

BEFORE THE NORTH DAKOTA PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION
OF NORTHERN STATES POWER CO.
FOR AN FOR AN ELECTRIC RATE INCREASE

DOCKET NO. PU-20-441

DIRECT TESTIMONY OF
MARLON F. GRIFFING, PH.D.
ON BEHALF OF
NORTH DAKOTA PUBLIC SERVICE COMMISSION ADVOCACY STAFF

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Exhibit 24 - Prefiled Direct Testimony of Marlon F.
Griffing

Public Service Commission Advocacy Staff

Mitch Armstrong, Advocacy Staff Counsel

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Prefiled Direct Testimony of Marlon Griffing and Exhibits
Public Service Commission Advocacy Staff
Mitch Armstrong, Advocacy Staff Counsel

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1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.**

3 A. My name is Dr. Marlon F. Griffing. I am a Senior Consultant with the economic consulting
4 firm of PCMG & Associates Inc. ("PCMG"). My business address is 22 Brookes Drive,
5 Gaithersburg, MD 20785.

6 **Q. PLEASE DESCRIBE PCMG.**

7 A. PCMG was founded in 2015 to conduct research on a consulting basis into the rates,
8 revenues, costs, and economic performance of regulated firms and industries. The firm has
9 a professional staff of four with expertise in economics, accounting, and cost analysis. Most
10 of its work involves the development, preparation, and presentation of expert witness
11 testimony before federal and state regulatory agencies.

12 **Q. HAVE YOU PREPARED A SUMMARY OF YOUR QUALIFICATIONS AND**
13 **EXPERIENCE, INCLUDING COST-OF-CAPITAL TESTIMONY IN**
14 **REGULATORY PROCEEDINGS?**

15 A. Yes. Attachment ____ (MFG-1) is a summary of my qualifications, experience, and
16 testimony given before state and federal regulatory agencies regarding cost of capital.

17 **Q. FOR WHOM ARE YOU APPEARING IN THIS PROCEEDING?**

18 A. I am appearing on behalf of the North Dakota Public Service Commission ("Commission")
19 Advocacy Staff in this proceeding.

20 **Q. WHAT ARE YOUR RESPONSIBILITIES IN THIS COMMISSION**
21 **PROCEEDING?**

22 A. My responsibility is to determine a fair rate of return on common equity capital and a fair
23 overall rate of return for Northern States Power, a Minnesota corporation ("NSPM" or the

1 “Company”). NSPM is a vertically integrated electric and natural gas utility. It is an
2 operating subsidiary of Xcel Energy Inc (“XEL”). Among its operations, NSPM provides
3 electric generation, transmission, and distribution service in North Dakota. NSPM is
4 seeking an increase in its North Dakota electric rates in this docket. NSPM witness Dylan
5 W. D’Ascendis testifies regarding cost of capital on behalf of the Company. I respond to
6 the cost of capital testimony of Mr. D’Ascendis.

7 **Q. HOW DO YOU DEVELOP A RECOMMENDED RATE OF RETURN FOR THE**
8 **COMPANY?**

9 A. To arrive at a recommended overall rate of return (“ROR”), I analyze the Company’s
10 requested capital structure and costs for each component of that structure.

11 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

12 A. My testimony is organized as follows:

- 13 • First, I discuss economic considerations and legal precedents underlying the cost
14 of equity in regulatory proceedings.
- 15 • Second, I explain how I selected the members of the Comparison Group of
16 companies used in my analysis.
- 17 • Third, I provide overviews of the Discounted Cash Flow (“DCF”) model and the
18 Capital Asset Pricing Model (“CAPM”) analyses.
- 19 • Fourth, I perform DCF model and CAPM analyses for the Comparison Group,
20 check them for reasonableness, and recommend a return on equity (“ROE”) for
21 the Company.
- 22 • Fifth, I recommend a return on equity (“ROE”) for the Company and check it for
23 reasonableness.
- 24 • Sixth, I recommend a capital structure and ROR for the Company.
- 25 • Seventh, I review the Company’s rate of return analysis.
- 26 • Eighth, I summarize my testimony and recommendations

27

1 **Q. PLEASE STATE YOUR CONCLUSIONS REGARDING THE COMPANY'S ROE**
2 **AND ROR.**

3 A. My ROE analysis for NSPM produces a value of 9.50 percent. For NSPM's capital
4 structure, my analysis shows ratios of 50.00 percent long-term debt, 0.50 percent short-
5 term debt, and 49.50 percent common equity are appropriate. When the ROE of 9.50
6 percent is included in the recommended capital structure with the Company's costs of long-
7 term debt and short-term debt,¹ the result is an ROR of 6.818 percent.²

8 **II. THE COST OF EQUITY IN THE REGULATORY ENVIRONMENT**

9 **1. The Role of Economic Theory**

10 **Q. WHAT IS THE BASIS IN ECONOMIC THEORY FOR REGULATING CERTAIN**
11 **INDUSTRIES?**

12 A. According to economic theory, the forces of supply and demand interacting in a
13 competitive environment produce an allocation of resources that yields an optimal mix of
14 goods and services. Firms and individuals maximize profits and satisfaction given the
15 prices and incomes that the interplay of market forces generates. This outcome is described
16 as economically efficient. Put simply, there is no better output of goods and services that
17 can be produced with the available resources.

18 **Q. DOES THE ECONOMICALLY EFFICIENT OUTCOME OCCUR IN ALL**
19 **INDUSTRIES?**

20 A. No, several conditions must be present, including many buyers and sellers, identical
21 products, perfect information about prices, and so forth. If these conditions exist, then price
22 is the only way for providers of goods and services to compete in markets. If the conditions

¹ NSPM Revised A32. Change in Cost of Capital, Page 1 of 1.

² Attachment ____ (MFG-20) Schedule 3.

1 for competition do not exist, however, then letting supply and demand work unfettered will
2 not produce the socially desired efficient outcome.

3 **Q. ARE THERE LEGAL OBSTACLES TO COMPETITION IN PUBLIC UTILITY**
4 **MARKETS?**

5 A. Yes. Even if a firm is willing and able to raise the capital needed to be a viable electric
6 distribution company, state and local governments typically have permitting processes that
7 govern where and when utilities can build facilities. Thus, high start-up costs are not the
8 only barrier that must be overcome.

9 **Q. ARE THERE OTHER ASPECTS OF AN ELECTRIC DISTRIBUTION UTILITY'S**
10 **COSTS THAT RESULT IN FEW SELLERS?**

11 A. Yes. The electric utility industry is what is typically known as a declining-cost industry.

12 **Q. WHAT IS A DECLINING-COST INDUSTRY?**

13 A. A declining-cost industry is one where the average cost of service declines over the range
14 of effective demand.

15 **Q. IS A DECLINING AVERAGE COST OF SERVICE SUFFICIENT FOR AN**
16 **INDUSTRY TO BE TERMED "DECLINING COST?"**

17 A. No. In fact, average costs decline in most industries as production and sales increase.
18 However, in these industries, average cost eventually rises and does so at a sales level that
19 is smaller than the total demand for the product in a given industry. As a consequence, a
20 few too many firms share the market because, beyond the sales volume at which average
21 costs rise, firms lose, rather than gain, cost advantage.

1 **Q. ARE PUBLIC UTILITIES DECLINING-COST INDUSTRIES?**

2 A. Yes. With their high fixed costs, public utilities have high initial average costs, but as their
3 sales increase, the average cost drops. What qualifies public utilities as a declining-cost
4 industry is that their average costs continue to decline over very high volumes of sales, up
5 to and beyond total, or effective, market demand for the product. This condition creates
6 market failure (when the market produces an outcome that is inefficient). As an electric
7 distribution firm increases its sales and market share, its average costs decline, and continue
8 to do so. Thus, the firm with the largest market share has an increasing cost advantage over
9 competitors. In effect, there is not enough room in the market for another distributor. The
10 logical result is a market with one distributor—often referred to as a natural monopoly—
11 not the many firms envisioned in the theory of competition.

12 **Q. HOW HAS SOCIETY RESPONDED TO THE ABSENCE OF COMPETITION IN**
13 **PUBLIC UTILITY MARKETS?**

14 A. Since sufficient competition does not exist in the markets for public utilities to ensure low
15 prices and adequate service, society has typically turned to regulation to achieve these
16 goals. Firms are granted exclusive franchises to serve areas in return for accepting
17 government regulation of their prices. The government regulators generally are charged
18 with pursuing an outcome that approximates the efficient outcome of the competitive
19 model. Regulation is viewed as a way to decrease prices and increase services provided by
20 a natural monopoly. A challenge for regulators is to set policies that ensure that the
21 regulated firm provides an appropriate supply of services at reasonable rates. A reasonable
22 rate enables a public utility not only to recover its operating expenses, depreciation, and
23 taxes, but also to compete for funds in capital markets.

1 **2. Standards for Finding a Fair Rate of Return**

2 **Q. DO STANDARDS EXIST FOR DETERMINING A FAIR RATE OF RETURN?**

3 A. Yes. Two United States Supreme Court (“Court”) cases are the basis for rate of return
4 regulation in the United States. They are the *Bluefield Water Works*³ and the *Hope Natural*
5 *Gas*⁴ cases. In *Hope*, the Court established the following standards for the return on equity
6 that must be allowed a regulated public utility to provide for a “reasonable return”:

7 [T]he return to the equity owner should be commensurate with the
8 returns on investments in other enterprises having corresponding
9 risks. That return, moreover, should be sufficient to assure
10 confidence in the financial integrity of the enterprise, so as to
11 maintain its credit and to attract capital.⁵

12 It can be seen from this excerpt that there are essentially three standards for determining
13 an appropriate return on equity from the standpoint of the equity owners of a regulated
14 utility. The first is the “comparable earnings” standard—the earnings must be
15 “commensurate with the returns on investments in other enterprises having corresponding
16 risks.” The second is that earnings must be sufficient to assure “confidence in the financial
17 integrity of the enterprise.” The third is that earnings must allow the utility to “attract
18 capital.”

19 **Q. CAN THE COMPARABLE EARNINGS STANDARD BE APPLIED IN**
20 **ESTIMATING THE RATE OF RETURN ON EQUITY CAPITAL?**

21 A. No. There is circularity to the comparable earnings standard because the competitive nature
22 of the capital markets virtually ensures that the returns to all enterprises are comparable
23 with each other. Investors establish the price of each traded stock in capital markets based

³ *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923).

⁴ *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

⁵ *Id.* at 603.

1 on prospective earnings and perceived risk. The prices for common equity for companies
2 with high earnings are bid up, while the prices for companies with low earnings are bid
3 down. If earnings were the only concern, the ratio of earnings to share prices, the return for
4 investors, would become equal for all companies. However, investors recognize relative
5 risk as they buy and sell common equity shares. For companies with high risk, share prices
6 will be lower; for companies with low risk, share prices will be higher. Thus, the
7 comparable earnings test becomes a nullity: All returns, because they are adjusted for risk,
8 are comparable with all other returns.

9 **Q. HOW IS THIS CIRCULARITY TYPICALLY RESOLVED IN PUBLIC UTILITY**
10 **REGULATION?**

11 A. In public utility regulation, the conventional procedure for resolving this circularity is to
12 identify the required equity return based on the market value of a utility's stock. That return
13 is combined with the cost of debt, and the blended return to total capital is then applied to
14 a rate base reflective of the book value of the utility's investment. The book value is the
15 accountant's quantification of the depreciated original cost of the utility's assets adjusted
16 for ratepayer contributions such as deposits and deferred taxes. Under this procedure, the
17 market price of a stock is used only to determine the return that investors expect from that
18 stock. That expectation is then applied to the book value of the utility's investment to
19 identify the level of earnings that regulation will allow the utility's common shareholders
20 to recover.

1 **Q. HOW CAN THE FINANCIAL INTEGRITY AND CAPITAL ATTRACTION**
2 **STANDARDS ENUNCIATED IN *HOPE* BE APPLIED IN ESTIMATING THE**
3 **RATE OF RETURN ON EQUITY CAPITAL?**

4 A. If a utility can earn a return on its investment comparable to that required by enterprises of
5 comparable risk, then it should have no difficulty in attracting capital and maintaining
6 credit. Investors would have no reason to pass on purchasing the common equity of such a
7 utility in favor of other investment opportunities. Thus, if the comparable earnings test is
8 met, then the financial integrity and capital attraction standards are met as well.

9 **Q. WHAT IS RISK?**

10 A. Risk is the chance that an investment will lose value. A business, for example, may
11 introduce a new product, supporting it with investment in plant and equipment. There is,
12 of course, no guarantee that consumers will purchase the product, putting the investment
13 in the plant and equipment at risk. The risk investors attach to the company varies inversely
14 with their view as to the probability of the product doing well. In general, the greater the
15 risk of an investment, the greater the return required to attract investors, and vice versa.

16 **Q. DOES SETTING AN ALLOWED RATE OF RETURN MEAN THAT THE**
17 **UTILITY WILL EARN THAT RETURN?**

18 A. No. There is no guarantee that the utility will earn the allowed rate of return. The utility
19 has the reasonable *opportunity* to earn the allowed rate of return; in practice, the utility may
20 earn more or less than this return, depending on whether and how its management responds
21 to technological and market developments, among other matters.

1 **Q. WHAT SHOULD THE COMMISSION CONSIDER IN SETTING AN**
2 **APPROPRIATE RATE OF RETURN?**

3 A. The Commission should look to current market conditions as it balances investor and
4 consumer interests. In this case, the rate of return should reflect the condition of the capital
5 markets in which NSPM will have to compete with other firms for funding. Historically
6 allowed rates and historical performances are not appropriate inputs in this forward-looking
7 approach. This statement, however, does not mean that historical rates and performance
8 are irrelevant. They are factors because they affect investors' views of a company's
9 prospects and, therefore, the investors' willingness to purchase its common equity shares.

10 **Q. PLEASE EXPLAIN HOW THE METHODS YOU HAVE USED TO DETERMINE**
11 **THE COST OF COMMON EQUITY CAPITAL FOR THE COMPANY REFLECT**
12 **CURRENT MARKET CONDITIONS.**

13 A. I used a market-oriented approach to determine the common equity cost for the Company.
14 I analyzed the equity return that investors currently expect to receive from investing in
15 companies with risks similar to the risk of the Company. Many factors influence these
16 investor expectations, among them: past performance of the companies, estimates of how
17 the companies will perform in the future, possible technological change, tax rates, and
18 predicted general economic conditions. As investors decide where to place their funds
19 among the investment options available to them, they weigh the information they have.
20 Then they decide how much to pay to acquire common equity shares, or to turn to the other
21 side of the question, what price will lead them to sell the shares. Either way, the factors are
22 reflected in current prices in capital markets. Thus, my analysis is forward-looking because
23 it relies on investors' current assessment of what is likely to happen with their investments.

1 **Q. WHAT IS THE ROLE OF OPPORTUNITY COSTS IN YOUR ANALYSIS?**

2 A. An opportunity cost is the value of the next best choice forgone as the result of making a
3 decision. Opportunity costs are central to my analysis. As investors decide where to place
4 their assets, they have many opportunities from which to choose in the financial markets.
5 Economic theory says they will choose the opportunity they think will provide them the
6 best return, taking into account the level of risk with which they are comfortable. Thus, for
7 a company to attract capital, its forward-looking fair rate of return must at least equal the
8 expected rate of return for the best alternative opportunity with similar risk.

