risks and enable the Company to maintain its financial health and continued access to capital markets at a reasonable cost. In return, the utility must provide safe and reliable service for its customers. This is the core of the regulatory compact. To meet the

1 regulatory compact, it is necessary that the three standards of a fair return  
2 provided in *Hope* and *Bluefield* (*i.e.*, comparability, capital attraction, and  
3 financial integrity) be met for a return to indeed be “fair.”  
4

5 Q. HOW DO INVESTMENT PRINCIPLES RELATE TO THE REGULATORY COMPACT  
6 AND UTILITY INVESTMENTS?

7 A. Two fundamental investment principles are at play – capital attraction and  
8 capital allocation. Investors have incentives to select investments that offer  
9 the best return, with best being defined in consideration of return  
10 opportunity and risk. If a utility is not afforded the opportunity to earn its  
11 allowed ROE (or if the allowed ROE does not reflect the true cost of equity  
12 for the utility), rates are not just and reasonable, and the utility’s ability to  
13 attract capital is impaired.  
14

15 Q. HOW IS THE ABILITY TO ATTRACT CAPITAL IMPAIRED?

16 A. Utilities compete in capital markets for investment capital, and those dollars  
17 will flow to investments that provide the most certainty around earnings,  
18 provided that those earnings are on par with comparable investments of  
19 similar risk. Investors, be they shareholders in a publicly traded company or  
20 the parent of a utility affiliate, will have incentives to simply allocate their  
21 investment capital elsewhere. The same incentives apply when capital  
22 investments decisions are made by utilities. If the return is not adequate to  
23 provide a reasonable return to shareholders, an incentive is created for the  
24 utility to defer that investment and redirect its capital elsewhere.

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<sup>6</sup> Sources: Value Line, SEC Form 10-K, Xcel Energy, Inc, for the year ending December 31, 2010, at 75, and FERC Form 1, Northern States Power Company (Minnesota), for the period ending December 31, 2010, at 110. The capital expenditure estimate for Empire District Electric excludes any restoration costs that may

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**VI. RESPONSE TO STAFF WITNESS COPELAND**

Q. PLEASE SUMMARIZE MR. COPELAND’S ANALYSES AND RECOMMENDATIONS.

A. Mr. Copeland recommends an ROE for NSP of 9.00 percent, which is the midpoint of a range from 8.50 percent to 9.50 percent. Mr. Copeland’s recommendation is based on the Constant Growth DCF model and the Dividend Discount Model (“DDM”). Mr. Copeland also performs a Capital Asset Pricing Model (“CAPM”) analysis, but does not use those results in establishing his recommended ROE range. Mr. Copeland also does not accept the Company’s proposed cost of debt and capital structure.

Q. IS MR. COPELAND’S 9.00 PERCENT ROE RECOMMENDATION FAIR AND REASONABLE FOR NSP, AND ADEQUATE TO SUPPORT CREDIT QUALITY AND ACCESS TO CAPITAL?

A. No, his 9.00 percent ROE recommendation is not fair and reasonable because it is not comparable to returns available from other investments of comparable risk and it would have a detrimental effect on the financial integrity of the Company and its ability access to capital on reasonable terms. A 9.00 percent ROE will impair NSP’s ability to produce cash flow needed to fund operations and meet financial obligations. As discussed in Mr. Dane’s Direct Testimony, the ROE and allowed return directly influence a utility’s ability to produce the cash flow required to fund operations and meet financial obligations.<sup>7</sup>

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<sup>7</sup> be required within its service territory as a result of the tornado damage suffered in May 2011. Direct Testimony of Daniel S. Dane, at 6-7.

1           The rates set in this case, including the ROE and capital structure, will  
2 directly affect the Company's cash flows in the period in which rates are in  
3 effect. The Company's cash flows in turn have a bearing on its credit quality  
4 and investors' perception of the riskiness of the enterprise. Given this, Mr.  
5 Copeland's recommended ROE and capital structure will exert pressure on  
6 the metrics that are of the greatest concern to both debt and equity  
7 investors. Mr. Copeland's recommendations are thus not consistent with the  
8 comparability and capital attraction standards established in *Hope* and  
9 *Bluefield*.<sup>8</sup> In addition, the entire range of ROEs recommended by Mr.  
10 Copeland is significantly below all other authorized ROEs for integrated  
11 electric companies in the past three years, including all ROEs recently  
12 authorized in NSP's other jurisdictions.

13  
14 Q. IS MR. COPELAND'S RECOMMENDATION BASED ON SOUND ANALYSIS?

15 A. No. Mr. Copeland's 9.00 percent recommended ROE is based on flawed  
16 analyses and assumptions. However, as I will demonstrate in my Rebuttal  
17 Testimony, when reasonable modifications are made or alternatives are  
18 provided to Mr. Copeland's analyses, the results are significantly more in line  
19 with the range of results presented in my Rebuttal Testimony, as well as  
20 prevailing levels of authorized returns.

21  
22 Q. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING MR. COPELAND'S  
23 ROE ANALYSIS.

24 A. Mr. Copeland's ROE analysis is affected by three primary flaws: (1) his  
25 choice of growth rates to be used in the DCF and DDM models; (2) his

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<sup>8</sup> Bluefield Waterworks & Improvement Co., v. Public Service Commission of West Virginia, 262 U.S. 679

1 failure to reflect flotation costs in developing the cost of equity for the  
2 Company; and (3) his application of the CAPM and his assessment of the  
3 Equity Risk Premium (“ERP”).  
4

5 **A. Application of the Constant Growth DCF Model**

6 Q. WHAT ARE THE EFFECTS OF MR. COPELAND’S GROWTH RATES AND  
7 APPROACH TO FLOTATION COSTS ON HIS CONSTANT GROWTH DCF  
8 ANALYSIS?

9 A. Mr. Copeland’s selection of growth rates and approach to flotation costs are  
10 the main drivers of Mr. Copeland’s unreasonably low Constant Growth  
11 DCF results of a 9.04 percent mean and 8.95 percent median.<sup>9</sup>  
12

13 Q. PLEASE DESCRIBE MR. COPELAND’S ANALYSIS AS TO GROWTH RATES.

14 A. As to growth rates, Mr. Copeland averages the Zacks consensus estimate of  
15 projected earnings per share growth with Value Line estimates of dividend  
16 per share growth, book value per share growth, and the “% Retained to  
17 Common Equity” rate (sometimes referred to as the “sustainable growth  
18 rate” or the “retention growth rate”) to arrive at his growth rate for each  
19 proxy group company. Rather than also utilizing EPS from Value Line to be  
20 consistent with his use of EPS from Zack’s, Mr. Copeland takes the  
21 unorthodox step of using EPS from one source and those other measures  
22 from Value Line, when he could have used a comparable measure from both  
23 sources. Exclusive reliance on EPS growth rates is theoretically sound and  
24 there are academic findings demonstrating the relationship between stock

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<sup>9</sup> (1923) (*Bluefield*); Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944) (*Hope*).  
Direct Testimony of Basil L. Copeland, Jr., at 27.

1 prices and earnings growth rates.

2  
3 Q. IS MR. COPELAND'S METHOD THE "BEST WAY TO ESTIMATE THE CONSTANT  
4 GROWTH DCF" AS HE CONTENDS?

5 A. No. Mr. Copeland averages three inputs from Value Line and averages  
6 those growth rates with EPS estimates from Zack's, when he had  
7 comparable EPS estimates from Value Line that he did not use.

8  
9 Q. DOES MR. COPELAND PROVIDE SUFFICIENT SUPPORT FOR HIS RELIANCE ON  
10 DPS, BVPS, AND "% RETAINED TO COMMON EQUITY" IN HIS ANALYSIS?

11 A. No. Mr. Copeland's position to include other growth rates is not supported  
12 by any analysis of what growth rates investors incorporate into their  
13 valuations. Further, he erroneously compares the EPS median growth rate  
14 from Zack's for the proxy group (5.70 percent) with the median DPS growth  
15 rate from Value Line (3.68 percent) and concludes that the "projected  
16 earnings growth rate is unsustainable in the long term."<sup>10</sup> Those are  
17 projections for different parameters from different sources, allowing no such  
18 conclusion. Nonetheless, had he compared the means, which I rely upon for  
19 DCF estimation, they are nearly identical (5.88 percent vs. 5.49 percent).  
20 Another concern I have is the variability in the Value Line DPS data Mr.  
21 Copeland uses, ranging from 17.02 percent per year for Empire District  
22 Electric to 1.19 percent per year for Hawaii Electric. Those variations are  
23 extreme and should raise caution flags.

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<sup>10</sup> *Ibid.*, at 25-26.



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Q. HAVE YOU RELIED EXCLUSIVELY ON EARNINGS GROWTH AS THE GROWTH RATE IN THE CONSTANT GROWTH DCF MODEL?

A. Yes. I rely exclusively on consensus forecasts of earnings per share growth from Zacks and First Call, as well as earnings growth projections from Value Line. I have relied exclusively on earnings growth because earnings are the fundamental determinant of a company's ability to pay dividends. As noted by Brigham and Houston:

Growth in dividends occurs primarily as a result of growth in *earnings per share* (EPS). Earnings growth, in turn, results from a number of factors, including (1) inflation, (2) the amount of earnings the company retains and invests, and (3) the rate of return the company earns on its equity (ROE).<sup>11</sup>

As noted previously, dividends are derived from earnings. Further, both dividends and book value per share may be directly affected by short run management decisions on cash management. As a result, dividend growth rates and book value growth rates may not accurately reflect a company's long-term growth. In contrast, earnings growth is not affected by short run cash management decisions.

Q. ARE DIVIDEND PER SHARE AND BOOK VALUE PER SHARE GROWTH RATES WIDELY REPORTED?

A. No. Value Line is the only service that provides dividend and book value growth projections. The Value Line growth rate estimates are not consensus estimates and, therefore, relying on a single source may introduce bias into

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<sup>11</sup> Eugene F. Brigham and Joel F. Houston, *Fundamentals of Financial Management*, at 317 (Concise Fourth Edition, Thomson South-Western).

1 the analysis. Thus, earnings growth rates, which are available from several  
2 sources, are a more reliable measure of a company's long-term growth.

3  
4 Q. HAS THE RELATIONSHIP BETWEEN EARNINGS GROWTH RATES AND STOCK  
5 VALUES BEEN DEMONSTRATED?

6 A. Yes. Professors Carleton and Vander Weide conducted a comparison of the  
7 predictive capability of historical growth estimates and analysts' consensus  
8 forecasts of five-year earnings growth for the stock prices of sixty-five utility  
9 companies.<sup>12</sup> Their research demonstrates that earnings growth projections  
10 are superior in their predictive quality for stock prices to other measures of  
11 growth. Those findings suggest that investors form their investment  
12 decisions based on expectations of growth in earnings, not dividends.  
13 Consequently, earnings growth is the appropriate estimate for the purpose of  
14 the Constant Growth DCF model.

15  
16 Q. DID YOU REPLICATE MR. COPELAND'S DCF ANALYSIS USING FORECASTED  
17 EARNINGS GROWTH AS THE MEASURE OF GROWTH?

18 A. Yes, I did. As shown in Exhibit\_\_(JMC-1), Schedule 6, I replicated Mr.  
19 Copeland's DCF analysis using analysts' consensus forecasted EPS growth  
20 rates, as reported by Mr. Copeland in Exhibit\_\_(BLC-1), Schedule 4. Based  
21 on that analysis, the mean and median DCF results were 10.18 percent and  
22 10.19 percent, respectively, before consideration of flotation costs. In  
23 comparison, Mr. Copeland's mean and median DCF results are 9.04 percent

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<sup>12</sup> Vander Weide and Carleton, *Investor Growth Expectations: Analysts vs. History*, The Journal of Portfolio Management, Spring 1988, at 81. Please note that while the original study was published in 1988, it was updated in 2004 under the direction of Dr. Vander Weide. The results of that updated study are consistent with Vander Weide and Carlton's original conclusions.

1 and 8.95 percent, respectively.<sup>13</sup> In addition, the 10.18 percent mean ROE  
2 estimate resulting from the use of forecasted EPS growth rates, once  
3 adjusted for flotation costs of 25 basis points (*i.e.*, 0.25 percent), is 10.43  
4 percent, which is within the low end of my estimated range of returns, and is  
5 significantly more consistent with the current level of authorized ROEs for  
6 integrated electric utilities.

7  
8 Q. PLEASE EXPLAIN THE PROBLEM WITH MR. COPELAND'S USE OF THE "%  
9 RETAINED TO COMMON EQUITY" GROWTH RATE METHOD.

10 A. Mr. Copeland's "% Retained to Common Equity" growth method reflects  
11 only one of two sources of growth, thereby understating total growth. Value  
12 Line's "% Retained to Common Equity" (also referred to as the "sustainable  
13 growth rate") is the equivalent of the retention growth rate. The retention  
14 growth rate considers only the product of earnings retention rates and  
15 earned returns on common equity, which reflect only growth from internally  
16 generated funds.<sup>14</sup>

17 Mr. Copeland's analysis fails to recognize that earnings growth also  
18 occurs as a result of new equity issuances, or what are commonly known as  
19 externally generated funds.<sup>15</sup> By only considering the funds from internally-  
20 generated sources, Mr. Copeland's retention growth rate understates the  
21 prospective earnings growth rates for the proxy group.

22  

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<sup>13</sup> Direct Testimony of Basil L. Copeland, Jr., at 27.

<sup>14</sup> In the retention growth formula, this is commonly referred to as the product of "b x r", where "b" is the retention ratio or the portion of net income not paid in dividends (*i.e.*, the portion of net income that is "plowed back" into the company as a means for future growth), and "r" is the expected return on equity.

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**B. Dividend Discount Model**

Q. PLEASE DESCRIBE MR. COPELAND’S DDM ANALYSIS.

A. Mr. Copeland’s DDM is a three-stage DCF model in which dividends in all three periods are the product of estimated earnings and payout ratios. In the first stage, which in Mr. Copeland’s model runs from 2011 to 2015, earnings grow at the Zacks consensus EPS growth rate for each company in the proxy group. In the second stage (2016 to 2030), earnings grow at a long-term growth rate, which Mr. Copeland has designated as the proxy group median value of Value Line’s “% Retained to Common Equity”. The second stage is a transition period in which the retention ratio transitions from the 2015 estimate for each proxy company to a common value of 39.00 percent (*i.e.*, the median value for the proxy group in 2015). In the third stage (2031 and thereafter), constant growth assumptions (*i.e.*, 4.00 percent earnings growth and 39.00 percent earnings retention) apply. The results of Mr. Copeland’s application of the DDM are a mean of 8.54 percent and a median of 8.42 percent.<sup>16</sup> As I will discuss below, while there are other areas of disagreement with Mr. Copeland’s DDM assumptions, the most significant difference is the use of “% Retained to Common Equity” as the long-term growth rate.

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<sup>15</sup> In the retention growth formula, this is commonly shown as the product of “s x v”, where “s” represents the growth in shares outstanding and “v” is that portion of the market-to-book ratio that exceeds unity. This methodology is recognized as a common approach to calculating the retention growth rate. *See*, Roger Morin, New Regulatory Finance, at 306.

<sup>16</sup> Direct Testimony of Basil L. Copeland, Jr., at 30.

1 Q. WHAT ARE THE PROBLEMS OTHER THAN THE LONG-TERM GROWTH RATE?

2 A. There are three problems in addition to the long term growth rate. First, Mr.  
3 Copeland assumes that dividend payments (which represent cash flows to  
4 investors) occur at the end of each year. That is inconsistent with Mr.  
5 Copeland's application of the Constant Growth DCF model, in which Mr.  
6 Copeland effectively increased the current dividend by half of a year's  
7 growth rate, in recognition that increases occur throughout the year.<sup>17</sup> In  
8 order to be consistent with that approach, it is appropriate to assume that  
9 dividend payments occur after six months rather than on December 31 of  
10 each year in the DDM.

11 Second, Mr. Copeland allows for no transition in the dividend growth  
12 rates assumed in the DDM between the near-term and the long-term  
13 measures. From a practical perspective, it is more reasonable to allow for a  
14 transition period during the second stage in which the near-term growth rate  
15 transitions to the long-term growth rate, much as Mr. Copeland has done  
16 with the retention ratio.

17 Third, Mr. Copeland assumes a long-term payout ratio of 61.00  
18 percent based on the median projected 2015 payout ratio from Value Line  
19 for the proxy group. However, the long-term (1990 to the present) industry  
20 average dividend payout ratio has been approximately 66.55 percent,<sup>18</sup> and it  
21 is reasonable to assume that the companies in the proxy group will revert to  
22 the long-term payout ratio after the current capital construction cycle is over.  
23 Mr. Copeland's long-term payout ratio is thus too low, as it incorporates

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<sup>17</sup> *Ibid.*, at 24.