9 **III. OVERVIEW OF THE RETURN ON EQUITY ANALYSIS**

10 **Q. HOW DO YOU KNOW WHAT EQUITY RATE OF RETURN THE COMPANY**
11 **MUST OFFER TO INVESTORS TO BE AN ATTRACTIVE OPPORTUNITY?**

12 A. No one knows with certainty what specific rate of return the Company must offer to
13 investors that is just sufficient to make the Company an attractive opportunity. However,
14 various methods based on finance theory have been derived for reliably estimating what
15 investors currently think that rate is.

16 **Q. PLEASE IDENTIFY THE METHODS YOU HAVE ADOPTED IN YOUR ROE**
17 **ANALYSIS.**

18 A. I use the Discounted Cash Flow (DCF) method, which is widely used in utility general rate
19 cases, and is a method relied on by the MPUC in determining rate of return. I also include
20 the results of the Capital Asset Pricing Model (CAPM), combining them with the DCF
21 results for my recommended ROE. I use recently authorized returns for electric utility
22 operating companies in U.S. jurisdictions as a check on the reasonableness of the ROE
23 outcome.

1 **Q. PLEASE SUMMARIZE THE DCF METHOD.**

2 A. The DCF model uses the current dividend yield and the expected growth rate of this yield
3 to determine a required rate of return on an investment opportunity. The required rate of
4 return from a DCF analysis is derived from a formula for determining the net present value,
5 or price, of a share of stock. There are several variations of the DCF, but the constant-
6 growth form I have selected assumes that dividends (D) are received at the end of each
7 year, the annual growth rate of dividends (g) is constant forever, and the discount rate for
8 dividends (k) is constant forever. The equation form of this constant-growth DCF model is
9 the following:

10

11
$$k = \frac{D_1}{P_0} + g$$

12

13

Where:

14

k is the discount rate, which also is the fair rate of return for equity;

15

D₁ is the annual dividend one year from the present;

16

P₀ is the current price of a stock share; and

17

g is the expected growth rate of the dividend.

18

19 **Q. HOW IS THE ANNUAL DIVIDEND ONE YEAR FROM THE PRESENT**
20 **CALCULATED?**

21 A. The annual dividend one year from now is derived by applying the growth-rate estimate
22 (g) to the actual current annual dividend (D₀).

1 **Q. PLEASE DESCRIBE THE ELEMENTS OF THE DCF MODEL.**

2 A. The first element of the DCF model is the dividend-yield component, while the second
3 element is the dividend growth-rate component. The sum of these two components
4 produces the required ROE for a company.

5 **Q. PLEASE DISCUSS THE CAPM METHOD.**

6 A. The premise of the CAPM method is that any risk which is company-specific can be
7 diversified away by investors. Therefore, the only risk that matters is the systematic risk of
8 the stock. This systematic risk is measured by beta (β). Expressed simply, the CAPM
9 assumes the following form:

10

$$k = r + \beta (k_m - r)$$

12

13 Where:

14 k is the required rate of return for the subject stock;

15 β is beta, the measure of systematic risk;

16 r is the rate of return on a riskless asset; and

17 k_m is the required rate of return on the broad market.

18 $[(k_m - r)$ is known as the "market risk premium"]

19

20 **Q. PLEASE CHARACTERIZE THE CAPM METHOD.**

21 A. In the CAPM the required ROE for a company also is the sum of two components. The
22 first of these is the return on a riskless asset. To this base value, a return is added that
23 reflects the additional rate of return earned by other companies in the broad equity market

1 adjusted for the risk of the subject company relative to the risk of an average company in
2 the market. The subsequent amount thus reflects the risk of the subject company.

3 **Q. DOES YOUR EQUITY RATE OF RETURN ANALYSIS USE FINANCIAL**
4 **INFORMATION FOR NSPM?**

5 A. No. As noted, NSPM is an operating subsidiary of XEL. NSPM is not publicly traded, so
6 common equity share price information is unavailable. Therefore, a direct DCF analysis
7 cannot be performed on the Company.

8 **Q. DOES YOUR EQUITY RATE OF RETURN ANALYSIS USE OTHER NSPM**
9 **INFORMATION?**

10 A. Yes. NSPM has a Standard & Poor's ("S&P") credit rating of A-.⁶ This credit rating
11 reflects S&P's evaluation of the risk for the company. It is identical to the S&P credit rating
12 for XEL, but is determined separately. The Company credit rating is one criterion that was
13 applied in selecting electric utilities that are similar in risk to NSPM.

14 **Q. HOW DO YOU USE THE ROE ANALYSIS TO ESTIMATE THE COMPANY'S**
15 **REQUIRED RATE OF RETURN?**

16 A. I performed an ROE analysis on a group of electric utilities comparable to NSPM that are
17 publicly traded and have similar investment risk, as discussed below. The estimated rates
18 of return for members of this group form the basis for my estimate of a fair rate of return
19 for the Company.

20

⁶ Attachment ____ (MFG-2)

1 **IV. SELECTING THE COMPARISON GROUP**

2 **Q. PLEASE DISCUSS YOUR PROCEDURE FOR SELECTING THE COMPARISON**
3 **GROUP.**

4 A. I set out to find a group of companies that are, from the perspective of investors, similar to
5 NSPM. Thus, I wanted firms that are electric utility companies that represent
6 approximately the same investment risk as the Company.

7 **Q. PLEASE DESCRIBE HOW YOU FOUND SUITABLE CANDIDATE COMPANIES**
8 **FOR THE COMPARISON GROUP.**

9 A. I looked at Value Line, a widely used investor service, for companies that Value Line
10 classifies as members of the Electric Utility Industry. The January 22, 2021 (West);
11 February 12, 2021 (East); and March 12, 2021 (Central) editions of the *Value Line*
12 *Investment Survey* available at the Value Line website on April 13, 2021 included 40
13 companies in this category.⁷

14 **Q. WAS XCEL ENERGY INC. ONE OF THE 40 COMPANIES IN THE VALUE LINE**
15 **ELECTRIC INDUSTRY?**

16 A. Yes. I removed XEL from consideration for the Comparison Group. I prefer not to include
17 a subject company or its parent or subsidiary in the Comparison Group because doing so
18 creates circularity in calculating a return. A concern in selecting a proxy group is that there
19 be enough members that no one company's results strongly affect the ROE analysis
20 outcome. There are enough electric utilities available that the Comparison Group can be
21 formed without including XEL.⁸

⁷ Attachment ____ (MFG-3).

⁸ Attachment ____ (MFG-4).

1 **Q. WHAT WAS THE NEXT STEP IN YOUR SELECTION PROCESS?**

2 A. I applied screens to the initial set of Value Line Electric Utility companies to ensure that
3 the companies included in my Comparison Group were similar in risk to the risk of the
4 Company.⁹

5 **Q. PLEASE LIST THE CRITERIA YOU APPLIED IN THE SELECTION OF THE**
6 **COMPARISON GROUP.**

7 A. I applied the following screens to the initial set of Electric Utility companies:

- 8 1. U.S. firm based in the continental 48 states;
- 9 2. shares publicly traded on a stock exchange;
- 10 3. a stable record of paying dividends;
- 11 4. not be expected to sell, merge into or be acquired by another company, or
12 be engaged in an unusual regulatory proceeding;
- 13 5. have a Standard & Poor's ("S&P") credit rating of BBB+ to A-;
- 14 6. have positive growth-rate projections from expert analysts; and
- 15 7. have 65 percent or more of the three-year average of net operating income,
16 net income, or operating revenue be derived from regulated electric
17 operations.

18 **Q. WHAT IS THE PURPOSE OF APPLYING THE CRITERION THAT THE**
19 **COMPANIES BE BASED IN THE CONTINENTAL UNITED STATES?**

20 A. I sought companies that face a business environment similar to that in which NSPM
21 operates. The Company's operating utility in this case is in North Dakota and subject to
22 state regulation, statutes, and rules that are similar to those found in the rest of the United

⁹ Attachment ____ (MFG-4).

1 States. No companies were excluded for not being U.S.-based. There were two Canada-
2 based utilities with U.S. operations in the initial set, Emera Incorporated and Fortis Inc. I
3 applied the other screens to the U.S.-based operations of these two utilities.

4 **Q. WHAT PURPOSE IS SERVED BY REQUIRING THAT THE COMPANIES BE**
5 **PUBLICLY TRADED?**

6 A. One analytical tool that I used for finding a company's ROE, the DCF model,¹⁰ requires
7 information about common equity share prices, dividends, and growth-rate projections.
8 The requirement that companies be publicly traded ensures that their common equity share
9 prices are available. All of the Value Line Electric Utility companies are publicly traded.¹¹

10 **Q. WHAT PURPOSE IS SERVED BY REQUIRING THAT THE COMPANIES HAVE**
11 **A STABLE RECORD OF PAYING DIVIDENDS?**

12 A. The DCF model requires dividends as an input. If a company is not paying dividends or
13 has a record of cutting dividends, then its DCF analysis is not reliable. CenterPoint Energy
14 reduced its dividend in the second quarter of 2020.¹² PG&E Corporation has been in
15 bankruptcy and has not paid dividends since December 2017.¹³ The dividend record of
16 another electric utility, Summer Energy Holdings, is not available from S&P. All of these
17 electric utilities are excluded.¹⁴ Dominion Energy reduced its dividend the fourth quarter
18 of 2020. However, the company also sold most of its midstream gas operations about the

¹⁰ As will be seen in a later section, the forward-looking CAPM as I have applied it incorporates a DCF analysis and, thus, also relies on publicly traded companies.

¹¹ Attachment ____ (MFG-3).

¹² Attachment ____ (MFG-5).

¹³ Attachment ____ (MFG-6).

¹⁴ Attachment ____ (MFG-4).

1 same time in a nearly \$10 billion transaction (cash and debt assumed total).¹⁵ The lower
2 dividend reflects the smaller company. Therefore, I kept Dominion under consideration.

3 **Q. WHY IS IT IMPORTANT THAT COMPANIES INVOLVED IN SALES,**
4 **MERGERS, OR ACQUISITIONS, USUALLY BE EXCLUDED FROM YOUR**
5 **ANALYSIS?**

6 A. The share prices of companies involved in sales, mergers or acquisitions can be volatile.
7 Extreme increases in the share prices of companies that are part of sales, mergers, or
8 acquisitions drive down the ROE results in DCF analysis, while extreme decreases in the
9 share prices drive up the ROE results. Neither outcome yields meaningful DCF results.
10 Therefore, it is usually appropriate to exclude such companies from the analysis.

11 **Q. WERE ANY COMPANIES IN THE INITIAL SET INVOLVED IN SALES,**
12 **MERGERS, OR ACQUISITIONS?**

13 A. Yes. Further, Exelon announced February 21, 2021 it will spin off its generation facilities
14 with a target completion date of first quarter 2022.¹⁶ PNM Resources is being acquired by
15 Avangrid.¹⁷ All of those companies are excluded.

16 **Q. WERE ANY COMPANIES IN THE INITIAL SET INVOLVED IN UNUSUAL**
17 **CIRCUMSTANCES?**

18 A. Yes. Avangrid is a controlled company. It is 81.5 percent owned by its Spanish parent
19 company, Iberdrola, S.A. Owners of its New York Stock Exchange-traded shares do not
20 control corporate decision making. The effect of this relationship may be adverse for these
21 shareholders if the interests of Iberdrola and these shareholders diverge. Consequently,

¹⁵ Attachment ____ (MFG-7).

¹⁶ Attachment ____ (MFG-8).

¹⁷ Attachment ____ (MFG-9), Schedule 1.

1 because of the added risk for these investors of owning Avangrid shares, its share prices
2 tend to be lower than those of similar companies that are not controlled, and its ROE is
3 therefore higher.¹⁸ This ownership situation is another reason to exclude Avangrid from
4 the Comparison Group.

5 **Q. IS THERE ANOTHER COMPANY INVOLVED IN AN UNUSUAL SITUATION?**

6 A. Yes. FirstEnergy was implicated in a bribery scheme in Ohio. It faces possible
7 racketeering charges.¹⁹

8 **Q. WHAT IS THE PURPOSE OF USING THE S&P CREDIT RATING AS A**
9 **SCREEN?**

10 A. S&P's experts incorporate financial risk and business risk into a firm's credit rating. Within
11 these risk categories, S&P assesses such factors for public utilities as competitive
12 advantage, operating efficiency, and scale, scope, and diversity. This last set of factors
13 includes the effects of a utility's markets, service territories, and customer diversity on the
14 company's cash-flow stability, and in turn on its risk level. After considering all the factors,
15 S&P assigns a credit rating to a company. If companies have identical or similar credit
16 ratings as determined by expert analysts, then their relative risks are similar. As S&P states:

17 Creditworthiness is a multi-faceted phenomenon. Although there is
18 no "formula" for combining the various facets, our credit ratings
19 attempt to condense their combined effects into rating symbols
20 along a simple, one-dimensional scale. Indeed, as discussed below,
21 the relative importance of the various factors may change in
22 different situations.²⁰

¹⁸ Attachment ____ (MFG-9), Schedule 2.

¹⁹ Attachment ____ (MFG-10).

²⁰ Attachment ____ (MFG-11).

1 **Q. PLEASE DESCRIBE YOUR APPLICATION OF THE S&P CREDIT RATING**
2 **SCREEN.**

3 A. Regardless of the utility type, I start with the credit rating of the subject company and work
4 out a step at a time from that rating until I found enough companies that meet the other
5 screens to make a group large enough that the results for one company do not dominate the
6 ROE analysis. Please note that the credit rating screen does not require that companies
7 have exactly the same credit rating as the subject company. The credit rating need only be
8 similar to that of the subject company. The narrower the range of the credit rating, the
9 more like the subject company's risk are the risk profiles of the companies within the range.
10 However, the goal of having companies with risk similar to that of the operating company
11 has to be balanced with the goal of having a reasonable number of companies in the
12 Comparison Group so that no one company's result strongly influences the outcome.

13 **Q. WHAT WAS THE RESULT OF YOUR APPLICATION OF THE CREDIT**
14 **RATING SCREEN IN THIS DOCKET?**

15 A. There were 32 companies remaining from the original group of 40 after the previous
16 screens were applied. Of these utilities, MGE Energy does not have an S&P credit rating
17 and is excluded.²¹ When I moved one step above to an A rating there were no companies
18 with that rating. When I moved one step below to a BBB+ rating, I found that eight of the
19 31 remaining companies were outside that range.^{22 23} Those eight electric utilities were
20 Allete, Inc., Avista Corporation, Edison International, Emera Incorporated, IDACORP,

²¹ Summer Energy Holdings, eliminated for not having a record of paying dividends, also does not have an S&P credit rating.

²² Attachment ____ (MFG-12).

²³ FirstEnergy and PG&E have credit ratings of BB, but they were already eliminated by other screens.

1 Inc., NorthWestern Corporation, Otter Tail Corporation, and Hawaiian Electric Industries,
2 Inc.

3 **Q. YOU REQUIRED THAT ELECTRIC UTILITIES HAVE POSITIVE EARNINGS**
4 **PER SHARE (“EPS”) GROWTH-RATE FORECASTS TO BE INCLUDED IN THE**
5 **COMPARISON GROUP. WHAT PURPOSE DOES THIS SCREEN SERVE?**

6 A. If the growth-rate projections are negative or missing, then any DCF analysis performed
7 on them is not meaningful. All of the 23 companies still under consideration for the
8 Comparison Group have at least two positive EPS growth-rate forecasts.²⁴

9 **Q. FINALLY YOU REQUIRED THAT MORE THAN 65 PERCENT OF A**
10 **COMPANY’S THREE-YEAR AVERAGE OF AN INCOME OR REVENUE**
11 **INDICATOR BE DERIVED FROM REGULATED ELECTRIC UTILITY**
12 **OPERATIONS TO BE INCLUDED IN THE COMPARISON GROUP. PLEASE**
13 **EXPLAIN THE PURPOSE OF THIS CRITERION.**

14 A. For the firms to have similar risks, they must operate in similar business environments. The
15 Company is predominantly a regulated electric utility operation, so the firms considered
16 for the Comparison Group also must have predominantly regulated operations. This
17 criterion ensures that most of the Comparison Group firms’ operations are in the same
18 environment as that of the Company.

19 **Q. WHAT WAS THE OUTCOME OF YOUR APPLICATION OF THIS SCREEN?**

20 A. I included 16 of the 23 companies in the Comparison Group after applying the operating
21 income/net income/operating revenue screen. One utility, Ameren Corporation (64.9
22 percent), did not strictly meet the 65 percent standard. However, I chose to include it in

²⁴ Attachment ____ (MFG-4).

1 the Comparison Group because it fell just short of the cutoff. Moreover, it was closer in
2 percentage to the next higher company, Dominion Energy (65.2 percent), than it was to the
3 next lowest company, DTE Energy Company (59.1 percent).²⁵

4 **Q. PLEASE DESCRIBE THE COMPARISON GROUP AFTER YOUR SCREENING.**

5 A. The Comparison Group is composed of Alliant Energy, Ameren Corporation, American
6 Electric Power, Avista Inc., CMS Energy, Consolidated Edison, Dominion, Duke Energy,
7 Entergy Corporation, Evergy, Inc., Eversource Energy, NextEra Energy, OGE Energy,
8 Pinnacle West Capital, Portland General Electric, Southern Co., and WEC Energy Group.
9 Seven of the 16 companies were rated BBB+, and nine were rated A-.²⁶

10 **Q. PLEASE COMPARE THE MEMBERSHIP OF MR. D'ASCENDIS'S PROXY**
11 **GROUP WITH THE MEMBERSHIP OF YOUR COMPARISON GROUP.**

12 A. Mr. D'Ascendis's Proxy Group was composed of 15 electric utilities. Eight of those
13 companies were members of the Comparison Group. The seven that were not are
14 ALLETE, Inc., Edison International, IDACORP, Inc., NorthWestern Corporation, Otter
15 Tail Corporation, PNM Resources, and Xcel Energy. On the other hand, there were eight
16 companies in the Comparison Group that Mr. Coyne does not include in the Proxy Group.
17 They were American Electric Power, CMS Energy, Consolidated Edison, Dominion
18 Energy, Eversource Energy, NextEra Energy, Southern Company, and WEC Energy
19 Group. I stand by the screens I applied in selecting the Comparison Group and the electric
20 utilities included.

21

²⁵ Attachment ____ (MFG-13).

²⁶ Attachment ____ (MFG-14).

1 **V. DCF MODEL OVERVIEW**

2 **Q. WHAT IS THE PURPOSE OF A DCF ANALYSIS?**

3 A. The goal of this analysis was to estimate an appropriate, forward-looking rate of return on
4 equity. A DCF analysis requires a determination of expected growth rates and dividend
5 yields in order to estimate this return.

6 **Q. PLEASE DISCUSS EXPECTED GROWTH RATES.**

7 A. Because a DCF analysis is forward-looking, I want to estimate the expected growth rate of
8 dividends. Historical growth rates would be good indicators of the expected growth rate if
9 both of the following are true:

- 10 • the dividend payout ratio and the realized rate of return on equity capital
11 were constant in the past and could be assumed to remain constant in the
12 future; and
- 13 • any growth in book equity was attributable solely to retained earnings.

14 If, in practice, these conditions held, then earnings per share (“EPS”), dividends per share
15 (“DPS”), and book value per share (“BPS”) would all grow at the same rate, and the past
16 growth rates for these factors would be the rate at which they would grow in the future.

17 **Q. DID YOU USE HISTORICAL GROWTH RATES IN YOUR ANALYSIS?**

18 A. No. The conditions necessary for historical growth rates to be good indicators of future
19 growth rates are rarely satisfied. Most utilities’ returns on equity and payout ratios have
20 not remained constant over time. Further, growth in book value has occurred not only due
21 to retained earnings, but also due to the issuance of new shares of common stock.
22 Consequently, past growth rates of earnings, dividends, and book equity are frequently
23 unequal. Moreover, an industry may face a changed business environment, thereby making
24 the past a poor basis for projecting the future. Historical growth rates can differ
25 significantly from forward-looking projected growth rates due to such factors as inflation

1 rates, tax rates, the role of an industry in the economy, and the regulatory environment. In
2 view of these limitations of using historical growth rates, I based my estimated growth rates
3 on projected growth rates as publicly provided by "Zacks Investment Research," a
4 respected investor services company, Thomson Financial Network estimates provided on
5 Yahoo! Finance, and "The Value Line Investment Survey."

6 **Q. PLEASE DISCUSS THE DIVIDEND YIELDS USED IN YOUR DCF ANALYSIS.**

7 A. To estimate the required rate of return on equity capital today, I estimated the expected
8 dividend yield, D_1/P_0 where P_0 is the price of a share of common equity today and D_1 is
9 the dividend in the next period. To find the dividends expected a year from now, I
10 multiplied the current annual dividends paid by 1 plus the EPS growth rates for each
11 company. The use of this dividend yield assumes that dividends are distributed at the end
12 of each period (year). Since the current equity share price incorporates all market
13 information considered relevant by investors, generally speaking, non-recent historical
14 prices should be avoided in calculating the dividend yield. However, since share prices are
15 volatile in the short run, it is desirable to use a period long enough to avoid short-term
16 aberrations in the capital market.

17 **Q. WHAT COMMON EQUITY SHARE PRICES DID YOU USE IN YOUR DCF**
18 **ANALYSIS?**

19 A. I used the average of four weeks of share prices for each electric utility. This period
20 achieves the goals of using current information and avoiding cases where short-run
21 volatility causes common-equity share prices to be unrepresentative of the value investors
22 place on a company.

23

1 **VI. DCF ANALYSIS FOR THE COMPARISON GROUP**

2 **1. Constant-Growth DCF Analysis**

3 **Q. PLEASE DISCUSS THE REQUIRED RATE OF RETURN FOR THE**
4 **COMPARISON GROUP.**

5 A. To estimate the required rate of return for the group, I found the expected growth rate, g ,
6 and the expected dividend yield, D_1/P_0 for each Comparison Group company. I also
7 incorporated flotation costs into the dividend yield. I applied the DCF model to the inputs
8 to find an ROE for each electric utility. Finally, I averaged the ROEs to find my DCF ROE
9 for NSPM.

10 **Q. WHAT PERIOD DID YOU USE TO ESTABLISH AVERAGE COMMON EQUITY**
11 **SHARE PRICES FOR THE COMPANIES IN THE COMPARISON GROUP?**

12 A. I used the trading period of March 15-April 9, 2021 to find average common equity share
13 prices. This four-week period is long enough to dampen any short-term aberrations in the
14 capital market. It was also close to the April 23, 2021, date of this Testimony, thus making
15 the results timely. I used closing prices for the Comparison Group member companies
16 obtained at Yahoo! Finance.²⁷

17 **Q. HOW DID YOU DETERMINE THE DIVIDENDS FOR THE COMPARISON**
18 **GROUP COMPANIES?**

19 A. I used the dividends that each Comparison Group member company is currently paying as
20 reported by Value Line on April 13, 2021 and by Zacks on April 15, 2021. I used the
21 greater of these two options in my DCF analysis. The Value Line dividends were equal or
22 greater than the Zacks dividends for all companies.²⁸

²⁷ Attachment ____ (MFG-15), Pages 1-6.

²⁸ Attachment ____ (MFG-16).

1 **Q. WHAT ASSUMPTION IS MADE ABOUT THE EXPECTED GROWTH RATE IN**
2 **THE CONSTANT-GROWTH DCF MODEL?**

3 A. In the constant-growth DCF model, it is assumed that current EPS growth rates continue
4 to infinity. I used, as is commonly done, forecasts of EPS growth rates for five years and
5 assumed those growth rates will continue.

6 **Q. PLEASE DISCUSS THE EXPECTED GROWTH RATE FOR THE COMPARISON**
7 **GROUP.**

8 A. As noted above, it is appropriate in this proceeding to use only the forecasted growth rates
9 to estimate the expected growth rate to be used in the DCF analysis. Zacks and Yahoo!
10 Finance provide five-year growth-rate projections for EPS and Value Line provides five-
11 year growth rate projections for EPS, DPS, and BPS. To maintain consistency across the
12 sources, I used only the EPS estimates from Value Line.

13 **Q. WHAT INFORMATION DID YOU USE FROM VALUE LINE?**

14 A. I used the Value Line EPS five-year growth projections for the individual firms in the
15 Comparison Group as reported by Value Line at its website on April 13, 2021.²⁹ Some of
16 these values were different from the forecasted values reported in the most recent editions
17 of Value Line's *Investment Surveys*.

18 **Q. WHAT INFORMATION DID YOU USE FROM ZACKS?**

19 A. I used the Zacks EPS five-year growth projections available April 15, 2021 for the
20 individual firms in the Comparison Group.³⁰

²⁹ Attachment ____ (MFG-17), Schedule 1.

³⁰ *Id.*

1 **Q. WHAT INFORMATION DID YOU USE FROM YAHOO! FINANCE?**

2 A. I used the Yahoo! Finance EPS five-year growth projections available April 13, 2021 for
3 the individual firms in the Comparison Group.³¹

4 **Q. HOW DID YOU COMBINE THE ZACKS, YAHOO! FINANCE, AND VALUE**
5 **LINE ESTIMATES?**

6 A. I weighted the Zacks, Yahoo! Finance, and Value Line EPS values equally to find my best
7 estimate of the expected growth rate for each company in the Comparison Group.

8 **Q. PLEASE DISCUSS YOUR CALCULATION OF THE EXPECTED DIVIDEND**
9 **YIELD FOR THE COMPARISON GROUP.**

10 A. The appropriate dividend to use in the constant-growth DCF model is the annual dividend
11 rate at the beginning of the next period (year). I began my estimation of the expected
12 dividend yield by finding the dividends that each Comparison Group member company
13 was currently paying, as noted above.

14 **Q. PLEASE CONTINUE.**

15 A. Next, I adjusted the annualized dividends for expected growth. The dividends of all the
16 companies in the Comparison Group are expected to increase over the next year. I applied
17 a full year's growth rate for a firm to the annualized dividend and added the product to the
18 annualized dividend yield to transform it into the expected dividend yield.³² The equation
19 for this operation is:

20
$$\frac{D_1}{P_0} = \frac{D_0}{P_0} (1 + g)$$

³¹ *Id.*

³² I followed this rule of applying a full year's growth to the current dividend in my CAPM analysis as well as in this DCF model analysis. My adjustment is larger than that of Mr. Coyne.

1 Applying this equation to the dividend yield for each company yielded the D_1 values that I
2 use in my estimates.³³

3 **2. Flotation Costs Adjustment**

4 **Q. PLEASE DEFINE FLOTATION COSTS.**

5 A. When companies issue equity, the price paid by investors for the new shares is higher than
6 the revenues per share received by the company. The difference is issuance, or flotation,
7 costs. These costs are the fees and expenses the company must pay as part of the issuance.
8 The return on equity must be adjusted to recognize this difference, or a company will be
9 denied the reasonable opportunity to earn its required rate of return.

10 **Q. DID YOU MAKE A FLOTATION COST ADJUSTMENT FOR THE COMPANY?**

11 A. Yes. My recommended flotation cost adjustment is 3.759 percent. I adopted this value
12 from the analysis of Mr. D'Ascendis.³⁴ He has assembled flotation cost information for
13 NSPM and XEL issuances. I inspected his work and found the flotation allowance
14 reasonable.

15 **Q. HOW WAS THE FLOTATION-COST ADJUSTMENT INCORPORATED INTO
16 YOUR DCF ANALYSIS?**

17 A. The DCF return on equity was modified in the following way to incorporate the adjustment
18 for flotation cost.³⁵

19

³³ Attachment ____ (MFG-17), Schedule 1.

³⁴ Exhibit ____ (DWD-1), Schedule 11, Page 1 of 1.

³⁵ Attachment ____ (MFG-17), Schedule 2. Morin, Roger, *New Regulatory Finance (2006)*, Public Utilities Reports, Inc., Vienna, Virginia, page 328.

1
$$k = \frac{D_1}{P_0} \left(\frac{1}{1-f} \right) + g$$

2
3

Where:

4
5
6

f is the flotation-cost percentage;

and all the other elements of the equation retain their previous meanings.

7
8
9

With the flotation cost of 3.759 percent incorporated, the expected dividend yield becomes the flotation adjusted dividend yield. The adjustment increases the expected dividend yield by about 15 basis points.³⁶

10 **Q. DID YOU INCLUDE A FLOTATION COST ADJUSTMENT IN ALL OF YOUR**
11 **ROE ANALYSES?**

12 A. Yes. All subsequent ROE analyses presented in this testimony included a flotation cost
13 adjustment.

14 **Q. IS IT APPROPRIATE TO APPLY A MINIMUM STANDARD TO ROE RESULTS**
15 **PRODUCED BY THE ROE MODELS?**

16 A. Yes. Investors demand a higher return from common equity than from debt to compensate
17 for the greater risk of common equity. The Federal Energy Regulatory Commission
18 (“FERC”) uses a minimum standard of the yield for Moody’s 10-Year Baa Corporate
19 Bonds plus 20 percent of the CAPM risk premium as a minimum ROE threshold. Investors
20 faced with an ROE for a company below that threshold would choose the less-risky debt
21 over common equity investment in the company. Thus, NSPM would not be competing
22 with these companies for capital.

³⁶ Attachment ___ MFG-17, Schedule 1.

1 **Q. DID YOU REMOVE ANY COMPANIES FROM THE DCF ANALYSIS BECAUSE**
2 **THEY HAD ROE RESULTS THAT WERE UNREASONABLY LOW?**

3 A. No. The average yield for the Moody's 10-year Baa Corporate Bond Yield Index was 3.75
4 percent over March 15-April 9, 2021,³⁷ while 20 percent of the CAPM risk premium was
5 2.05 percent.³⁸ The sum of the two components of the minimum threshold was 5.80
6 percent. All the ROEs in the analysis exceeded that value.

7 **Q. WHAT ROE DID YOU FIND FOR YOUR CONSTANT-GROWTH DCF**
8 **ANALYSIS?**

9 A. For the 16 companies, the mean growth rate was 5.94 percent and the mean flotation
10 adjusted dividend yield was 3.89 percent. The combination of these two components
11 yielded an ROE of 9.83 percent. The median ROE was 9.60 percent.³⁹

12 **2. Multistage DCF Analysis**

13 **Q. WHAT ASSUMPTION IS MADE ABOUT THE EXPECTED GROWTH RATE IN**
14 **THE MULTISTAGE DCF MODEL?**

15 A. In the multistage DCF model it is assumed that the current growth rates are replaced by
16 other growth rates in intervals subsequent to the present period. There are several possible
17 approaches to a multistage analysis, but in many of the variations a long-run gross domestic
18 product ("GDP") growth rate is adopted after the first stage.

³⁷ Attachment ____ (MFG-18) Schedule 8.

³⁸ Attachment ____ (MFG-18), Schedule 9.

³⁹ Attachment ____ (MFG-17), Schedule 1.