<sup>18</sup> Equals average of company-specific median payout ratios for 1990-2011 for the 51 electric utilities covered by the Value Line Investment Survey as of March 31, 2012.

1 shorter-term expectations that reflect the current high level of construction  
2 activity.

3  
4 Q. WHY IS MR. COPELAND'S ASSUMPTION REGARDING LONG-TERM GROWTH IN  
5 THE DDM INCORRECT?

6 A. The five-year “% Retained to Common Equity” growth rate of 4.00 percent  
7 that Mr. Copeland uses as the measure of long-term growth differs  
8 significantly from long-term estimates of overall economic growth in the  
9 U.S., and thus is not indicative of the long-term growth prospects of electric  
10 utilities.

11  
12 Q. HOW DO YOU CALCULATE THE LONG-TERM GDP GROWTH RATE?

13 A. The long-term GDP growth rate is based on real (constant dollar) GDP  
14 growth rates, and estimates for inflation. Blue Chip Financial Forecast  
15 provides a consensus forecast of the real GDP growth rate. I applied two  
16 alternative estimates for inflation to develop the nominal (post-inflation)  
17 GDP growth rate. I have averaged two alternative estimates for inflation: 1)  
18 the GDP Chained Price Index; and 2) the 30-day average spread between the  
19 30-year Treasury bond and the 30-year Treasury Inflation-Protected  
20 Securities (“TIPS”) bond.<sup>19</sup> The estimates of nominal GDP growth that I  
21 have utilized are summarized below:

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<sup>19</sup> The TIPS is an inflation-indexed bond that presents the broader market's view of forward-looking inflation.

1 **Table 2: Estimates of Nominal GDP Growth**

Inflation	2.27% <sup>20</sup>
Real GDP Growth <sup>21</sup>	2.60%
Nominal GDP Growth	4.93%

2  
3 Q. DID YOU PERFORM A MULTI-STAGE DCF?

4 A. Yes. In response to Mr. Copeland's approach I developed a Multi-Stage  
5 DCF model that reflects a three stage approach: near-term, transitional, and  
6 long-term growth.

7  
8 Q. PLEASE DESCRIBE THE STRUCTURE OF YOUR MULTI-STAGE DCF MODEL.

9 A. The model transitions from near-term growth, (*i.e.* the average of Value  
10 Line, Zacks, and First Call forecasts used in the Constant Growth model) for  
11 the first stage (years 1-5), to the long-term forecast of GDP growth for the  
12 third stage (years 11 and beyond). The second stage, or the transitional stage  
13 (years 6-10), connects the first stage growth with the third stage growth by  
14 decreasing the growth rate each year on a pro rata basis.

15  
16 Q. PLEASE SUMMARIZE YOUR INPUTS TO THE MULTI-STAGE DCF MODEL.

17 A. I applied the Multi-Stage DCF model to the proxy group. My assumptions  
18 with respect to the various model inputs are described in Table 3.

---

<sup>20</sup> Represents the average of GDP Chained Price Index of 2.10 percent and the TIPS spread of 2.68 percent.

<sup>21</sup> Blue Chip Financial Forecasts, for 2017 – 2021, December 1, 2010.

1

**Table 3: Multi-Stage DCF Model Assumptions**

<b>Model Input</b>		<b>Stage 1</b>	<b>Stage 2</b>	<b>Stage3</b>
<b>Years</b>	<b>Start</b>	<b>1 – 5</b>	<b>6 – 10</b>	<b>&gt;11</b>
Stock Price and Dividend Yields	30, 90 and 180 day average			
Earnings Growth		EPS growth as average of Value Line, Zacks, and First Call projected growth rates	Transition to Long-term GDP growth on geometric average basis	Long-term GDP Growth

2

3 Q. PLEASE DESCRIBE THE MULTI-STAGE DCF ANALYSIS YOU HAVE  
4 PERFORMED.

5 A. To apply the Multi-Stage DCF analysis, I determined the cash dividend  
6 receipt each year by multiplying the applicable period’s growth rate (applying  
7 the three stages of growth rates described above) to annual estimated  
8 earnings per share. To that result I applied an estimated dividend payout  
9 ratio to arrive at annual investor cash flows. I estimated the payout ratios  
10 for years 1–10, as those projected by Value Line for each of the proxy group  
11 companies. I then assumed that by the end of the second period (*i.e.*, the end  
12 of year 10), the payout ratio will converge to the long-term industry median  
13 payout ratio, for the reasons discussed above.

14

15 Q. WHAT ARE THE RESULTS OF YOUR MULTI-STAGE DCF ANALYSIS?

16 A. As provided in Exhibit\_\_(JMC-1), Schedule 7, the Multi-Stage DCF results  
17 are summarized in Table 4 below:



1                   **Table 4: Multi-Stage DCF Results (excludes flotation costs)**

30-day Average	9.98%
90-day Average	9.94%
180-day Average	10.08%
Average	10.00%

2  
3    Q.    WHAT COMMENT DO YOU HAVE REGARDING THE REASONABLENESS OF  
4           THOSE RESULTS?

5    A.    The results of the Multi-Stage DCF Model, which are presented before any  
6           consideration of flotation costs, are generally lower than the results of the  
7           Constant Growth DCF. It is quite clear that the Multi-Stage DCF will  
8           produce comparatively lower results than historical norms based on real  
9           GDP growth projections that are considerably below the historical long-term  
10          growth rate of the U.S. economy, which averaged 3.24 percent over the 1929  
11          – 2011 period.<sup>22</sup> However, it is also clear that, based on the flawed  
12          assumptions in Mr. Copeland’s DDM, his results are unreasonably low. My  
13          Multi-Stage DCF, which corrects for those flawed assumptions, provides  
14          more reliable results that, while below my recommended range, are  
15          considerably more in line with current levels of authorized returns for  
16          integrated electric utilities.

17  

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<sup>22</sup> Bureau of Economic Analysis, National Economic Accounts, March 29, 2012 update.

1 **C. Flotation Costs**

2 Q. PLEASE SUMMARIZE MR. COPELAND’S TESTIMONY REGARDING FLOTATION  
3 COSTS.

4 A. Mr. Copeland states that flotation costs are generally not a “significant  
5 element” of the required rate of return and that he believes the “double  
6 leverage impact” of XEI’s preferred stock offsets any potential cost due to  
7 flotation expenses. Mr. Copeland argues that the flotation cost adjustment  
8 in Mr. Dane’s Direct Testimony overstates the necessary adjustment because  
9 not all common equity is raised through public offerings, common stock is  
10 not issued annually, and NSP does not issue its own shares. Mr. Copeland’s  
11 quantification of the flotation cost adjustment leads Mr. Copeland to  
12 conclude that flotation costs are the equivalent of a “rounding error.”<sup>23</sup>

13  
14 Q. IS MR. COPELAND CORRECT?

15 A. No. Flotation costs are a part of the cost of capital of a utility, like the  
16 issuance costs for long term debt. These costs are not like operating  
17 expenses and are reflected in the balance sheet, not the income statement.  
18 Flotation costs resulting from stock issuances are permanent reductions in  
19 common equity for the issuing company. In Exhibit\_\_(JMC-1), Schedule 8,  
20 I have demonstrated why a flotation cost allowance is required in every year  
21 subsequent to an equity issuance, not just a year in which shares are offered.  
22 Specifically, Table 3 of Exhibit\_\_(JMC-1), Schedule 8 shows, under the  
23 restrictive assumptions of the Constant Growth DCF model (*i.e.*, constant  
24 growth rate, stable dividend payout ratio, and constant price/earnings ratio)  
25 that if a company is authorized to earn a return that does not reflect flotation

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<sup>23</sup> Direct Testimony of Basil L. Copeland, Jr., at 48.

1 costs, the result will be a return to shareholders that is below their required  
2 return and a capital loss to shareholders. Table 2 in that schedule also  
3 demonstrates that a flotation cost adjustment is required annually, not just in  
4 the year following a stock issuance, in order for shareholders to earn their  
5 required return. Thus, counter to Mr. Copeland's assertion, the fact that  
6 common stock is not issued annually does not negate the need for an annual  
7 adjustment to the ROE for flotation costs.

8  
9 Q. IS THE NEED TO RECOVER FLOTATION COSTS AFFECTED BY THE ISSUANCE OF  
10 STOCK BY XEI SINCE 2000, INSTEAD OF NSP?