1 **Q. WHAT LOGIC SUPPORTS ADOPTING GDP GROWTH RATES AFTER THE**
2 **FIRST STAGE OF A MULTISTAGE DCF ANALYSIS?**

3 A. The logic for adopting a long-run GDP growth rate after the first stage of a multistage
4 analysis is that a company cannot sustain growth faster than the growth rate of the economy
5 as a whole over the long run.

6 **Q. WHAT WAS YOUR BASIS FOR ASSUMING THAT CURRENT FORECASTED**
7 **EPS GROWTH RATES WILL NOT CONTINUE AFTER FIVE YEARS?**

8 A. The current five-year EPS growth-rate forecasts reflect growth expected as the U.S.
9 economy rebounds from the recession caused by the COVID-19 pandemic. These growth
10 rates are unsustainable because the economy is making use of productive capacity that was
11 idled by the recession. Once the slack is restored to use, the potential growth level returns
12 to long-run capacity growth rates.

13 **Q. IS THERE ECONOMIC DATA THAT SUPPORT THIS HYPOTHESIS?**

14 A. Yes. The U.S. economy turned sharply downward from long-term trends in the first quarter
15 of 2020 as the pandemic took hold. In 2018 and 2019, Bureau of Economic Analysis year-
16 over-year quarterly growth rates for U.S. GDP ranged between 2.0 percent and 3.3
17 percent.⁴⁰ In the first quarter of 2020, the GDP growth rate dropped to 0.3 percent, then to
18 -9.0 percent, -2.8 percent, and -2.4 percent in the next three quarters.⁴¹

19 **Q. PLEASE CONTINUE.**

20 A. Federal Reserve Board projections of annual GDP growth are 6.5 percent for 2021, 3.3
21 percent for 2022, and 2.2 percent for 2023.⁴² These data are consistent with growth rates

⁴⁰ The BEA and Federal Reserve Board GDP growth rates are "real," inflation-adjusted rates.

⁴¹ Attachment ___ (MFG-17), Schedule 2.

⁴² Attachment ___ (MFG-17), Schedule 3.

1 returning to long-term norms as the U.S. economy climbs out of the pandemic-induced
2 trough. It is reasonable, therefore, to assume that current five-year EPS growth-rate
3 forecasts are pushed above sustainable levels by the burst in economic activity associated
4 with the recovery. Long-term GDP growth rates better reflect the long-term trend in EPS
5 growth rates.

6 **Q. PLEASE IDENTIFY YOUR LONG-RUN GDP GROWTH RATES.**

7 A. It was my opinion that the second-stage EPS growth rates will be similar to the long-run
8 GDP growth rate forecasts of the Social Security Administration (“SSA”) and the Energy
9 Information Administration (“EIA”). I calculated long run GDP growth rates from 2026-
10 2050 from information published by these two agencies.⁴³ The SSA rate is 4.09 percent,⁴⁴
11 while the EIA rate is 4.36 percent.⁴⁵ The weighted rate of the two growth rates is 4.23
12 percent.⁴⁶

13 **Q. PLEASE DISCUSS THE USE OF REAL GDP GROWTH RATES AND NOMINAL**
14 **GDP GROWTH RATES.**

15 A. I used real and nominal GDP growth rates because that is how the agencies report them.
16 The real rates could be converted to nominal rates by adding inflation rates to them. Doing
17 so would not change the range of change in the rates, which is the important point about
18 the rates. For example, there would still be a nearly 9 percent decrease in GDP from the
19 first quarter of 2020 to the second quarter of 2020 as the inflation rates added would be
20 similar, if not identical. Moreover, the difference between the actual GDP contraction rate
21 in second quarter of 2020 and the projected growth rate for 2021 would also be about the

⁴³ The SSA and EIA GDP growth rates are “nominal.” They reflect current prices and include inflation.

⁴⁴ Attachment ____ (MFG-17), Schedule 4.

⁴⁵ Attachment ____ (MFG-17), Schedule 5.

⁴⁶ Attachment ____ (MFG-17), Schedule 6.

1 same as inflation would be added to both sets of numbers. It is the large difference between
2 these rates that indicate the room for short-run growth in the U.S. economy, a spurt that is
3 not sustainable in the long run. Further, the long-term GDP growth rates that I used in my
4 multistage ROE analysis are nominal rates, as are the forecasted EPS growth rates with
5 which they are blended.

6 **Q. PLEASE DESCRIBE YOUR MULTISTAGE DCF ANALYSIS.**

7 A. I applied what is sometimes called a blended approach as my multistage DCF analysis. In
8 this approach, all inputs other than the EPS growth rates are the same as in the constant-
9 growth DCF analysis. I continued to use the five-year EPS forecasts in the first stage but
10 used the weighted long-run GDP growth rate as my second-stage EPS input. At that point
11 I blended the two growth rates by weighting the average of the five-year EPS forecasts
12 two-thirds and the long-run weighted GDP growth rate one-third. This approach is set
13 forth in a widely used regulatory handbook.⁴⁷

14 **Q. WHAT IS THE RESULT OF YOUR MULTISTAGE DCF ANALYSIS?**

15 A. The mean flotation adjusted dividend yield was 3.89 percent, the same as in the constant-
16 growth DCF analysis. The mean growth rate was 5.37 percent. The combination of these
17 two components yielded an ROE of 9.26 percent. The median ROE was 9.19 percent.⁴⁸

18 **Q. HAVE YOU ADJUSTED YOUR DCF ROE TO ACCOMMODATE FACTORS
19 OTHER THAN EPS GROWTH RATE CHANGES?**

20 A. No. The DCF model incorporates factors that affect investors' view of the world. The
21 share price of common equity is the mechanism through which these influences are

⁴⁷ Attachment ____ (MFG-17), Schedule 7; Morin, Roger, *New Regulatory Finance (2006)*, Public Utilities Reports, Inc., Vienna, Virginia, page 309.

⁴⁸ Attachment ____ (MFG-17), Schedule 8.

1 translated. For example, investors' beliefs about the effect of a pandemic on the economy
2 are translated into common equity share prices. The same is true of the effect on those
3 prices of changes in federal income tax and depreciation rates, such as those implemented
4 in the United States under the 2017 Tax Cut and Jobs Act. Either case affects the ROE of
5 the company. Other factors that are incorporated into share prices are environmental
6 regulations, interest-rate expectations, market volatility, and leverage of companies.
7 Investors will ask for common equity prices that compensate them for the degree of risk
8 that they believe these factors create.

9 **VII. CAPM ANALYSIS FOR THE COMPARISON GROUP**

10 **Q. WHAT ARE THE STRENGTHS AND WEAKNESSES OF THE CAPM?**

11 A. The CAPM is theoretically sound, but its application raises some issues. The analysis using
12 CAPM selects a riskless asset, beta, and market risk premium. The ROE analysis can vary
13 considerably depending on the analyst's choices for these variables. Thus, what at first may
14 seem like a model that is straightforward depends heavily on the particular input values
15 used by an analyst.

16 **1. S&P 500 Constant-Growth DCF Analysis**

17 **Q. PLEASE DESCRIBE THE CAPM VERSION THAT YOU EMPLOY IN YOUR**
18 **ROE ANALYSIS.**

19 A. I base my CAPM analysis on the version that the Federal Energy Regulatory Commission
20 ("FERC") first adopted in Opinion 569.⁴⁹ This approach addresses potential flaws in the
21 CAPM. The FERC model is forward-looking, using EPS forecasts and current dividend
22 yields for S&P 500 companies to conduct a DCF ROE analysis in developing the market

⁴⁹ *Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569, 169 FERC ¶ 61,129 (2019). Issued November 21, 2019, pages 134, 138, 184-185.

1 risk premium. It requires that companies included in the market return analysis be paying
2 dividends, an essential part of any DCF analysis. Companies with EPS estimates less than
3 0 percent and greater than 20 percent are excluded thereby handling the problem of outliers
4 at either end of the spectrum. It also specifies that the EPS forecasts for S&P 500 companies
5 be from Yahoo! Finance, thus bringing consistency from one CAPM analysis to the next.
6 For the risk-free rate, FERC uses a six-month average of 30-year Treasury bond yields, not
7 forecasts of those bond yields.⁵⁰ FERC also sets forth a specific method for making size
8 adjustments to CAPM ROEs. This list of rules and methods is not comprehensive, but it
9 does indicate that the FERC approach to CAPM removes much of the analyst judgment
10 that can cause CAPM analyses conducted at the same time to vary widely.

11 **Q. PLEASE EXPLAIN THE CALCULATION OF A CAPM ROE.**

12 A. First, the analyst must select the rate of return for a riskless asset. Short-term assets such
13 as 90-day Treasury Bills are considered to be virtually riskless; the default risk is next to
14 nothing and the inflation risk is negligible. Equity investors, however, typically have a
15 longer planning horizon than the 90-day maturity of these instruments, so the return on
16 these bills is not suitable for this CAPM process. Long-Term Treasury bonds, on the other
17 hand, match the planning horizon and have yields that are closer to common equity returns.
18 But these instruments are subject to substantial inflation risk and, therefore, are not riskless.
19 Nevertheless, I adopted the 30-year U.S. Treasury yield as my risk-free rate. Its favorable
20 characteristics outweigh its unfavorable characteristics.

⁵⁰ I depart from this aspect of the FERC analysis in one regard. I use an average of 30-year Treasury bond yields like FERC, but for a four-week period, not six months. This treatment of average yields is consistent with how I find average equity prices within the DCF model.

1 **Q. WHAT PERIOD DID YOU USE FOR THE 30-YEAR TREASURY YIELD IN**
2 **YOUR CAPM ANALYSIS?**

3 A. I used the average yield on a 30-year Treasury bond for March 15-April 9, 2021 as my
4 riskless asset rate. This average yield was 2.37 percent.⁵¹ As noted above, I departed from
5 the FERC approach by using a four-week average of recent yields. The six-month period
6 FERC uses includes data that is stale and, therefore, does not reflect investors' current
7 views regarding the future of the economy.

8 **Q. WHY DID YOU USE THE RECENT 30-YEAR TREASURY YIELD IN YOUR**
9 **CAPM ANALYSIS?**

10 A. Current yields on the 30-year Treasury bond are the best risk-free rate for the CAPM
11 analysis. Much like current common equity share prices reflect all information about
12 factors affecting the value of the shares, so too do current bond yields capture the beliefs
13 of investors as to where yields on the instruments are headed.

14 **Q. WHAT VALUES DID YOU USE FOR BETA (β)?**

15 A. I used the betas for each company in the Comparison Group taken from the Value Line
16 website on April 13, 2021.⁵² These beta values are Value Line's latest assessment for each
17 company. These betas can be different from those reported in the *Investment Surveys*.

18 **Q. HOW IS BETA (β) INTERPRETED?**

19 A. A beta of 1 indicates that a company's share price will move with the market, while a beta
20 higher than 1 indicates that a stock will be more volatile than the market, and a beta lower
21 than 1 indicates that a stock will be less volatile than the market.

⁵¹ Attachment ____ MFG-18, Schedule 1.

⁵² Attachment ____ MFG-18, Schedule 2.

1 **Q. WHAT ELSE WAS INVOLVED IN YOUR CALCULATION?**

2 A. The term within parentheses in the CAPM equation is called the “market risk premium
3 (MRP).” It is the difference between the return on a broad market measure and the risk-
4 free rate of return. In other words, the premium that investors require in order to take on
5 risk. As noted above, I already had the risk-free rate. Therefore, I needed to calculate a
6 market rate of return.

7 **Q. WHAT METHOD DID YOU USE TO FIND THE MARKET RETURN?**

8 A. As stated, I use the S&P 500 inputs in finding my market risk premium. FERC prescribes
9 the I/B/E/S EPS forecasts published by Yahoo! Finance. I downloaded these values on
10 April 13, 2021. I downloaded the dividend yields for the S&P 500 companies from Value
11 Line, also on April 13, 2021. I applied the I/B/E/S EPS growth rates to find the expected
12 dividend yield, adding a full year’s growth.⁵³

13 **Q. WHAT WERE THE NEXT STEPS IN FINDING THE CAPM RETURN ON
14 EQUITY?**

15 A. I applied the dividend-paying rule, and the minimum and maximum threshold rules of less
16 than 0 percent and greater than 20 percent to the set of S&P 500 companies.

17 **Q. WHAT WAS THE FOLLOWING STEP?**

18 A. I weighted the remaining ROEs by the market capitalization for each company. The sum
19 of those individual ROEs is the market return. In my analysis, the value was 12.63
20 percent.⁵⁴ The market risk premium is calculated by subtracting the 2.37 percent rate of
21 return on the 30-year Treasury from the market return. The result of this operation was

⁵³ Attachment ___ MFG-18, Schedule 3.

⁵⁴ Attachment ___ MFG-18, Schedule 4.

1 10.26 percent.⁵⁵ This amount is multiplied by the beta for each Comparison Group
2 company to find that company's unadjusted CAPM ROE.

3 **Q. PLEASE DESCRIBE THE SIZE ADJUSTMENT?**

4 A. The CAPM size adjustment is made to incorporate findings that smaller companies have
5 higher actual ROEs than the CAPM predicts. FERC prescribes using size adjustments
6 calculated each year for ten deciles of firms based on their market capitalizations. Duff &
7 Phelps publishes these adjustments,⁵⁶ which I have added to the unadjusted ROE for each
8 company as appropriate for their market capitalizations.⁵⁷

9 **Q. DOES FERC HAVE SCREENS FOR OUTLIER CAPM ROES?**

10 A. Yes. FERC applies Low-End and High-End Test to the CAPM adjusted ROEs. My Low-
11 End Test is the same as the minimum threshold for the DCF ROEs, the four-week average
12 of the Moody's 10-year Baa Corporate Bond Yield Index value of 3.75 percent⁵⁸ plus 20
13 percent of the CAPM risk premium, or 5.80 percent. The High-End Test is 150 percent of
14 the median value of all companies included in the analysis. That value is 17.19 percent in
15 the current analysis. FERC recently proposed changing the High-End Test to 200 percent
16 of the median value, which would be 22.92 percent.⁵⁹ It does not matter in my analysis as
17 all the utilities have ROEs of 13.93 percent or less. Thus, no company CAPM ROEs were
18 removed due to the Low-End or High-End Tests.

⁵⁵ Attachment _____ MFG-18, Schedule 9.

⁵⁶ Attachment _____ MFG-18, Schedule 7.

⁵⁷ Attachment _____ MFG-18, Schedule 9.

⁵⁸ Attachment _____ MFG-18, Schedule 8.

⁵⁹ *Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569-A, 171 FERC ¶ 61,154 (2020).

1 **Q. WHAT WAS THE RESULT OF YOUR CAPM ANALYSIS?**

2 A. The mean ROE for my CAPM analysis was 11.56 percent. The median ROE was 11.46
3 percent. I have added a flotation-cost adjustment of 15 basis points to both values, so the
4 adjusted ROE mean is 11.71 percent and the adjusted ROE median is 11.61 percent.⁶⁰

5 **2. S&P 500 Multistage DCF Analysis**

6 **Q. DID YOU PERFORM ANOTHER CAPM ANALYSIS?**

7 A. Yes. The forecasted five-year EPS growth rates for the companies in the S&P 500 are
8 subject to being unsustainably high in the short run, just like the five-year forecasted EPS
9 growth rate values for electric utilities because they reflect anticipated rebounds in activity
10 for the companies as they come out of the pandemic recession. My response was to
11 perform a multistage DCF analysis on the S&P 500 companies and incorporate that blended
12 market return into a CAPM analysis.