11 A. No. As shown on Exhibit\_\_(DSD-1), Schedule 3, a substantial portion of  
12 the stock issuances upon which flotation costs were incurred was issued  
13 directly by NSP prior to the 2000 merger that resulted in XEI. Further, to  
14 the extent that NSP is not allowed to recover legitimate flotation costs, even  
15 if those costs were borne at the parent level, the Company does not have the  
16 opportunity to earn its authorized ROE. Flotation costs are no different  
17 than costs associated with debt issuances, which are traditionally allowed in a  
18 utility's revenue requirement, and NSP should be allowed to fully recover  
19 those costs in rates.

20  
21 Q. DOES THE ISSUANCE OF SOME COMMON STOCK THROUGH NON-PUBLIC  
22 SOURCES ELIMINATE THE NEED TO RECOVER FLOTATION COSTS?

23 A. No. The flotation cost adjustment presented by Mr. Dane represents the  
24 cost to publicly issue shares. Given the significant capital program that NSP  
25 is undertaking, public issuances are likely to be a much more significant  
26 source of common equity to support the Company's capital program than

1 are non-public issuances. As such, recovery of those costs during a period  
2 of elevated capital spending becomes even more important to the  
3 Company's financial integrity and its ability to earn its allowed ROE.  
4 However, if the Commission were to decide that reflection of non-publicly  
5 issued shares in the flotation cost adjustment were appropriate, I strongly  
6 disagree that such an adjustment would result in no adjustment at all, as  
7 suggested by Mr. Copeland.

8  
9 Q. WHAT IS THE RESULT IF THE COMMISSION DETERMINES THAT THE LOW COST  
10 OF NON-PUBLIC ISSUANCES SHOULD BE REFLECTED IN FLOTATION COSTS?

11 A. While the reflection of common stock issued through the Company's  
12 dividend reinvestment plan ("DRIP") and Employee Stock Ownership Plan  
13 ("ESOP") would somewhat decrease the flotation costs adjustment, it is not  
14 to the degree suggested by Mr. Copeland. To that point, I have provided an  
15 estimate of the flotation cost adjustment excluding non-publicly issued  
16 shares. As shown in Exhibit\_\_(JMC-1), Schedule 9, the result of that  
17 modification is an adjustment to the Constant Growth DCF model results of  
18 14 basis points (*i.e.*, 0.14 percent).

19  
20 Q. IS MR. COPELAND CORRECT IN CLAIMING THAT NSP'S FLOTATION COSTS  
21 ARE ESSENTIALLY OFFSET BY "DOUBLE LEVERAGE"?

22 A. No. Mr. Copeland's position is incorrect for two main reasons. First, the  
23 reflection of XEI's preferred stock in the Company's capital structure, even  
24 implicitly, goes against long-standing regulatory principles with regards to  
25 stand-alone ratemaking and financial theory, and is inconsistent with the  
26 basis on which NSP issues its own debt. Second, on a practical level, Mr.

1 Copeland's use of XEI's December 31, 2010 balance of preferred equity  
2 (NSP's parent company had no preferred debt as of December 31, 2011)  
3 directly conflicts with his position regarding the appropriate capital structure  
4 balances for the Company.

5  
6 Q. ARE MR. COPELAND'S ASSERTIONS REGARDING "DOUBLE LEVERAGE"  
7 CONSISTENT WITH NSP'S STAND-ALONE ISSUANCE OF DEBT?

8 A. No. Mr. Copeland's implicit use of elements of XEI's consolidated capital  
9 structure would be inconsistent with: (1) the basis on which NSP has issued  
10 approximately \$3.4 billion of long-term debt; and (2) the financial theory that  
11 establishes that it is the risk of the investment that determines the investor's  
12 required return, not the source of the investor's investment capital.

13  
14 Q. PLEASE EXPLAIN THE INCONSISTENCY WITH THE BASIS ON WHICH NSP HAS  
15 ISSUED ITS LONG-TERM DEBT?

16 A. NSP-MN is a separate corporate entity with a total capitalization of \$7.1  
17 billion, including \$3.3 billion of stand-alone, publicly-issued debt.<sup>24</sup> NSP also  
18 files its stand-alone financial statements with the Securities and Exchange  
19 Commission ("SEC"), and is rated separately by S&P, Moody's and Fitch.  
20 S&P provides specific guidance on the credit ratings criteria for the  
21 Company to achieve ratings objectives. Using those criteria, the Company  
22 has a corporate credit rating of A-, from S&P. Therefore, relying on  
23 components of XEI's capital structure ignores the basis on which the  
24 Company has issued its existing debt and the way in which the investing  
25 community views the Company.

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<sup>24</sup> SEC Form 10-K, Northern States Power Company, for the year ending December 31, 2011, at 38 and 40.

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Q. HOW IS MR. COPELAND’S PROPOSAL INCONSISTENT WITH FINANCIAL THEORY?

A. Financial theory provides that it is the risk inherent in an investment that determines the cost of capital, not the source of the funds used to make an investment. Furthermore, the return required on an investment depends only on the risks of that investment, not on the risks of the investor’s other investments. In this proceeding, we are establishing the cost of equity for NSP’s South Dakota operations. The returns investors require for NSP’s South Dakota operations are not based on the source of their capital; the risk (and required return) for an equity investment in NSP’s South Dakota operations does not change based on the source of funds to make that investment.

As Dr. Roger Morin states in New Regulatory Finance, “[e]quity is equity, irrespective of its source, and the cost of equity is governed by its use, by the risk to which it is exposed.”<sup>25</sup> The Maryland Public Service Commission came to a similar conclusion in a 2007 rate proceeding, stating:

We reject People’s Counsel’s proposed capital structure [reflecting a double leverage adjustment] because it suffers from numerous flaws. First, it assumes that the rate of return depends on the source of capital rather than the risks faced by the capital.<sup>26</sup>

Those findings confirm that Mr. Copeland’s analysis of the preferred equity held at XEI is irrelevant to the determination of NSP’s cost of capital.

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<sup>25</sup> Morin, Roger A., New Regulatory Finance, Public Utilities Reports, Inc., 2006, at 523.  
<sup>26</sup> Maryland Public Service Commission, Order No. 81517; Case No. 9092, *In the Matter of the Application of Potomac Electric Power Company for Authority to Revise its Rate and Charges for Electric Service and for Certain Rate Design Changes*, July 19, 2007. Clarification added.

1 Q. DOES MR. COPELAND’S THEORY ALSO COMPROMISE THE SEPARATION OF  
2 UTILITY AND NON-UTILITY COSTS AND OPERATIONS?

3 A. Yes. Mr. Copeland’s approach would compromise the traditional separation  
4 of utility and non-utility costs and operations that are reflected in the stand-  
5 alone principle.

6

7 Q. WHAT DO YOU MEAN BY THE “STAND-ALONE PRINCIPLE”?

8 A. For ratemaking purposes, the stand alone principle provides that only the  
9 revenues and expenses of the regulated utility be considered for purposes of  
10 determining the revenue requirement, not those of either the holding  
11 company within which a utility is held or the utility’s affiliates. The utility is  
12 thus treated as a stand-alone entity.

13

14 Q. HAS THE VALUE OF THE STAND-ALONE PRINCIPLE BEEN RECOGNIZED BY  
15 REGULATORY COMMISSIONS?

16 A. Yes. The stand-alone principle is fundamental to traditional utility  
17 ratemaking in North America and has been applied consistently. Application  
18 of the stand-alone principle to the determination of the cost of capital  
19 requires that the specific risks of regulated utility operations be considered,  
20 not those of the larger consolidated entity. Mr. Copeland’s arguments  
21 regarding “double leverage” clearly violate the stand-alone principle.

22

23 Q. HAVE OTHER COMMISSIONS REJECTED THE USE OF DOUBLE LEVERAGE?

24 A. Yes. For example, the Washington Utilities and Transportation Commission  
25 (“WUTC”) rejected the application of a double leverage adjustment for  
26 PacifiCorp. In that case, intervening parties presented positions that the

1 acquiring company's debt should be considered in establishing the operating  
2 subsidiary's capital structure. In that case, the WUTC rejected the use of  
3 double leverage stating:

4 The ring fencing provisions required by our final order in  
5 Docket UE-051090 insulate PacifiCorp and its customers  
6 from risks and financial distress at the MEHC level.