13 **Q. ARE THERE THE ELEMENTS OF THE CAPM ANALYSIS THAT WERE NOT**
14 **AFFECTED BY THE MULTISTAGE ANALYSIS?**

15 A. The initial EPS estimates, dividend yields, and market capitalizations for the multistage
16 analysis of the S&P 500 companies are unchanged. Further, the dividend-paying screen,
17 and the minimum and maximum threshold rules of less than 0 percent and greater than 20
18 percent EPS growth rates screens were applied as before.

⁶⁰ Attachment ____ MFG-18, Schedule 9.

1 **Q. DID YOU ADJUST THE COMPANIES INCLUDED IN THE FINAL ANALYSIS**
2 **DUE TO THE MULTISTAGE ANALYSIS?**

3 A. Yes. The blended ROE for certain companies with initial EPS growth rates greater than
4 20 percent fell below that threshold after the blending. I identified these companies and
5 restored them to the market return analysis step of the CAPM analysis.⁶¹

6 **Q. WHAT WERE THE RESULTS OF THIS ADJUSTED ANALYSIS?**

7 A. The market return for the five-year EPS growth rate return became 13.17 percent. When
8 this value was weighted two-thirds and the weighted long-run GDP growth rate of 4.23
9 percent weighted one-third, the result was a blended market return of 10.19 percent.⁶²
10 Carrying this value through to the next steps in the CAPM analysis, the mean ROE for the
11 Comparison Group after the size adjustment was added became 9.45 percent, while the
12 median ROE became 9.32 percent. Adding the 15-basis point flotation-cost adjustment
13 increases these values to 9.60 percent for the mean and 9.47 percent for the median.⁶³

14 **VIII. RECOMMENDED ROE**

15 **Q. PLEASE SUMMARIZE YOUR ROE RESULTS.**

16 A. I performed four ROE analyses, constant-growth and multistage DCF, and S&P 500 market
17 return constant-growth and multistage CAPM. Those ROE values are:

18 **ROE Mean Results**

	Constant growth	Multistage
DCF	9.83%	9.26%
CAPM	11.71%	9.60%

⁶¹ Attachment ___ MFG-18, Schedule 5.

⁶² Attachment ___ MFG-18, Schedule 6.

⁶³ Attachment ___ MFG-18, Schedule 10.

1

2

ROE Median Results

	Constant growth	Multistage
DCF	9.60%	9.19%
CAPM	11.61%	9.47%

3

4 **Q. PLEASE COMMENT ON THESE ROE RESULTS.**

5 A. The constant-growth results are higher than their multistage counterparts. This outcome is
6 to be expected given the recent history of sharply negative GDP growth rates, followed by
7 further negative rates, though not as severe. The constant-growth model reflects only the
8 short-lived sharp upward bursts in the growth rates as the economy recovers from the
9 contraction. The multistage approach, on the other hand, moderates the influence of these
10 recent negative growth rates by incorporating the lower, steadier long-run rates.

11 **Q. HOW DID YOU ARRIVE AT A RECOMMENDED ROE FOR NSPM?**

12 A. In the present circumstances, recent U.S. economic performance and short-run forecasts
13 support the narrative that EPS forecasts for the next five years are temporarily high and can
14 be expected to decline as growth in the domestic economy returns to typical levels. This
15 scenario does not mean that the U.S. economy is headed for a period of poor performance.
16 Rather, it means that the opportunities for large growth rates due to the presence of unused
17 resources caused by the economic downturn will taper off as the economy returns to greater
18 use of its economic potential. Therefore, I based my recommended ROE for NSPM mostly
19 on the multistage analyses as they better reflect the underlying forces in the economy. My
20 analysis results in a NSPM ROE of 9.50 percent. This value reflects the means and medians

1 of the multistage DCF and CAPM approaches, plus the constant-growth DCF results,
2 which cluster around this number.⁶⁴ I excluded the constant-growth CAPM result because
3 it was considerably out of step with recent ROE awards in the U.S. I discuss this issue in
4 the next section.

5 **IX. REASONABLENESS CHECK OF THE ROES**

6 **Q. HAVE YOU CHECKED THE REASONABLENESS OF YOUR ROE RESULTS?**

7 A. Yes. I checked the reasonableness of my analyses' outcomes by comparing the ROEs with
8 recent ROEs authorized in electric rate cases across the United States.

9 **Q. PLEASE EXPLAIN WHICH AUTHORIZED ROES YOU USED TO CHECK THE**
10 **REASONABLENESS OF YOUR DCF AND CAPM ROES.**

11 A. I collected a set of fully litigated 2019-2021 authorized ROEs from U.S. electric rate cases
12 from S&P Global Market Intelligence's Regulatory Research Associates (RRA).⁶⁵

13 **Q. HOW DO YOU USE THIS SET OF AUTHORIZED ROES?**

14 A. I use the recent authorized ROEs as a basis for evaluating the reasonableness of my ROE
15 results. I did not use it as a substitute for those analyses.

16 **Q. WHY ARE AUTHORIZED ROES NOT A GOOD SUBSTITUTE FOR CURRENT,**
17 **FORWARD-LOOKING ROE ANALYSES?**

18 A. Recently authorized ROEs reflect the results of rate cases conducted in a variety of
19 environments and at different times. Test years, conditions in capital markets, general
20 economic indicators such as inflation rates, and so forth for previous rate cases can be
21 different and become outdated when compared with these factors for a current rate case.

22 Therefore, recently authorized ROEs should serve only to establish whether a current ROE

⁶⁴ Attachment ____ MFG-20, Schedule 1.

⁶⁵ Attachment ____ MFG-19.

1 result is reasonably close to what has happened, not be a substitute for forward-looking
2 analysis based on current conditions.

3 **Q. PLEASE DESCRIBE THE SET OF AUTHORIZED ROES YOU COLLECTED.**

4 A. For fully litigated cases, RRA listed 18 for 2019 and 22 for 2020. However, the ROEs for
5 three of the 2019 cases and two of the 2020 cases were not available. There has been only
6 one fully litigated rate case in 2021. The mean and median values for 2021, almost needless
7 to say, are not important factors in considering the reasonableness of my ROE results.

8 **Q. PLEASE DISCUSS THE ROE AWARDS MADE IN 2019, 2020, AND 2021.**

9 A. The following table summarizes the authorized ROE results for all fully litigated cases in
10 2019, 2020, and 2021.

11 **Summary of Fully Litigated ROE Awards for 2019-2021**

Year	No. of Cases	Mean ROE	Median ROE	ROE Range
2021	1	9.30	9.30	9.30
2020	20	9.41	9.50	8.25-10.00
2019	15	9.61	9.60	8.75-10.50

12
13 Three of my ROE results, constant-growth DCF (9.83%), multistage DCF (9.26%), and
14 S&P 500 multistage CAPM (9.60) lie within the ROE ranges for 2019 and 2020. My
15 estimated ROE of 9.50 percent is in line with the mean and median values for 2019 and
16 2020. Therefore, I conclude that this ROE is reasonable.

17 **Q. IS THE CONSTANT-GROWTH CAPM RESULT REASONABLE?**

18 A. No. I did not reject the constant-growth CAPM mean of 11.71 percent out of hand. ROEs
19 can be acceptable if they are outside the range of recent awards, but the CAPM constant-
20 growth mean result represents a large upward leap. This mean ROE was 1.21 percent
21 greater than the highest electric utility ROE awarded in any U.S. jurisdiction in 2019-2020.

1 It was also about 2 percent greater than the means and medians of awards in those years.

2 It was not reasonable; therefore, I excluded it from consideration in finding my ROE.

3 **X. RECOMMENDED CAPITAL STRUCTURE AND OVERALL RATE OF**
4 **RETURN**

5 **Q. WHAT DID YOU INCLUDE IN YOUR OVERALL RETURN ANALYSIS AS THE**
6 **COSTS OF CAPITAL FOR NSPM?**

7 A. I accepted the Company's proposed cost of long-term debt of 4.22 percent and short-term
8 debt cost of 1.00 percent as presented in NSPM Exhibit Revised A32. Cost of Capital, Page
9 1 of 1.

10 **Q. WHAT WAS THE CAPITAL STRUCTURE YOU RECOMMENDED FOR THE**
11 **NSPM?**

12 A. I recommended a capital structure of 50.00 percent long-term debt, 0.50 percent short-term
13 debt, and 49.50 percent common equity.

14 **Q. HOW DID YOU DETERMINE YOUR RECOMMENDED CAPITAL**
15 **STRUCTURE?**

16 A. To find my recommended capital structure, I calculated the average long-term debt, short-
17 term debt, preferred equity, and common equity ratios for the 16 electric utilities in the
18 Comparison Group. These average ratios reflected the dollar amount by company for each
19 of the eight quarters from the first quarter of 2019 to the fourth quarter of 2020. The source
20 of the amounts upon which the company ratios were based is S&P Global Market
21 Intelligence.⁶⁶

⁶⁶ Attachment ____ (MFG-20), Schedule 2.

1 **Q. WHY DID YOU SELECT THESE EIGHT QUARTERS FOR YOUR CAPITAL-**
2 **STRUCTURE ANALYSIS?**

3 A. I used two years of data to smooth the effects of any quarter that was an outlier. Using two
4 years of data also mitigated any seasonal effects on the capital structures. The fourth
5 quarter of 2020 is the most recent quarter for which data were available. Therefore, I began
6 my analysis with data from the first quarter of 2019.

7 **Q. DID YOU MAKE ANY ADJUSTMENTS IN YOUR CAPITAL-STRUCTURE**
8 **ANALYSIS?**

9 A. Yes. I first excluded the results for CMS Energy, Entergy, and Southern Co. These
10 companies have long-term debt ratios that exceed 55 percent. Commissions rarely have
11 approved capital structures with such lopsided, high ratios, so I chose to exclude the
12 companies' capital structures from my analysis.

13 **Q. PLEASE STATE THE AVERAGE CAPITAL-STRUCTURE RATIOS FOUND AT**
14 **THIS POINT IN YOUR ANALYSIS.**

15 A. My calculations produced average ratios of 49.78 percent long-term debt, 6.48 percent
16 short-term debt, 0.29 percent preferred equity, and 43.44 percent common equity.

17 **Q. DID YOU STOP THERE?**

18 A. No. I continued my analysis, removing American Electric Power and Dominion Energy
19 from the calculations. These companies had common-equity ratios less than 40 percent,
20 which are unreasonably low. This adjustment produced average ratios of 49.67 percent
21 long-term debt, 6.47 percent short-term debt, 0.12 percent preferred equity, and 43.73
22 percent common equity.

1 **Q. WHAT WAS YOUR RECOMMENDED CAPITAL-STRUCTURE RATIOS FOR**
2 **NSPM?**

3 A. My recommended capital-structure ratios were 50.00 percent long-term debt, 0.50 percent
4 short-term debt, and 49.50 percent common equity.⁶⁷ These recommended ratios reflect
5 the ratios I found in my analysis for the Comparison Group and the Company's requested
6 ratios. I adopted 0.50 percent for short-term debt as it is close to NSPM's requested ratio.
7 I increased the long-term debt ratio to 50 percent because that value is close to both the
8 Company's request and the average for the proxy group companies. Those assumptions
9 left 49.50 percent for common equity. The Company's requested 52.50 percent common
10 equity was significantly greater than the less-than-44 percent ratio I found for the
11 Comparison Group. Therefore, I recommended reducing the ratio from 52.50 percent to
12 fit better with the mean ratio for the peer companies.

13 **Q. WHAT IS THE OVERALL ROR THAT YOU RECOMMENDED FOR THE**
14 **COMPANY?**

15 A. When my estimated ROE of 9.50 percent was included with the proposed capital structure
16 and the Company's costs for the other capital-structure elements, the ROR is 6.818
17 percent.⁶⁸

⁶⁷ NSPM does not have preferred equity, so I removed it from my recommendation. The average ratio for the Comparison Group companies in the analysis is quite small. Further, the great majority of the electric utilities did not have preferred equity in their capital structures.

⁶⁸ Attachment ____ (MFG-20), Schedule 3.

1 **XI. REVIEW OF THE COMPANY'S ROE ANALYSIS**

2 **1. Comparison Group vs. Proxy Group**

3 **Q. PLEASE COMPARE THE MEMBERSHIP OF YOUR COMPARISON GROUP**
4 **WITH THE MEMBERSHIP OF MR. D'ASCENDIS'S PROXY GROUP.**

5 A. As noted previously, Mr. D'Ascendis's Proxy Group had 15 members to my Comparison
6 Group's 16 members. There was an overlap of eight electric utilities.

7 **Q. WHAT EXPLAINS THE DIFFERENCES IN THE MEMBERSHIP OF THE TWO**
8 **GROUPS?**

9 A. Our screens varied somewhat. Mr. D'Ascendis required companies to be vertically
10 integrated. I required the electric utilities to have an S&P credit rating close to NSPM's
11 S&P rating of A-. Mr. D'Ascendis used regulated electric operating income percentage as
12 a screen, as did I, but he also required companies to have a 70 percent minimum percentage
13 of operating assets employed in regulated electric activities. Another source of differences
14 could have been the timing of our analyses. For example, perhaps the October 21, 2020
15 date of the announcement of the anticipated merger of PNM Resources and AVANGRID
16 explained why I excluded the company and Mr. D'Ascendis did not.

17 **Q. WHAT FACTORS ACCOUNT FOR THE DIFFERENCES IN THE ROE**
18 **ANALYSES VALUES?**

19 A. The different dates of the analyses account for some of the difference. EPS growth rates,
20 share prices, dividend amounts, beta values, and risk-free rates can change substantially in
21 a few months. These changes cause ROEs for individual proxy group member companies
22 to be different from what they were a few months before. Thus, even when group
23 memberships overlap, differences occur.

1 **2. CAPM Analysis**

2 **Q. WHAT SOURCES DID MR. D'ASCENDIS USE TO CALCULATE MARKET**
3 **RETURNS FOR HIS CAPM ANALYSES?**

4 A. Mr. D'Ascendis used estimates provided by Value Line, S&P, and Bloomberg as proxies
5 for the market index.

6 **Q. DID MR. D'ASCENDIS'S SOURCES PROVIDE A DIVIDEND-YIELD**
7 **COMPONENT AND A GROWTH-RATE COMPONENT?**

8 A. Yes. Both of these components were present in Mr. D'Ascendis's three market return
9 estimates.⁶⁹ Therefore, as Mr. D'Ascendis stated, his broad market returns were based on
10 a DCF analysis.⁷⁰

11 **Q. DID MR. D'ASCENDIS EXCLUDE COMPANIES NOT PAYING DIVIDENDS**
12 **FROM HIS BROAD MARKET RETURN ANALYSES?**

13 A. No. Mr. D'Ascendis stated that he did not exclude companies not paying dividends from
14 his three broad market return analyses.⁷¹

15 **Q. PLEASE EXPLAIN WHY MR. D'ASCENDIS' BROAD MARKET RETURN**
16 **RESULTS WERE FLAWED IF THEY INCLUDED COMPANIES NOT PAYING**
17 **DIVIDENDS.**

18 A. The constant-growth rate DCF model calculates the price of a dividend-paying stock
19 growing at a constant rate per the following expression:⁷²

⁶⁹ Attachment ____ (MFG-21), pages 1-3. Responses to NDPSC Advocacy Staff Data Requests 7-11, 7-12, and 7-13.

⁷⁰ D'Ascendis Direct Testimony, page 39, line 18-page 41, line 2.

⁷¹ Attachment ____ (MFG-21), pages 1-3.

⁷² Roger A. Morin, *New Regulatory Finance*, Public Utilities Reports, Inc., Vienna, Virginia (2006), page 273.

1
$$P = \frac{D_1}{1 + K} / \left(1 - \frac{1 + g}{1 + K}\right)$$

2 If the stock pays no dividends, D_1 is zero, and the price of the stock is zero, according to
3 the model. Investors cannot purchase equities for this price. Therefore, the DCF model
4 results are not reliable for non-dividend paying companies.

5 **Q. IS THERE SUPPORT FOR THE PROPOSITION THAT THE DCF MODEL**
6 **CANNOT BE APPLIED TO COMPANIES NOT PAYING DIVIDENDS?**

7 A. Yes. The following passage is from FERC Opinion No. 569, cited earlier.

8 **f. Commission Determination**

9 “260. We continue to find reasonable the MISO TOs’
10 proposal to estimate the CAPM expected market return using
11 a forward-looking approach, based on applying the DCF
12 model to the dividend-paying members of the S&P 500. Using
13 a DCF analysis of the dividend-paying members of the S&P
14 500 is a well-recognized method of estimating the expected
15 market return for purposes of the CAPM model.⁷³ *The DCF*
16 *analysis must be limited to the dividend-paying members of*
17 *the S&P 500, rather than using all companies in the S&P 500,*
18 *because a DCF analysis can only be performed on companies*
19 *that pay dividends.”⁷³ [Emphasis added]*

20
21 **Q. WHAT IS THE CONSEQUENCE OF INCLUDING NON-DIVIDEND PAYING**
22 **COMPANIES IN A DCF ANALYSIS?**

23 A. The consequence of including non-dividend paying companies in a DCF analysis is that
24 the market return value is tainted.⁷⁴ As shown, the application of the DCF model to such
25 companies yields ROE results that cannot be defended. Therefore, Mr. D’Ascendis’s three
26 broad market returns were flawed, as were the ROE approaches in which they are applied.

⁷³ *Ass’n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569, 169 FERC ¶ 61,129 (2019), page 134.

⁷⁴ Dr. Griffing’s calculation of the S&P 500 market return shows that 118 of the initial set of companies were not paying dividends. (See Attachment ____ (MFG-18, Schedule 4). Thus, the inclusion of these companies in calculating the S&P market return is not a minor matter.

1 These included his CAPM analysis as applied to his proxy group and to the set of
2 unregulated companies Mr. D'Ascendis asserts have the same risk level as NPSM.

3 **3. Non-Price Regulated Companies Analysis**

4 **Q. PLEASE DESCRIBE MR. D'ASCENDIS'S COMPARABLE RISK ANALYSIS.**

5 A. Mr. D'Ascendis asserted that the comparable risk standard for determining an ROE for a
6 regulated utility such as NPSM can be applied to non-price regulated companies if they are
7 comparable in risk to the subject utility. He formed a proxy group for such companies
8 using Value Line betas and standard errors as screening criteria. The betas and standard
9 errors had to fall within two standard deviations of the values of the same parameters for
10 the electric utility Proxy Group companies. He then applied the DCF model, risk premium
11 model, and CAPM to the resulting proxy group of 47 companies. He argued that the ROEs
12 derived were indicators of the level of return required by NSPM because the risks were
13 similar.⁷⁵

14 **Q. WHAT ROLE DOES VOLATILITY OF CASH FLOW PLAY IN THE CREDIT**
15 **RATINGS THAT COMPANIES RECEIVE?**

16 A. Price regulated companies such as the electric utilities used by Mr. D'Ascendis and me in
17 our proxy groups tend to have cash flow that is less volatile than the cash flow of non-price
18 regulated companies. S&P considers both level and volatility of profits as it assigns
19 leverage ratings to companies. Firms with lower leverage ratings receive better credit
20 ratings. Therefore, companies with less volatile cash flow receive better credit ratings.

⁷⁵ D'Ascendis Direct Testimony, page 52, line 1-page 53, line 27.

1 **Q. PLEASE ELABORATE.**

2 A. S&P explains in an excerpt from its publication "Key Credit Factors for the Regulated
3 Public Utilities Industry" that in assessing the adequacy of cash flow of a regulated utility
4 that S&P analysts take into account volatility of cash flow, just as they do for other
5 corporate issuers. One measure of volatility is the percentage of cash flow from regulated
6 activities. Utilities, with a higher percentage of their cash flow coming from regulated
7 activities, typically are regarded as less volatile.⁷⁶

8 **Q. PLEASE EXPLAIN HOW S&P COMBINES VOLATILITY RATINGS WITH**
9 **CASH FLOW IN RATING COMPANIES.**

10 A. S&P includes three tables of different volatility ratings in its credit rating discussion
11 publication "General: Corporate Methodology." The tables show that for a company,
12 regulated or not, to receive a certain leverage rating, it must demonstrate that it meets
13 certain thresholds for core ratios, coverage ratios, and payback ratios. Companies rated
14 low in volatility do not have to meet levels as stringent as companies rated medial or
15 standard in volatility do to receive the same leverage rating.⁷⁷

16 **Q. PLEASE PROVIDE AN EXAMPLE.**

17 A. The standard for a company with a low volatility rating to receive a "minimal leverage"
18 rating for the funds from operations ("FFO")-to-debt ratio is 35 percent or better. In
19 contrast, a company with a standard volatility rating has to have an FFO-to-debt ratio of 60
20 percent or better to receive the same "minimal leverage" rating.⁷⁸ Recall that lower
21 volatility is associated with better credit ratings.

⁷⁶ Attachment ____ (MFG-22), Schedule 1, Pages 1-2.

⁷⁷ See paragraphs 76-77 of Attachment ____ (MFG-22), Schedule 2, Pages 1-2.

⁷⁸ See the shaded areas in the FFO/Debt columns of Table 17 and Table 19 in Attachment ____ (MFG-22), Schedule 2, pages 1-2.

1 **Q. PLEASE DESCRIBE HOW HAVING TO MEET A LOWER RATIO TO RECEIVE**
2 **THE SAME LEVERAGE RATING ADDRESSES RISK LEVELS OF PRICE**
3 **REGULATED.**

4 A. The FFO-to-debt ratio is one of seven indicators that S&P considers in assigning an overall
5 leverage rating in its credit rating process. A “minimal leverage” rating is associated with
6 higher credit ratings. Thus, a price regulated public utility with its tendency to receive a
7 low volatility rating because a “vast majority”⁷⁹ of its cash flow comes from regulated
8 activities will, all other things equal, receive a better leverage rating and better credit rating
9 than will a non-price regulated company. A non-price regulated company by definition
10 does not have a substantial percentage of cash flow coming from regulated activities.

11 **Q. HOW CAN NON-PRICE REGULATED FIRMS RECEIVE A CREDIT RATING**
12 **IDENTICAL TO THAT OF PRICE REGULATED UTILITIES?**

13 A. Firms with less desirable volatility ratings, such as the volatility rating a typical non-price
14 regulated firm is likely to receive, can make up for their greater cash flow uncertainty with
15 higher FFO-to-debt ratios, to name one compensating factor. These firms can achieve
16 higher ratios if they have greater cash flow than price regulated firms. Higher rates of
17 return to equity can produce greater cash flow. Hence, higher return to equity enables the
18 non-price regulated firms to receive credit ratings equal to the credit ratings of their price
19 regulated counterparts.

⁷⁹ See paragraph 78 of Attachment ____ (MFG-22), Schedule 1, page 2.

1 **Q. DOES IT FOLLOW THAT A NON-PRICE REGULATED COMPANY WITH THE**
2 **SAME CREDIT RATING AS A PRICE REGULATED UTILITY IS A GOOD**
3 **PROXY FOR THE PRICE REGULATED UTILITY?**

4 A. No. Non-price regulated companies with greater cash flow volatility tend to require greater
5 return on equities than their price-regulated counterparts. As shown above, greater return
6 on equity is a way non-price regulated firms can attain equality in S&P volatility ratings
7 with price regulated utilities and take a step toward the same credit rating. Hence, the non-
8 price regulated firms do not make good proxies for price regulated utilities because of their
9 tendency toward higher rates of return.

10 **Q. DO THESE OBSERVATIONS ABOUT CREDIT RATINGS AND RETURN ON**
11 **EQUITY ALSO APPLY TO BETA VALUES?**

12 A. Yes. Mr. D'Ascendis states that beta coefficients reflect the market's assessment of
13 market/systematic risk. Further, he says that beta coefficients are derived from regression
14 analyses of market prices. If a non-price regulated firm and a price regulated firm with the
15 same beta value are alike in all operational aspects other than volatility of earnings, logic
16 indicates that the non-price regulated firm must be equally appealing to investors due to a
17 higher rate of return. Therefore, the ROEs for the companies in Mr. D'Ascendis's proxy
18 group of 47 non-price regulated companies are biased upward relative to the ROEs for
19 electric utilities in proxy groups. It is not surprising that they are higher.

20

1 **4. Adequacy of North Dakota Return to Equity for NSPM**

2 **Q. WHAT DOES MR. D'ASCENDIS STATE ABOUT THE ROR NEEDED ON A**
3 **STANDALONE BASIS FOR AN OPERATING SUBSIDIARY LIKE NSPM?**

4 A. The rate of return for an operating subsidiary like NSPM must be sufficient, according to
5 Mr. D'Ascendis, to make the operations in its jurisdiction attractive to investors. If the
6 return does not reach this level, then the operating subsidiary will see capital flow to other
7 units of its parent company operating in jurisdictions with better returns, or to competing
8 utilities with risk levels similar to NSPM's and better returns.⁸⁰

9 **Q. HAS NSPM EVER DIRECTED INVESTMENT AWAY FROM NORTH DAKOTA**
10 **TO OTHER SUBSIDIARIES OF XEL OR RECEIVED INVESTMENT FROM**
11 **OTHER XEL JURISDICTIONS AT THE EXPENSE OF THOSE OTHER**
12 **SUBSIDIARIES BECAUSE OF A DIFFERENCE IN RETURNS?**

13 A. NSPM was asked in Data Request No. 7-2 to provide examples of when it or XEL had
14 withheld capital funding from NSPM's North Dakota operations or had directed investment
15 to North Dakota away from other NSPM or XEL jurisdictions because of return
16 differences. The Company was also asked about the effect on NSPM's ability to provide
17 safe, adequate, and reliable service in North Dakota if either capital movement had
18 occurred.⁸¹

19 **Q. WHAT RESPONSE TO DATA REQUEST NO. 7-2 DID NSPM PROVIDE?**

20 A. NSPM's response discussed the financial needs budgeting process carried out by XEL
21 every year on behalf of NSPM and its other operating subsidiaries. It concluded the
22 response by stating the Company did not have any examples responsive to the request's

⁸⁰ D'Ascendis Direct Testimony, page 8, line 30-page 9, line 21.

⁸¹ Attachment ____ (MFG-23), pages 1-3.

1 inquiries about capital investment moving to or from North Dakota in response to rate of
2 return. It also did not provide any examples regarding the effect on NSPM's ability to
3 provide safe, adequate, and reliable service of capital movements.

4 **XII. SUMMARY**

5 **Q. WHAT ARE THE CRITERIA THE COMMISSION SHOULD CONSIDER IN**
6 **SETTING THE COMPANY'S ROE AND ROR?**

7 A. The Commission should only consider whether the ROE and ROR meet the *Bluefield* and
8 *Hope* criteria for a fair return. Recounting, these criteria include returns that are
9 commensurate with returns being earned on other investments with equivalent risks, a rate
10 of return sufficient to enable the utility to attract capital, and returns sufficient to enable the
11 regulated company to maintain its credit rating and financial integrity. The interpretation of
12 the *Hope* and *Bluefield* criteria is that a company should be given the opportunity to earn an
13 ROE and ROR sufficient to meet these standards.

14 **Q. PLEASE STATE YOUR RECOMMENDED RETURN ON EQUITY AND**
15 **OVERALL COST OF CAPITAL FOR NSPM?**

16 A. I estimated an ROE of 9.50 percent and an ROR of 6.818 percent.

17 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

18 A. Yes.

19

PCMG and Associates

Marlon Griffing, Ph.D.

Education

Ph.D., M.A., B.A., Economics, University of Nebraska-Lincoln

Position

Senior Consultant – PCMG and Associates	2015 – present
Senior Consultant – Snavely King Majoros and Associates	2013 – 2014
Utilities Financial Analyst – Minnesota Department of Commerce	2003 – 2013
Independent Consultant	2003
Senior Consultant – QSI Consulting	2000 – 2002
Economic Analyst – Nebraska Public Service Commission	1998 – 2000

Professional Experience

Dr. Griffing holds bachelors, masters, and doctoral degrees in economics. Dr. Griffing is well versed in microeconomics, cost/benefit analysis and econometric analysis. He has 21 years' experience as an expert witness and consultant, primarily addressing the cost of capital and capital structure for electric, natural gas, and water utilities. He has also made appearances regarding rate design, competitive effect of mergers, reliability and supply adequacy, and oil-pipeline companies in certificate of need cases. In addition, he managed testimony in two oil-pipeline certificate-of-need cases and arbitrated a telecommunications dispute for the Nebraska Public Service Commission. Dr. Griffing has appeared over 40 times in cost of capital dockets before the regulatory agencies of Arkansas, Maine, Maryland, Minnesota, Nebraska, New Jersey, New Mexico, North Dakota, Oklahoma, Pennsylvania, and South Dakota, and the Federal Energy Regulatory Commission.