7 \*\*\*

8 Nonetheless, after having insulated PacifiCorp and its  
9 customers from the risks of leveraged financing at the  
10 parent, Staff and Public Counsel seek to secure for  
11 customers the cost and tax benefits of that financing. The  
12 Company's expert witness argues this may violate the  
13 familiar principle in utility law that financial benefits should  
14 follow burden of risks. We agree. If the risks and costs of  
15 activities at the parent-level are born exclusively by  
16 shareholders—because customers are insulated from them  
17 by the ring fence—then it is fair and appropriate for the  
18 shareholders, and not the customers, to receive the benefits  
19 that result from those activities.<sup>27</sup>  
20

#### 21 **D. Application of Capital Asset Pricing Model and the Equity Risk Premium**

22 Q. PLEASE SUMMARIZE MR. COPELAND'S CAPM ANALYSIS AND RESULTS.

23 A. Based on his CAPM analysis, Mr. Copeland estimates an ROE for NSP of  
24 5.65 percent, with a range of results for his proxy group between 5.13  
25 percent and 5.83 percent.<sup>28</sup> Mr. Copeland's analysis relies on a risk-free rate  
26 of 3.20 percent, an average Beta of 0.70, and an ERP of 3.50 percent.<sup>29</sup>  
27 Despite the fact that Mr. Copeland dedicates 18 pages of his testimony to  
28 derivation of the ERP, summarizing references ranging from academic  
29 journals to the Social Security Administration, and another eight pages

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<sup>27</sup> Washington Utilities Transportation Commission, Docket No. UE 050684, Order No. 4, p. 103-104.

<sup>28</sup> See, Exhibit\_(BLC-1), Schedule 6.

<sup>29</sup> *Ibid.*



1 deriving his resulting CAPM, Mr. Copeland does not rely on his CAPM  
2 results due to what he describes as “abnormalities in the Treasury bill and  
3 bond market that probably makes the 30-year Treasury bond yield, here 3.20  
4 percent, a poor estimate of the ‘risk-free’ rate in the current market  
5 environment.”<sup>30</sup> Instead, Mr. Copeland dismisses nearly half of his entire  
6 testimony and relies on the DCF method, to which he dedicates only seven  
7 pages of his testimony. Even though Mr. Copeland dismisses the results of  
8 the CAPM, I am compelled to address many issues he has raised to present a  
9 balanced perspective on his conclusions.

10  
11 Q. DO YOU AGREE WITH MR. COPELAND’S DECISION TO NOT RELY ON HIS  
12 CAPM ANALYSIS?

13 A. Yes, I do. Mr. Copeland’s CAPM result of 5.65 percent is not reasonable in  
14 the context of authorized ROEs for other integrated electric utilities, as well  
15 as current utility bond yields. Specifically, the average authorized ROE for  
16 integrated electric utilities from January 2010 through March 31, 2012 has  
17 been 10.39 percent.<sup>31</sup> In addition, there has not been an authorized ROE for  
18 an integrated electric utility as low as Mr. Copeland’s 9.00 percent in at least  
19 the last 20 years.<sup>32</sup>

20 Further, the average yield on the Moody’s A-rated utility bond index  
21 for the past twelve months has been 4.74 percent. Mr. Copeland’s CAPM  
22 estimate is only 91 basis points above that level, which would provide a *de*  
23 *minimis* premium to compensate equity holders for the incremental risks  
24 associated with ownership.

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<sup>30</sup> Direct Testimony of Basil L. Copeland, Jr., at 36.

<sup>31</sup> Source: Regulatory Research Associates.

<sup>32</sup> *Ibid.*

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Q. WHAT REASONS DOES MR. COPELAND PROVIDE FOR HIS LACK OF RELIANCE ON HIS CAPM RESULTS?

A. As stated above, Mr. Copeland cites “abnormalities in the Treasury bill and bond market.”<sup>33</sup> While Mr. Copeland is correct that there currently are “abnormalities” in the Treasury market, Mr. Copeland fails to consider the underlying causes of prevailing low interest rates, and he also fails to take into account the well-established inverse relationship between interest rates and the ERP.<sup>34</sup> As discussed in the Direct Testimony of Company witness Dane, current interest rates remain near historic lows due to federal intervention in financial markets, as well as the flight to quality due to continued investor risk aversion.<sup>35</sup> I agree with Mr. Copeland that the CAPM is currently not providing reliable results. However, I disagree with his reasoning, and in particular his view that the ERP has fallen precipitously.

Q. HAVE YOU EXAMINED THE EFFECT OF MAKING REASONABLE MODIFICATIONS TO THE INPUTS AND ASSUMPTIONS OF MR. COPELAND’S CAPM ANALYSIS?

A. Yes. I have modified Mr. Copeland’s CAPM analysis to include a risk free rate of 5.10 percent based on the projected 30-year Treasury yield for the

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<sup>33</sup> Direct Testimony of Basil L. Copeland, Jr., at 36.  
<sup>34</sup> Robert S. Harris and Felicia C. Marston, *Estimating Shareholder Risk Premia Using Analysts’ Growth Forecasts*, Financial Management, Summer 1992, at 63-70; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *The Risk Premium Approach to Measuring a Utility’s Cost of Equity*, Financial Management, Spring 1985, at 33-45; and Farris M. Maddox, Donna T. Pippert, and Rodney N. Sullivan, *An Empirical Study of Ex Ante Risk Premiums for the Electric Utility Industry*, Financial Management, Autumn 1995, at 89-95.  
<sup>35</sup> Direct Testimony of Daniel S. Dane, at 8.

1 period 2013 through 2017,<sup>36</sup> and an ERP of 8.09 percent, based on the  
2 market DCF method using the S&P 500 index less the projected yield on 30-  
3 year Treasury securities, as described further below. As shown on  
4 Exhibit\_\_(JMC-1), Schedule 10, with those reasonable adjustments to Mr.  
5 Copeland's analysis, the CAPM produces an estimated cost of equity of  
6 10.76 percent, which is well within my recommended range for NSP's ROE.

7  
8 Q. PLEASE SUMMARIZE MR. COPELAND'S POSITION WITH RESPECT TO THE ERP.

9 A. Although Mr. Copeland does not rely on his CAPM analysis to establish his  
10 range of results or ROE recommendation for NSP, he suggests that  
11 "knowledge of the market risk premium provides a benchmark for assessing  
12 the plausibility of cost of equity estimates."<sup>37</sup> Mr. Copeland estimates that  
13 the current ERP is approximately 3.50 percent.

14  
15 Q. IS MR. COPELAND'S ESTIMATED 3.50 PERCENT ERP WELL FOUNDED?

16 A. No. The methods by which Mr. Copeland developed his ERP contain a  
17 number of flaws, which I will briefly summarize. First, Mr. Copeland relies  
18 on a number of dated academic and journal articles that preceded the recent  
19 financial crisis and thus are not relevant to current market conditions. In  
20 addition, by referencing studies that were published at least ten years ago,  
21 Mr. Copeland fails to recognize that the ERP changes over time with the  
22 prevailing level of interest rates, investor risk perceptions and current  
23 economic conditions. To that point, Dr. Damodoran, who is cited by Mr.  
24 Copeland in his discussion of the ERP, published a paper in February 2011,

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<sup>36</sup> Source: Blue Chip Financial Forecast, December 1, 2011, at 14.

<sup>37</sup> Direct Testimony of Basil L. Copeland, Jr., at 7.

1 in which he acknowledges that the financial crisis changed his view on  
2 whether the ERP remains static. Dr. Damodoran states:

3           Though I believe that mean reversion is a powerful force, I  
4 think that the banking and financial crisis of 2008 has created a  
5 new reality, *i.e.*, that equity risk premiums can change quickly  
6 and by large amounts even in mature equity markets.  
7 Consequently, I have forsaken my practice of staying with a  
8 fixed equity risk premium for mature markets, year after year  
9 and vary it year to year, and even on an intra-year basis, if  
10 conditions warrant.<sup>38</sup>

11  
12           According to Dr. Damodoran, the average ERP from October 1,  
13 2011 through April 1, 2012 has been 6.94 percent, or 344 basis points higher  
14 than Mr. Copeland's estimate of 3.50 percent.<sup>39</sup>

15           Second, the results of Mr. Copeland's "supply-side" approach are very  
16 sensitive to the holding period used in the calculation, as shown in the table  
17 on page 32 of his Direct Testimony. That same criticism applies to all  
18 historical estimates of the ERP. For that reason, as discussed below, it is  
19 more appropriate to rely on forward-looking equity risk premia that are  
20 based on observable market information.