Cost of Capital

1. Versant Power f/k/a Emera Maine, Proposed Increase in Distribution Rates (2021) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Maine Office of the Public Advocate)
Maine Public Utilities Commission Docket No. 2020-00316
2. In the Matter of the Verified Petition of Atlantic City Electric Company for Approval of Amendments to its Tariff to Provide for an Increase in Rates and Charges for Electric Service Pursuant to N.J.S.A. 48:2-21 and N.J.S.A. 48:2-21.1, and for Other Appropriate Relief (2021) – (Appearance: cost of capital on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. ER201020746

3. Northern States Power Company 2021 Electric Rate Increase Application (2021) – (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the North Dakota Public Service Commission Staff)
ND Public Service Commission Case No. PU-20-441
4. Pike County Light & Power Company 2020 General Base Rate Increase (2020) – (Appearance: Cost of Capital on behalf of the Pennsylvania Office of Consumer Advocate)
Pennsylvania Public Utility Commission – Docket Nos. R-2020-3022134 (Gas) and R-2020-3022135 (Electric)
5. Water Rate Case Consultant for the Maine Public Advocate (2020) – (Appearance: cost of capital on behalf of the Maine Office of Public Advocate in Maine Water Co. dockets)
Docket No. 2921-00053
6. In the Matter of the Petition of South Jersey Gas Company for Approval of Increased Base Tariff Rates and Charges for Gas Service, Changes to Depreciation Rates and Other Tariff Revisions (2020) – (Appearance: cost of capital on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. GR20030243
7. In the Matter of the Verified Petition of Jersey Central Power & Light Company for Review and Approval of Increases in, and Other Adjustments to, its Rates and Charges for Electric Service, and for Approval of Other Proposed Tariff Revisions in Connection Therewith (2020) – (Appearance: cost of equity on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. ER20020146
8. In the Matter of the Federal Power Act Rule 206 Complaint Against Public Service Electric and Gas Company (2020) – (Appearance: cost of equity on behalf of the New Jersey Division of Rate Counsel)
Federal Energy Regulatory Commission Docket No. ER09-1257-000
9. In the Matter of the Petition of New Jersey-American Water Company for Approval of Increase Base Tariff Rates and Charges for Water and Wastewater Service and Other Tariff Changes (2019) – (Appearance: cost of equity on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. WR19121516
10. In the Matter of the Petition of Jersey Central Power & Light Company for Approval of Its Transmission Rates and Transmission Enhancement Charge for Interconnection with PJM Interconnection, L.L.C. (2019) – (Appearance: cost of equity on behalf of the New Jersey Division of Rate Counsel)
Federal Energy Regulatory Commission Docket No. ER20-227-000

11. In the Matter of the Application of Hawaiian Electric Company, Inc. for Approval of a General Rate Increase and Revised Rate Schedules and Rules (2019) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Hawaii Division of Consumer Advocacy)
Hawaii Public Utilities Commission Docket No. 2019-0085
12. Request for Approval of Rate Change, Northern Utilities, Inc. (2019) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Maine Office of the Public Advocate)
Maine Public Utilities Commission Docket No. 2019-00092
13. Application of San Diego Gas & Electric Company (U902M) for Authority to: (i) Adjust its Authorized Return on Common Equity, (ii) Adjust its Authorized Embedded Costs of Debt and Preferred Stock, (iii) Adjust its Authorized Capital Structure; (iv) Modify its Adopted Cost of Capital Mechanism Structure, and (v) Revise its Electric Distribution and Gas Rates Accordingly, and for Related Substantive and Procedural Relief (2019) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the United Consumer Action Network)
California Public Utilities Commission Proceeding A.19-04-017
14. In the Matter of the Application of the Empire District Electric Company, a Kansas Corporation, for an Adjustment in its Rates and Charges for Electric Service in the State of Oklahoma (2019) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Office of the Oklahoma Attorney General)
Oklahoma Commerce Commission Cause No. PUD 201800133
15. In the Matter of the Petition of New Jersey Natural Gas Company for Approval of an Increase in Gas Base Rates and for Changes in its Tariff for Gas Service, Pursuant to N.J.S.A. 48:2-21 and 48:2-21.1 and for Changes to Depreciation Rates for Gas Property Pursuant to N.J.S.A. 48:2-18 (2019) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. GR19030420
16. In the Matter of the Petition of Pivotal Utility Holdings d/b/a Elizabethtown Gas Company to Implement an Infrastructure Investment Program (IIP) and Associated Recovery Mechanism (2019) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. GR1810197
17. Commission-Initiated Investigation into Rates and Revenue Requirements Pertaining to Emera Maine, Inc. (2019) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Maine Office of the Public Advocate)
Maine Public Utilities Commission Docket No. 2019-00019

18. In the Matter of the Petition of Aqua New Jersey, Inc. for Approval of an Increase in Rates for Water Service and Other Tariff Changes (2018) - (Appearance: return on equity, cost of capital on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. WR18121351
19. Application of Oklahoma Gas and Electric Company for an Order of the Commission Authorizing Applicant to Modify Its Rates, Charges, and Tariffs for Retail Electric Service in the State of Oklahoma (2018) - (Appearance: return on equity, cost of capital on behalf of the Office of the Oklahoma Attorney General)
Oklahoma Commerce Commission Cause No. PUD 201800140
20. Commission-Initiated Investigation into Rates and Revenue Requirements Pertaining to Central Maine Power Company (2018) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Maine Office of the Public Advocate)
Maine Public Utilities Commission Docket No. 2018-00194
21. Application of Public Service Company of Oklahoma, An Oklahoma Corporation, for An Adjustment in Its Rates and Charges and the Electric Service Rules, Regulations and Conditions for Service in the State of Oklahoma and to Approve a Performance-Based Rate Proposal (2018) - (Appearance: return on equity, cost of capital on behalf of the Office of the Oklahoma Attorney General)
Oklahoma Commerce Commission Cause No. PUD 201800097
22. In Re: The Matter of the Application of Maryland American Water Co. for Authority to Increase Rates and Charges (2018) – (Appearance: Cost of capital on behalf of the Maryland Office of the People’s Counsel)
Maryland Public Service Commission – Case No. 9487
23. In the Matter of Petition of Atlantic City Electric Co. for Approval of Amendments to Its Tariff to Provide for an Increase in Rates and Charges for Electric Service and for Other Appropriate Relief (2018) - (Appearance: return on equity, cost of capital on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. ER18080925
24. In the Matter of Petition of SUEZ Water New Jersey, Inc. for Approval of an Increase in Rates for Water/Sewer Service and Other Tariff Changes (2018) - (Appearance: return on equity, cost of capital on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. WR18050593
25. In Re: The Matter of the Application of Columbia Gas of Maryland, Inc. for Authority to Increase Rates and Charges (2018) – (Appearance: Cost of capital on behalf of the Maryland Office of the People’s Counsel)
Maryland Public Service Commission – Case No. 9480

26. In Re: The Matter of the Columbia Gas of Pennsylvania for a General Rate Increase in Distribution Gas Service (2018) – (Appearance: Cost of Capital on behalf of the Pennsylvania Office of Consumer Advocate)
 Pennsylvania Public Utility Commission – Docket No. R-2018-2647577
27. In the Matter of the Application of Black Hills Energy Arkansas, Inc. for Approval of a General Tariff Change in Rates and Tariffs (2018) – (Appearance: return on equity, cost of capital on behalf of the Office of the Arkansas Attorney General)
 Arkansas Public Service Commission Docket 17-071-U
28. In the Matter of the Petition of Atlantic City Electric Company for Approval of an Infrastructure Investment Program and Related Cost Recovery Mechanism (2018) – (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the New Jersey Division of Rate Counsel)
 New Jersey Board of Public Utilities Docket No. EO18020196
29. In the Matter of the Application of Oklahoma Gas and Electric Company for an Order of the Commission Authorizing Applicant to Modify Its Rates, Charges, and Tariffs for Retail Electric Service in Oklahoma (2018) - (Appearance: return on equity, cost of capital on behalf of the Office of the Oklahoma Attorney General)
 Oklahoma Commerce Commission Cause No. PUD 201700496
30. Application of Fayson Lake Water Company for the Approval of an Increase in Rates and Other Appropriate Relief (2017) – (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the New Jersey Division of Rate Counsel)
 New Jersey Board of Public Utilities Docket No. WR17101041
31. Petition of Middlesex Water Company for Approval of an Increase in its Rates for Water Service and Other Tariff Changes, and an Order Authorizing Special Accounting Treatment of Income Tax Refund Proceeds and Future Income Tax Deductions (2017) – (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the New Jersey Division of Rate Counsel)
 New Jersey Board of Public Utilities Docket No. WR17101049
32. In the Matter of the Petition of New Jersey-American Water Company, Inc. for Approval of an Increased Tariff Rates and Charges for Water and Sewer Service, Change in Depreciation Rates, and Other Tariff Modifications (2017) – (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the New Jersey Division of Rate Counsel)
 New Jersey Board of Public Utilities Docket No. WR17090985
33. Montana-Dakota Utilities Co., Application to Increase Natural Gas Rates (2017) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the North Dakota Public Service Commission Staff)
 ND Public Service Commission Case No. PU-17-295

34. In the Matter of the Petition of Andover Utility Company, Inc. for Approval of an Increase in Rates for Wastewater Service (2017) – (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. WR17070726
35. Application of Public Service Company of Oklahoma, An Oklahoma Corporation, for An Adjustment in Its Rates and Charges and the Electric Service Rules, Regulations and Conditions for Service in the State of Oklahoma (2017) - (Appearance: return on equity, cost of capital on behalf of the Office of the Oklahoma Attorney General)
Oklahoma Commerce Commission Cause No. PUD 201700151
36. In the Matter of the Petition of SUEZ Water Arlington Hills, Inc. for Approval of an Increase in Rates for Wastewater Service and Other Tariffs (2016) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the New Jersey Division of Rate Counsel)
New Jersey Board of Public Utilities Docket No. WR16060510
37. In the Matter of Request by Emera Maine for Approval of a Rate Change (2016) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Maine Office of the Public Advocate)
Maine Public Utilities Commission Docket No. 15-00360
38. ENMAX Energy Corporation (EEC) Regulated Rate Option Non-Energy Tariff Application (2015-2016) - (Analysis: cost of capital, risk element identification on behalf of the Alberta Utilities Consumer Advocate)
Alberta Utilities Commission Proceeding 20480
39. Pennsylvania Public Utilities Commission vs. West Penn Power Co., Pennsylvania Electric Co., Pennsylvania Power Co., and Metropolitan Edison Co. (2014-2015) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return behalf of the Office of the Pennsylvania Consumer Advocate)
PA Docket Nos. R-2014-2428742-R-2014-2428745
40. In the Matter of the Application of Minnesota Energy Resources Corporation for Authority to Increase Rates for Natural Gas Service in Minnesota (2010-2012) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Minnesota Department of Commerce)
MN Docket No. G007,011/GR-10-977
41. In the Matter of the Application of Otter Tail Power Company for Authority to Increase Rates for Electric Utility Service in Minnesota (2010-2011) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Minnesota Department of Commerce)
MN Docket No. E017/GR-10-239

42. In the Matter of the Petition of Northern States Power Company, a Minnesota Corporation, for Authority to Increase Rates for Natural Gas Service in Minnesota (2009-2010) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Minnesota Department of Commerce)
MN Docket No. G002/GR-09-1153
43. In the Matter of an Application by CenterPoint Energy Resources Corp., D/B/A CenterPoint Minnesota Gas to Increase Natural Gas Rates in Minnesota (2008-2009) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Minnesota Department of Commerce)
MN Docket No. G008/GR-08-1075
44. In the Matter of Minnesota Energy Resources Corporation's Application for Authority to Increase Natural Gas Rates in Minnesota (2008-2009) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Minnesota Department of Commerce)
MN Docket No. G007,011/GR-08-835
45. In the Matter of the Petition of Northern States Power Company, a Minnesota Corporation and Wholly Owned Subsidiary of Xcel Energy Inc., for Authority to Increase Rates for Natural Gas Service in Minnesota (2006-2007) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Minnesota Department of Commerce)
MN Docket No. G002/GR-06-1429
46. In the Matter of the Application of CenterPoint Energy Resources Corp., D/B/A CenterPoint Energy Minnesota Gas, for Authority to Increase Natural Gas Rates in Minnesota (2005-2006) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Minnesota Department of Commerce)
MN Docket No. G008/GR-05-1380
47. In the Matter of a Petition by Interstate Power and Light Company for Authority to Increase Electric Rates in Minnesota (2005) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Minnesota Department of Commerce)
MN Docket No. E001/GR-05-748
48. In the Matter of the Petition of Northern States Power Company dba Xcel Energy Request for General Rate Increase (2004-2005) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Minnesota Department of Commerce)
MN Docket No. G002/GR-04-1511

49. In the Matter of the Petition of Great Plains Natural Gas Company's Request for General Rate Increase (2004-2005) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Minnesota Department of Commerce)
MN Docket No. G004/GR-04-1487

50. In the Matter of the Petition of CenterPoint Energy Minnegasco, A Division of CenterPoint Resources Corp. for Authority to Increase Natural Gas Rates in Minnesota (2004-2005) - (Appearance: cost of equity, cost of debt, capital structure, overall rate of return on behalf of the Minnesota Department of Commerce)
Docket No. G008/GR-04-901

**ROE and ROR Analysis for NSPM
Comparison Group Screening
NSPM Credit Rating**

**Docket No. PU-20-441
Attachment ____ (MFG-2)**

**S&P Global
Market Intelligence
Northern States Power Company | Credit Ratings**

(MI KEY: 4057754; SPCIQ KEY: 12040739)

A-

S&P Global Ratings

Issuer Credit Rating (Foreign Currency LT)

6/23/2010

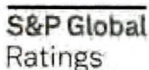
Outlook: Stable

6/23/2010

Current Ratings

S&P GLOBAL RATINGS (S&P Entity Name:Northern States Power Co.)

RATING TYPE	RATING	RATING DATE	LAST REVIEW DATE	PREVIOUS RATING	ACTION	CREDITWATCH/ OUTLOOK	CREDITWATCH/ OUTLOOK DATE
Issuer Credit Rating							
Local Currency LT	A-	6/23/2010	5/21/2020	BBB+	Upgrade CreditWatch/Outlook	Stable	6/23/2010
Local Currency ST	A-2	2/14/2006	5/21/2020	NR	New Rating		
Foreign Currency LT	A-	6/23/2010	5/21/2020	BBB+	Upgrade CreditWatch/Outlook	Stable	6/23/2010
Foreign Currency ST	A-2	2/14/2006	5/21/2020	NR	New Rating		

S&P Credit Ratings and Research provided by 

'Last Review Date' indicates the date on which an Issue/Issuer Credit Rating was last formally reviewed within a twelve-month period or when a Credit Rating Action was last published. For certain dependent instruments, the 'Last Review Date' will only be updated in the event of a Credit Rating change of the linked organization.

Latest S&P Ratings available unless you are a subscriber of S&P Ratings history.

**ROE and ROR Analysis for NSPM
 Comparison Group Screening
 Value Line Electric Utilities Group
 Investment Surveys at Value Line Website on April 13, 2021**

**Docket No. PU-20-441
 Attachment ____ (MFG-3)**

Company	Ticker	Exchange where Publicly Traded
ALLETE	ALE	NYS
Alliant Energy	LNT	NDQ
Ameren Corp.	AEE	NYS
American Elec. Power	AEP	NYS
AVANGRID, Inc.	AGR	NYS
Avista Corp.	AVA	NYS
Black Hills	BKH	NYS
CenterPoint Energy	CNP	NYS
CMS Energy Corp.	CMS	NYS
Consol. Edison	ED	NYS
Dominion Energy	D	NYS
DTE Energy	DTE	NYS
Duke Energy	DUK	NYS
Edison Int'l	EIX	NYS
Emera Incorporated	EMA	TSX
Entergy Corp.	ETR	NYS
Evergy, Inc.	EVRG	NYS
Eversource Energy	ES	NYS
Exelon Corp.	EXC	NDQ
FirstEnergy Corp.	FE	NYS
Fortis Inc.	FTS.TO	TSE
Hawaiian Elec.	HE	NYS
IDACORP, Inc.	IDA	NYS
MGE Energy	MGEE	NDQ
NextEra Energy	NEE	NYS
NorthWestern Corp.	NWE	NYS
OGE Energy	OGE	NYS
Otter Tail Corp.	OTTR	NDQ
PG&E Corp.	PCG	NYS
Pinnacle West Capital	PNW	NYS
PNM Resources	PNM	NYS
Portland General	POR	NYS
PPL Corp.	PPL	NYS
Public Serv. Enterprise	PEG	NYS
Sempra Energy	SRE	NYS
Southern Co.	SO	NYS
Summer Energy Holding	SUME	NDQ
Unitil Corp.	UTL	AMS
WEC Energy Group	WEC	NYS
Xcel Energy Inc.	XEL	NDQ