21           Third, Mr. Copeland relies on studies and reports (*e.g.*, the Social  
22 Security Administration, the Congressional Budget Office, and surveys of  
23 financial executives) that are developed outside of the context of the  
24 derivation of a market-based ROE for utilities and provide no insight in  
25 investors' required returns for investments of comparable risk to the  
26 Company. While there are several issues with relying on those sources and  
27 surveys in this proceeding, one significant problem is the fact that those

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<sup>38</sup> Aswath Damodoran, "Equity Risk Premiums: Determinants, Estimation, and Implications – The 2011 Edition, Stern School of Business, Updated February 2011, at 70.

<sup>39</sup> See <http://pages.stern.nyu.edu/~adamodar/>.

1 reports, studies, and surveys provide policymakers' and executives'  
2 expectations regarding broad market returns, and provide no information  
3 regarding investors' required returns on invested capital. That is a crucial  
4 distinction and is one that Mr. Copeland ignores.

5  
6 Q. IS THERE A MORE REASONABLE METHOD TO ESTIMATE A FORWARD-  
7 LOOKING ERP?

8 A. Yes. A reasonable method to estimate a forward-looking ERP would be to  
9 subtract the projected 30-year Treasury bond yield from the expected return  
10 on the S&P 500 Index. The expected return on the S&P 500 can be  
11 calculated using the Constant Growth DCF model for the companies in the  
12 S&P 500 index for which long-term earnings projections are available.  
13 Based on an estimated weighted-index dividend yield of 2.09 percent and a  
14 weighted-index long-term growth rate of 10.99 percent, the estimated  
15 required market return for the S&P 500 index is approximately 13.19  
16 percent. The implied ERP over the projected 30-year Treasury yield is 8.09  
17 percent, as shown in Exhibit \_\_ (JMC-1), Schedule 10, or 459 basis points  
18 higher than Mr. Copeland's estimate of 3.50 percent.

19  
20 Q. IS THAT ESTIMATE OF THE FORWARD LOOKING ERP CONSISTENT WITH  
21 EQUITY RISK PREMIA ASSUMED IN THE INVESTMENT COMMUNITY?

22 A. Yes. For instance, Bank of America Merrill Lynch ("BofA") publishes a  
23 monthly report titled *Quantitative Profiles – Monthly insights for equity management*  
24 that presents the implied and required returns for the S&P 500 on a monthly  
25 basis. As of January 2012, the implied and required returns for the S&P 500

1 were both 12.10 percent,<sup>40</sup> which, when compared to the projected 30-year  
2 treasury yield, implies an ERP of 7.00 percent. Moreover, the implied and  
3 required returns reported by BofA are significantly greater than the market  
4 return implied by Mr. Copeland's CAPM analysis of 6.70 percent, which is  
5 the risk-free rate of 3.20 percent plus the ERP of 3.50 percent.<sup>41</sup> In this  
6 instance, therefore, the market return assumed by BofA is nearly twice that  
7 assumed by Mr. Copeland.

8  
9 Q. HAS MR. DANE TAKEN OUT OF CONTEXT THE FEDERAL RESERVE QUOTE  
10 ABOUT THE ELEVATED RISK PREMIUM?

11 A. No. Contrary to Mr. Copeland's argument, the Fed has stated in the past  
12 that it calculates its estimate of the ERP as, "[t]he spread between the  
13 forward trend earnings-price ratio for S&P 500 firms and an estimate of the  
14 real *long-run* Treasury yield."<sup>42</sup> While long-term interest rates are also near  
15 historic lows, the Fed discusses its ERP calculations in the context of  
16 option-implied volatility on the S&P 500, which, it notes in the report cited  
17 by Mr. Dane, "rose sharply" during the period under discussion. Increased  
18 investor-perceptions of market volatility implies greater levels of risk  
19 aversion, which are consistent with an ERP that is "quite elevated relative to  
20 long-term norms."<sup>43</sup>

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40 Bank of America Merrill Lynch, Quantitative Profiles, Monthly insights for equity management, January 11, 2012, at 59. Elsewhere in that report, BofA reports an S&P 500 risk premium over AAA corporate bond rates of 817 basis points. Given that corporate bonds generally provided higher yields than similarly tenured government bonds, that suggests the ERP implied by BofA is reasonably consistent with that which I have calculated in my Rebuttal Testimony.

41 Direct Testimony of Basil L. Copeland, Jr., at 35.

42 Federal Open Market Committee, Minutes of the Meeting of April 28-29, 2009, at 5.

43 Federal Open Market Committee, Minutes of the Meeting of March 15, 2011, at 4.

1 Q. WHAT ARE YOUR CONCLUSIONS REGARDING MR. COPELAND’S ASSESSMENT  
2 OF THE ERP?

3 A. Mr. Copeland’s ERP of 3.50 percent is not consistent with current market-  
4 based evidence. Consequently, Mr. Copeland’s CAPM analysis and his  
5 discussion of the ERP provide no meaningful insight into the cost of equity  
6 for NSP in this proceeding.

7

8 **E. Bond Yield Plus Risk Premium**

9 Q. PLEASE BRIEFLY SUMMARIZE MR. COPELAND’S RESPONSE TO THE BOND  
10 YIELD PLUS RISK PREMIUM ANALYSIS PROVIDED BY MR. DANE.

11 A. Mr. Copeland believes there are “issues” with Mr. Dane’s risk premium  
12 analysis based on the fact that the analysis uses allowed returns as a proxy  
13 for the required rate of return and due to what Mr. Copeland believes to be  
14 statistical flaws in the analysis.

15

16 Q. WHAT IS YOUR RESPONSE TO MR. COPELAND ON THOSE POINTS?

17 A. What Mr. Copeland fails to understand is that the Bond Yield Plus Risk  
18 Premium analysis uses allowed returns as a proxy for required returns, under  
19 the presumption that the presiding commissions based their decisions on  
20 market-based data, much as the cost of capital witnesses are doing in this  
21 proceeding. As to Mr. Copeland’s assertion that the ROEs in the sample set  
22 may reflect the product of “concessions” made in the ratemaking process, it  
23 is my view that the more than 500 cases used in the analysis provide a very  
24 robust sample from which to derive meaningful analyses.

25 Additionally, Mr. Copeland incorrectly states that the bond yield in  
26 the analysis is not an independent variable. However, despite what Mr.

1 Copeland attempts to prove mathematically, it is incorrect to state that bond  
2 yields are equal to allowed returns less the risk premium. Bond yields are  
3 determined by a number of economic and market-driven factors, not  
4 including ROEs awarded to utilities in regulatory proceedings.

5 Furthermore, while Mr. Copeland claims to prove that there is no  
6 relationship between the ERP and bond yields, he subsequently states that  
7 Federal Reserve comments about an elevated ERP are in regards to currently  
8 low Treasury yields. In fact, Mr. Copeland states, “normally, [Treasury  
9 yields] will be higher, implying a lower risk premium all other things equal.”<sup>44</sup>  
10 Thus, Mr. Copeland appears to accept that there is an inverse relationship  
11 between bond yields and the ERP, despite what his analysis purports to  
12 show. In fact, the notion that there is an inverse relationship between bond  
13 yields and the ERP is supported by academic research, as discussed above.

14 Finally, it should be noted that Mr. Dane used the Bond Yield Plus  
15 Risk Premium only as a corroborating method to the DCF analysis, upon  
16 which he primarily based his conclusions. It is my view that this method  
17 continues to be a sound approach to assess the reasonableness of other cost  
18 of capital estimation models, and I have provided updated results for that  
19 analysis in my Rebuttal Testimony (*see*, Exhibit\_\_(JMC-1), Schedule 5).

20  
21 **F. Other Issues**

22 Q. WHAT IS MR. COPELAND’S POSITION REGARDING PENSION FUND RETURN  
23 ASSUMPTIONS IN RELATION TO THE ROE IN THIS CASE?

24 A. Mr. Copeland claims that Mr. Dane’s recommendation and NSP’s ROE  
25 request are not consistent with assumptions built into XEI’s pension fund



1 projections and infers an inconsistency on the part of NSP.<sup>45</sup> Specifically,  
2 Mr. Copeland relies on the fact that XEI’s pension plan projects an expected  
3 return for “large cap” equities “in the single digits,” and that the Company’s  
4 proposal is inconsistent with those assumptions.<sup>46</sup>

5  
6 Q. IS MR. COPELAND’S POSITION SOUND?

7 A. No. For several reasons, Mr. Copeland’s position is misplaced and not  
8 relevant to the determination of the Company’s cost of equity. One of the  
9 primary flaws, as with certain of the published reports and studies regarding  
10 policymakers’ and executives’ views on future market returns (discussed  
11 above in my response to Mr. Copeland’s ERP), is that Mr. Copeland has  
12 relied on *expectations* of returns on the broader market, rather than investors’  
13 *required* returns. Expected returns represent participants’ forecasts regarding  
14 future returns, and say nothing regarding whether those expectations are  
15 lower than, equal to, or greater than required returns. Thus, while  
16 companies such as XEI must disclose the return they expect on pension  
17 assets in order to demonstrate the degree to which they will be able to fund  
18 pension liabilities, those disclosures provide no insight into whether an  
19 investor seeking to maximize a risk-adjusted return would invest their capital  
20 at those expected levels of return. Relying on such sources in an assessment  
21 of a utility’s ROE is thus inconsistent with the capital attraction standard of  
22 *Hope* and *Bluefield*. Moreover, the distinction between expected and required  
23 returns is reflected in the fact that many investors currently are avoiding  
24 stock investments because the returns they *expect* from stocks are less than

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<sup>44</sup> Direct Testimony of Basil L. Copeland, Jr., at 54.

<sup>45</sup> *Ibid.*

<sup>46</sup> *Ibid.*, at 55.

1 the returns they *require* to make a stock investment, given prevailing levels of  
2 risk.

3  
4 Q. IS THIS DISTINCTION BETWEEN EXPECTED AND REQUIRED RETURNS WELL  
5 RECOGNIZED?

6 A. Yes. The distinction between expected and required returns, and the time  
7 horizon of the liabilities being funded by pension assets, was noted by the  
8 Arkansas Public Service Commission (the “APSC”). The APSC rejected the  
9 Attorney General witness’ position that expected returns disclosed in the  
10 context of pension fund assumptions could be used in determining the ROE  
11 for a regulated utility, and noted that:

12 There are two major problems with this sort of analysis: (1)  
13 it is unclear how long the time horizon is; and (2) these  
14 returns are expected, not required. It is well-established  
15 that expected returns may be less than, equal to, or greater  
16 than required returns. For that reason, expected returns  
17 cannot be used directly as a proxy for required returns,  
18 which is the information sought in a general rate case.<sup>47</sup>

19  
20 Q. IF EXPECTED PENSION RETURNS WERE RELEVANT TO A REQUIRED ROE,  
21 WOULD MR. COPELAND’S COMPARISON BE ON POINT?

22 A. No. NSP is not large enough to fit the definition of a “large cap”  
23 investment. Exhibit\_\_(JMC-1), Schedule 12 demonstrates that NSP would  
24 be a “mid-cap” investment based on market capitalization ranges published  
25 in the Ibbotson SBBI 2012 Valuation Yearbook. In order to determine an  
26 implied market capitalization for NSP, I applied the median price-to-book  
27 ratio for the proxy group to NSP’s common equity balance as of December

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<sup>47</sup> Docket No. 04-121-U, Order No. 16, Arkansas Public Service Commission, September 19, 2005, at 19.

1 31, 2011. That produced an implied market capitalization for NSP of \$4.7  
2 billion which falls within Ibbotson’s “mid-cap” range. NSP’s South Dakota  
3 operations, which is the utility whose ROE is being determined in this  
4 proceeding, is a substantially smaller entity, suggesting that the proper point  
5 of comparison would be “small cap” investments, on which investors  
6 generally require a significantly higher return than on “large cap”  
7 investments.

8  
9 Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE USE OF PENSION FUND  
10 RETURN ASSUMPTIONS TO MEASURE THE REASONABLENESS OF ROE  
11 RECOMMENDATIONS?

12 A. The use of pension fund return assumptions to measure the reasonableness  
13 of ROE recommendations fails to recognize the distinction between  
14 expected and required returns and has been rejected by other regulatory  
15 commissions. For those reasons, Mr. Copeland’s reference to pension fund  
16 return assumptions is misplaced and not relevant to the determination of  
17 NSP’s cost of equity.

18  
19 **VII. CAPITAL STRUCTURE AND COST OF DEBT**

20 Q. DOES MR. COPELAND ACCEPT THE COMPANY’S PROPOSED CAPITAL  
21 STRUCTURE AND COST OF DEBT?

22 A. No. Specifically, Mr. Copeland recommends a capital structure consisting of  
23 47.27 percent long-term debt and 52.73 percent equity,<sup>48</sup> whereas the  
24 Company’s 13-month average capital structure as of December 31, 2011  
25 consisted of 47.10 percent long-term debt and 52.90 percent equity. Mr.

1 Copeland recommends a debt cost of 6.02 percent, as compared to the  
2 Company's debt cost at December 31, 2011 of 6.13 percent.

3  
4 Q. WHAT CAUSES THE DIFFERENCE BETWEEN MR. COPELAND'S  
5 RECOMMENDATIONS AND THE COMPANY'S PROPOSAL?

6 A. There are two differences between Mr. Copeland's approach and that used  
7 by the Company. Mr. Copeland uses the year-end balances of debt and  
8 equity, whereas the Company uses the 13-month average of those balances.  
9 He also mistakenly asserts that there is a double counting of debt issuance  
10 costs.

11  
12 Q. IS MR. COPELAND'S USE OF YEAR-END BALANCES APPROPRIATE?

13 A. No. Mr. Copeland's use of year-end balances for the capital structure would  
14 be inconsistent with the 13-month average basis of the Company's rate base.  
15 NSP calculates its revenue requirement based on a 13-month average rate  
16 base, with which the Company's reflection of 13-month average balances of  
17 its capital structure is consistent. In other words, it is consistent to use the  
18 same convention for capital costs as is used for the Company's investment in  
19 property, plant, and equipment. Otherwise, the inconsistency would lead to  
20 a mismatch of the closely related rate base and the capital used to finance the  
21 rate base. Mr. Copeland asserts that there is a "general 'rule'" that end-of-  
22 test-year balances are the most accurate estimate of the capital structure.<sup>49</sup>  
23 However, while the test period ending balance may be a more accurate  
24 estimate of the capital structure at a point in time, it is not a more accurate

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<sup>48</sup> Direct Testimony of Basil L. Copeland, Jr., at 38.

<sup>49</sup> *Ibid.*, at 39.

1 estimate of the cost incurred to finance the Company's rate base, upon  
2 which the Company will earn its return.

3  
4 Q. IS MR. COPELAND CORRECT THAT THE COMPANY IS "DOUBLE COUNTING"  
5 DEBT COSTS?<sup>50</sup>

6 A. No. Mr. Copeland's incorrect assertion appears to stem from a  
7 misunderstanding regarding the way NSP determines its capital structure.  
8 The Company calculates its debt expenses as a percentage of "Capital  
9 Employed" (*i.e.*, the net amount available to the Company determined by the  
10 face amount of debt issuances plus premiums and less discounts and  
11 expenses). However, Mr. Copeland appears to not understand whether the  
12 Company uses: (i) the face amounts of long term debt to determine its  
13 capital structure (thereby collecting debt costs on a higher amount of long  
14 term debt); or (ii) the net amount (*i.e.*, Capital Employed). Specifically, Mr.  
15 Copeland's testimony first states, "[t]he company is being allowed to include  
16 the full amount of the face value in its capital structure,"<sup>51</sup> but later states,  
17 "NSP's approach...is to include only the 'capital employed' amount in the  
18 debt ratio."<sup>52</sup> For clarification, the Company uses the net amount (*i.e.*,  
19 Capital Employed) to determine its long-term debt balance and the  
20 percentage of long-term debt in the regulated capital structure, and that is  
21 the correct approach.  
22

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<sup>50</sup> *Ibid.*, at 40.

<sup>51</sup> *Ibid.*, at 42.

<sup>52</sup> *Ibid.*

1 Q. PLEASE EXPLAIN THE LONG TERM DEBT BALANCE MORE FULLY.

2 A. As of December 31, 2011, the 13-month average long-term debt Capital  
3 Employed in the Company's capital structure was \$3,286,263,000, as  
4 compared to a face amount of \$3,346,916,000.<sup>53</sup> The \$3,286,263,000 Capital  
5 Employed amount can be traced to the Company's capital structure  
6 calculation.<sup>54</sup> The \$60,653,000 reduction from the face amount to Capital  
7 Employed reflects issuance costs.

8

9 Q. HAS THE COMPANY DOUBLE-COUNTED THE COST OF LONG TERM DEBT?

10 A. No. The total amount of issuance costs recovered by the Company under  
11 its calculation is equal to the total amount of issuance costs incurred by the  
12 Company. There is no double counting of debt issuance costs.

13

14 Q. CAN YOU DEMONSTRATE THAT THE COMPANY'S PROPOSAL RESULTS IN NO  
15 "DOUBLE COUNTING"?

16 A. Yes. In Exhibit\_\_(JMC-1), Schedule 11, I have modified the example  
17 provided by Mr. Copeland on page 41 of his Direct Testimony to  
18 demonstrate the amount of debt expense recovered under the Company's  
19 proposal. As the example shows, there is no over-recovery of debt expense.

20

21 Q. IS MR. COPELAND CORRECT THAT THE COMPANY "INCLUDES THE FULL  
22 'FACE VALUE' OF EQUITY ISSUED, NOT JUST 'CAPITAL EMPLOYED'"?<sup>55</sup>

23 A. No. The equity balance in the NSP's regulatory capital structure represents  
24 amounts net of issuance costs, which is consistent with the Capital

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<sup>53</sup> Response to SDPUC DR2-12, January 5, 2012. Attachment B.

<sup>54</sup> *Ibid.*, Attachment A.

<sup>55</sup> Direct Testimony of Basil L. Copeland, Jr., at 42.

1 Employed amount that the Company uses in calculating its debt balance in  
2 its regulatory capital structure. Thus, contrary to Mr. Copeland's assertions,  
3 there is no "overstatement of the equity ratio relative to the debt ratio."<sup>56</sup>  
4 Both are based on the same approach.  
5

6 Q. HAS MR. COPELAND MISTAKENLY INCLUDED THE NET AMOUNT OF EQUITY  
7 IN HIS PROPOSED CAPITAL STRUCTURE?

8 A. Yes. What Mr. Copeland understands to be the full face amount of the  
9 Company's equity actually represents the equity balance net of issuance  
10 costs. Since Mr. Copeland has used that net amount of equity in the capital  
11 structure while using the full face amount of NSP's debt, he has presented a  
12 mismatch of equity and debt balances, and overstated the debt balance  
13 relative to the equity balance.  
14

15 Q. IS MR. COPELAND CORRECT IN STATING THAT NSP SHOULD INCLUDE THE  
16 FULL FACE AMOUNT OF ITS DEBT AND EQUITY BALANCES IN ITS CAPITAL  
17 STRUCTURE?

18 A. No. Using the full face amount of issued equity would be inconsistent with  
19 the way in which NSP records such issuances on its books, and also  
20 inconsistent with accounting guidance. As provided in the Securities  
21 Exchange Commission's Staff Accounting Bulletin Topic 5.A: "Specific  
22 incremental costs directly attributable to a proposed or actual offering of

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<sup>56</sup> *Ibid.*

1 securities may properly be deferred and *charged against* the gross proceeds of  
2 the offering.”<sup>57</sup>

3 In other words, common equity balances that appear on a company’s  
4 financial statements are net of issuance costs. Therefore, I disagree that it  
5 would be appropriate to include the full face amount of equity in the capital  
6 structure.

### 8 VIII. UPDATED ANALYSES

9 Q. HAVE YOU UPDATED THE ANALYSES CONTAINED IN COMPANY WITNESS  
10 DANE’S DIRECT TESTIMONY?

11 A. Yes. I have updated the analyses contained in Mr. Dane’s Direct Testimony  
12 based on data through March 31, 2012, for the same electric utility proxy  
13 group that Mr. Dane established.

14  
15 Q. WHAT GROWTH RATES HAVE YOU USED IN YOUR UPDATED CONSTANT  
16 GROWTH DCF ANALYSIS?

17 A. I have maintained the use of earnings growth estimates from Zacks, First  
18 Call and Value Line as the relevant measure of growth.

19  
20 Q. WHAT AVERAGING PERIODS HAVE YOU USED IN YOUR UPDATED ANALYSES  
21 TO CALCULATE THE DIVIDEND YIELD COMPONENT OF THE DCF MODEL?

22 A. Consistent with Mr. Dane’s Direct Testimony, I have continued to present  
23 results for the most recent 30, 90 and 180-trading days as of March 31, 2012.

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<sup>57</sup> Securities Exchange Commission’s Staff Accounting Bulletin Topic 5.A. Emphasis added. *See also*, Kieso, Donald E., Weygandt, Jerry J., and Warfield, Terry D., Intermediate Accounting, 10<sup>th</sup> ed., John Wiley & Sons, Inc., 2001, at 781, which states: “Direct costs incurred to sell stock, such as underwriting costs, accounting and legal fees, printing costs, and taxes, should be reported as a reduction of the amounts paid in. Issue costs are therefore debited to Additional Paid-in Capital because they are unrelated to corporate operations.”



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- Q. PLEASE SUMMARIZE YOUR UPDATED CONSTANT GROWTH DCF RESULTS.
- A. As shown in Table 5 (below, see also Exhibit \_\_ (JMC-1), Schedule 3), the updated mean results of my Constant Growth DCF analysis for the electric utility proxy group, which include flotation costs, support the Company's revised ROE request of 10.65 percent.

**Table 5: Updated Constant Growth DCF Results with Flotation Cost Adjustment**

	<b>Mean Low</b>	<b>Mean</b>	<b>Mean High</b>
30-Day Average	9.48%	10.68%	11.89%
90-Day Average	9.44%	10.64%	11.85%
180-Day Average	9.57%	10.76%	11.97%

- Q. HAVE YOU PERFORMED A CAPM ANALYSIS IN YOUR REBUTTAL TESTIMONY?
- A. No, I have not. However, as noted in my response to Mr. Copeland, reasonable adjustments to his inputs and assumptions would produce a CAPM result of 10.76 percent, which is well within my recommended range.
- Q. PLEASE SUMMARIZE THE UPDATED BOND YIELD PLUS RISK PREMIUM ANALYSIS.
- A. The updated Bond Yield Plus Risk Premium analysis includes authorized ROEs as reported by Regulatory Research Associates through March 31, 2012, for electric utilities. For the purpose of calculating the expected risk premium and ROE, I have used projected yields of the 30-Year Treasury. As shown in Exhibit \_\_ (JMC-1), Schedule 5, my updated risk premium results using the Blue Chip projected 30-year Treasury yield range from 10.17 percent to 10.92 percent.

1

2 Q. WHAT USE HAVE YOU MADE OF THE UPDATED RISK PREMIUM ANALYSIS?

3 A. I have used the risk premium analysis only to test the reasonableness of my  
4 DCF results.

5

6 **IX. SUMMARY AND RECOMMENDATION**

7 Q. PLEASE SUMMARIZE YOUR ANALYTICAL RESULTS AND CONCLUSIONS.

8 A. Based on the results of my updated analysis, I recommend a revised ROE  
9 range to between 10.40 percent and 10.90 percent, with an ROE  
10 recommendation of 10.65 percent. The low end of the range is based on the  
11 mean DCF results, before consideration of flotation costs, and the high end  
12 of the range is based on the mean DCF results with flotation costs, and  
13 considers that the Company has the need for a very substantial and relatively  
14 high level of capital expenditures, and faces somewhat greater business risks  
15 than the proxy group. As a result of the updated analyses, Table 6 (below)  
16 demonstrates that my recommended range is well within the broader range  
17 of my analytical results, and is corroborated by the Bond Yield Plus Risk  
18 Premium analysis.

1

**Table 6: Summary of Analytical Results**

Constant Growth DCF Including Flotation Cost Adjustment			
	Mean Low	Mean	Mean High
30-Day Average	9.48%	10.68%	11.89%
90-Day Average	9.44%	10.64%	11.85%
180-Day Average	9.57%	10.76%	11.97%
Bond Yield Plus Risk Premium			
Blue Chip Financial Forecast Q1 2012 – Q2 2013 30-Year Treasury Projection (3.42%)			10.17%
Blue Chip Financial Forecast 2013 – 2022 30-Year Treasury Projection (5.30%)			10.92%
Mean			10.54%

2

3 Q. WHAT IS YOUR RECOMMENDATION WITH REGARDS TO THE COMPANY’S COST  
 4 OF DEBT AND CAPITAL STRUCTURE?

5 A. As discussed above, it is my view that the Company’s approach to  
 6 developing its capital structure and cost of debt is reasonable. As such, I  
 7 support the Company’s revised proposal regarding capital structure (*i.e.*,  
 8 52.90 percent equity, 47.10 percent debt) and cost of debt (*i.e.*, 6.13 percent).

9

10 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

11 A. Yes, it does.