Companies in boldface excluded for one or more reasons

Company	Ticker	Merger, Acquisition, or Other	Paying Dividends	Postive EPS Growth Rates	S&P Credit Rating
ALLETE, Inc.	ALE	No	Yes	Yes	BBB
Alliant Energy Corporation	LNT	No	Yes	Yes	A-
Ameren Corporation	AEE	No	Yes	Yes	BBB+
American Electric Power Co., Inc.	AEP	No	Yes	Yes	A-
Avangrid, Inc.	AGR	Yes*	Yes	Yes	BBB+
Avista Corporation	AVA	No	Yes	Yes	BBB
Black Hills Corporation	BKH	No	Yes	Yes	BBB+
CenterPoint Energy, Inc.	CNP	No	No#	Yes	BBB+
CMS Energy Corporation	CMS	No	Yes	Yes	BBB+
Consolidated Edison, Inc.	ED	No	Yes	Yes	A-
Dominion Energy, Inc.	D	No	Yes	Yes	BBB+
DTE Energy Company	DTE	No	Yes	Yes	BBB+
Duke Energy Corporation	DUK	No	Yes	Yes	BBB+
Edison International	EIX	No	Yes	Yes	BBB
Emera Incorporated	EMA	No	Yes	Yes	BBB
Entergy Corporation	ETR	No	Yes	Yes	BBB+
Evergy, Inc.	EVRG	No	Yes	Yes	A-
Eversource Energy	ES	No	Yes	Yes	A-
Exelon Corporation	EXC	Yes**	Yes	Yes	BBB+
FirstEnergy Corp.	FE	Yes***	Yes	Yes	BB^
Fortis Inc.	FTS.TO	No	Yes	Yes	A-
Hawaiian Electric Industries, Inc.	HE	No	Yes	Yes	BBB-
IDACORP, Inc.	IDA	No	Yes	Yes	BBB
MGE Energy, Inc.	MGEE	No	Yes	Yes	No^^
NextEra Energy, Inc.	NEE	No	Yes	Yes	A-
NorthWestern Corporation	NWE	No	Yes	Yes	BBB
OGE Energy Corp.	OGE	No	Yes	Yes	BBB+
Otter Tail Corporation	OTTR	No	Yes	Yes	BBB
PG&E Corporation	PCG	No	No##	Yes	BB-^
Pinnacle West Capital Corporation	PNW	No	Yes	Yes	A-
PNM Resources, Inc.	PNM	Yes****	Yes	Yes	BBB
Portland General Electric Company	POR	No	Yes	Yes	BBB+
PPL Corporation	PPL	No	Yes	Yes	A-
Public Service Enterprise Group Inc.	PEG	No	Yes	Yes	BBB+
Sempra Energy	SRE	No	Yes	Yes	BBB+
Southern Company	SO	No	Yes	Yes	A-
Summer Energy Holdings	SUME	No	NA		No^^
Unitil Corporation	UTL	No	Yes	Yes	BBB+
WEC Energy Group, Inc.	WEC	No	Yes	Yes	A-
Xcel Energy Inc.^P	XEL	No	Yes	Yes	A-

*-Avangrid is a controlled company owned by Iberdrola; Avangrid is also acquiring PNM Resources

**-Exelon plans to spin off its generation facilities in the first quarter of 2022.

***-FirstEnergy implicated in a bribery scheme in Ohio on July 21, 2020

****-PNM Resources is being acquired by Avangrid

#-CenterPoint Energy reduced its dividend in the second quarter of 2020

##-PG&E Corporation is not paying dividends as it exits bankruptcy

^-Company does not have an investment-grade credit rating

^^-Company does not have a S&P credit rating

^P-Parent of the subject company.

S&P Global
Market Intelligence

Pacific Gas and Electric Company | Key Development Details

(MI KEY: 4004218; SPCIQ KEY: 805269)

Modified Third Amended Reorganization Plan Approved for PG&E Corporation

The US Bankruptcy Court approved the modified third amended plan of reorganization of PG&E Corporation on June 20, 2020. The debtor has filed its modified third amended plan in the Court on June 19, 2020. As per the amended plan, administrative expense claims, professional fee claims, DIP facility claims, priority tax claims, HoldCo Subordinated Debt Claims, shall be paid in full in cash. HoldCo Other Secured Claims shall be paid in full in cash or reinstated or shall receive other treatment under bankruptcy code. HoldCo Priority Non-Tax Claims shall be paid in full in cash including interest through the effective date calculated at the applicable contract rate or, in the absence of a contract rate, the Federal Judgment Rate, payable on the effective date or as soon as reasonably practicable thereafter, or such other treatment under bankruptcy code. HoldCo Revolver Claim shall be allowed in an aggregate amount equal to principal amount plus all accrued and unpaid interest and shall receive pro rata share of cash. HoldCo Term Loan Claims shall be allowed in an aggregate amount of principal plus all accrued and unpaid interest and shall receive its prorata share of cash. HoldCo General Unsecured Claims shall be paid in full in cash including interest accrued from petition date to effective date at applicable contract rate. HoldCo Public Entities Wildfire Claims shall be satisfied solely from the transfer of cash in amount of \$1.0 billion from the Fire Victims Trust and the Public Entities Segregated Defense Fund. HoldCo Subrogation Wildfire Claims shall have its claim permanently channeled to the Subrogation Wildfire Trust, and such claim shall be asserted exclusively against the Subrogation Wildfire Trust in accordance with its terms, with no recourse to the Debtors, the Reorganized Debtors, or their respective assets and properties. HoldCo Fire Victim Claims shall be asserted exclusively against the Fire Victim Trust in accordance with its terms, with no recourse to the Debtors, the Reorganized Debtors, or their respective assets and properties. HoldCo Workers' Compensation Claims, on and after effective date HoldCo Workers' Compensation Claim shall be entitled to pursue its claim against Reorganized HoldCo as if the Chapter 11 Cases had not been commenced. HoldCo Intercompany Claims shall either be cancelled or reinstated. HoldCo Common Interests shall retain such interest subject to dilution from any New HoldCo Common Stock issued pursuant to the plan and shall receive a pro rata distribution of any subscription rights to purchase in the aggregate up to 5% of the New HoldCo Common Interests issued pursuant to the New HoldCo Common Stock Investment through the Rights Offering. HoldCo Other Interests shall be reinstated. HoldCo ghost ship fire claims will be settled from the amounts available under the debtors insurance, HoldCo environmental claims shall be reinstated and HoldCo rescission or damage claims shall be settled by issue new equity. The plan will be funded through cash, sale of assets and issue of New HoldCo Common Stock and Rights issue.

Announcement Date	6/20/2020
Company Name	Pacific Gas and Electric Company, PG&E Corporation
Source	Capital IQ Bankruptcy Database
Development Type	Bankruptcy: Reorganization
Advisors	NA

Business Description

Pacific Gas and Electric Company

Pacific Gas and Electric Company, a subsidiary of PG&E Corporation (NYSE:PCG), is one of the largest combined natural gas and electric energy companies in the United States. Based in San Francisco, with more than 23,000 employees, the company delivers some of the nation's cleanest energy to nearly 16 million people in Northern and Central California. For more information, visit www.pge.com/ and www.pge.com/en/about/newsroom/index.page.

**ROE and ROR Analysis for NSPM
Comparison Group Screening
Dominion dividend cut and asset sale**

**Docket No. PU-20-441
Attachment (MFG-7)**

DOMINION ENERGY NYSE-D				RECENT PRICE	PIE RATIO	(Trailing: 17.7)	RELATIVE P/E RATIO	DIV'D YLD	3.5%	VALUE LINE									
TIMELINESS 4 Lowered 2/5/21	High: 45.1	53.6	55.6	68.0	80.9	79.9	79.0	85.3	81.7	83.9	90.9	75.5	Target Price	Range					
SAFETY 2 Raised 9/11/98	Low: 36.1	42.1	48.9	51.9	63.1	64.5	66.3	70.9	61.5	67.4	57.8	70.5	2024	2025					
TECHNICAL 5 Lowered 2/12/21	LEGENDS --- 0.71 x Dividends p sh divided by Interest Rate ... Relative Price Strength Options: Yes Shaded area indicates recession																		
BETA .80 (1.00 = Market)	18-Month Target Price Range Low-High Midpoint (% to Mid) \$54-\$120 \$87 (20%)																		
2024-26 PROJECTIONS Price Gain Ann'l Total High 100 (+40%) 11% Low 75 (+5%) 5%																			
Institutional Decisions 1Q2020 2Q2020 3Q2020 to Buy 626 643 582 to Sell 691 626 720 Held(000) 560,954 562,803 548,887																			
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022																			
25.96	23.61	27.17	27.93	25.24	26.17	25.24	22.73	22.56	21.25	19.59	18.70	19.53	19.63	19.78	17.75	18.30	18.30	Revenues per sh	19.75
3.70	4.91	5.08	5.07	4.82	5.11	5.04	5.24	5.47	5.71	5.98	6.33	6.90	6.48	5.73	7.00	7.65	7.75	"Cash Flow" per sh	8.75
1.50	2.40	2.13	3.04	2.64	2.89	2.76	2.75	3.09	3.05	3.20	3.44	3.53	3.25	2.19	3.20	3.85	4.10	Earnings per sh ^A	4.75
1.34	1.38	1.46	1.58	1.75	1.83	1.97	2.11	2.25	2.40	2.59	2.80	3.04	3.34	3.67	3.45	2.52	2.66	Div'd Decl'd per sh ^B	3.20
4.83	5.81	6.89	6.09	6.40	5.89	6.41	7.20	7.06	9.13	9.35	9.69	8.54	6.25	5.94	9.40	8.70	8.40	Cap'l Spending per sh	8.25
14.96	18.50	16.31	17.28	18.66	20.66	20.09	18.34	20.02	19.74	21.24	23.26	26.59	29.53	35.33	29.15	30.75	33.60	Book Value per sh ^C	39.25
695.00	698.00	576.80	583.20	599.40	580.80	569.70	576.10	581.50	585.30	596.30	627.80	644.60	680.90	838.00	800.00	804.00	831.00	Common Shs Outst'g ^D	862.00
24.9	16.0	20.6	13.8	12.7	14.3	17.3	18.9	19.2	23.0	22.1	21.3	22.2	21.8	35.2	25.0	1.88	1.30	Avg Ann'l P/E Ratio	18.0
1.33	.86	1.09	.83	.85	.91	1.09	1.20	1.08	1.21	1.11	1.12	1.12	1.18	1.88	1.30	4.7%	4.3%	Relative P/E Ratio	1.00
3.6%	3.6%	3.3%	3.8%	5.2%	4.4%	4.1%	4.1%	3.8%	3.4%	3.7%	3.8%	3.9%	4.7%	4.8%	4.3%			Avg Ann'l Div'd Yield	3.7%
CAPITAL STRUCTURE as of 9/30/20 Total Debt \$38398 mill. Due in 5 Yrs \$16834 mill. LT Debt \$33145 mill. LT Interest \$1312 mill. (LT interest earned: 2.9x) Leases, Uncapitalized Annual rentals \$72 mill.																			
Pension Assets-12/19 \$9631 mill.																			
Pfd Stock \$2387 mill. Pfd Divd \$65 mill. 2 mill. shs. 1.75%, cum., convert. in 2022. 800,000 shs. 4.65%, cum., redeemable not before 12/15/24. Common Stock 815,819,095 shs. as of 10/16/20 MARKET CAP: \$59 billion (Large Cap)																			
ELECTRIC OPERATING STATISTICS 2017 2018 2019 % Change Retail Sales (KWH) NA NA NA Avg. Indust. Use (MWH) NA NA NA Avg. Indust. Revs per KWH (¢) NA NA NA Capacity at Peak (MW) NA NA NA Peak Load, Summer (MW) NA NA NA Annual Load Factor (%) NA NA NA % Change Customers (y-end) NA NA NA Fixed Charge Cov. (%) 287 219 166																			
ANNUAL RATES Past Past Est'd '17-'19 of change (per sh) 10 Yrs. 5 Yrs. to '24-'26 Revenues -3.0% -2.5% Nil "Cash Flow" 2.5% 3.0% 4.5% Earnings 1.5% - 7.0% Dividends 7.5% 8.0% -5% Book Value 6.0% 9.5% 3.5%																			
QUARTERLY REVENUES (\$ mill.) Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 2018 3466 3088 3451 3361 13366 2019 3858 3970 4269 4475 16572 2020 7044F 3607 3549 14200 2021 3750 3650 3650 3650 14700 2022 3950 3750 3750 3750 15200																			
EARNINGS PER SHARE^A Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 2018 .77 .82 1.22 .44 3.25 2019 d.37 .13 1.23 1.22 2.19 2020 1.10F 1.29 .81 3.20 2021 1.00 .85 1.05 .95 3.85 2022 1.10 .90 1.10 1.00 4.10																			
QUARTERLY DIVIDENDS PAID^B Cal-endar Mar.31 Jun.30 Sep.30 Dec.31 Full Year 2017 .755 .755 .755 .77 3.04 2018 .835 .835 .835 .835 3.34 2019 .9175 .9175 .9175 .9175 3.67 2020 .94 .94 .94 .63 3.45																			
BUSINESS: Dominion Energy, Inc. (formerly Dominion Resources) is a holding company for Virginia Power, North Carolina Power, & South Carolina E&G, which serve 3.9 mill. customers in VA, SC, & NC. Serves 3.0 mill. gas customers in OH, WV, UT, SC, & NC. Other ops. incl. independent power production. Acq'd Questar 9/16; SCANA 1/19. Elec. rev. breakdown: residential, 46%; commercial, 32%; industrial, 7%; other, 15%. Generating sources: gas, 41%; nuclear, 29%; coal, 8%; other, 5%; purchased, 17%. Fuel costs: 28% of revs. '19 reported deprec. rates: 2.4%-4.6%. Has 19,100 empls. Chairman, President & CEO: Thomas F. Farrell II, Inc.: VA. Address: 120 Tredegar St., P.O. Box 26532, Richmond, VA 23261-6532. Tel.: 804-819-2000. Internet: www.dominionenergy.com.																			
Dominion Energy began 2021 as a much-different company than it was a year earlier. The most significant change was the company's exit from most of its midstream gas operations (except for a 50% interest in the Cove Point liquefied natural gas export facility), which is treated as discontinued. Dominion Energy received \$4 billion in cash, and the buyer assumed \$5.7 billion of debt. The board of directors cut the dividend 33%, effective with the December payment. The company was planning to provide its expectations for 2021 around the time this report came out in print. We think share earnings will advance significantly this year, with another healthy gain in 2022.																			
The company used most of the cash to repurchase stock. This amounted to \$3.1 billion, most of which occurred in late 2020. Dominion Energy expects to issue \$300 million in 2021 through the dividend reinvestment plan, but average shares outstanding will likely decline because most of the buyback in 2020 occurred late in the year. In 2022, equity units will be converted to common stock.																			
Rate cases are pending in South Carolina and West Virginia. In South Carolina, the utility filed for an electric increase of \$178 million, based on a 10.25% return on equity (its currently allowed ROE). New rates are expected to take effect soon. The utility's ROE is well below its allowed ROE. In West Virginia, the company is seeking a gas hike of \$28 million, based on a 10.25% ROE (versus the currently allowed 9.45%). New tariffs are expected to take effect in July. Rate relief is one source of Dominion Energy's likely profit growth in 2021 and 2022.																			
Dominion Energy is planning to add offshore wind. The project would provide 2,640 megawatts of capacity at a cost of \$8 billion. Construction is expected to begin in 2024, with completion in 2026. Investors should note that offshore wind entails significant construction risk.																			
The untimely stock has a modest yield for a utility. We project respectable dividend growth through mid-decade, but not enough to restore the payout to its level before the cut last year. Total return potential is good for the 18-month span, but unspectacular for the 2024-2026 period.																			
<i>Paul E. Debbas, CFA February 12, 2021</i>																			
Company's Financial Strength B++ Stock's Price Stability 90 Price Growth Persistence 50 Earnings Predictability 45																			

(A) Dil. excls. nonrec. gains (losses): '07, \$1.67; '08, 1.24; '09, (47¢); '10, \$2.18; '11, (7¢); '12, (\$1.70); '14, (76¢); '17, \$1.19; '18, 43¢; '19, (58¢); '20, (67¢); losses from disc. ops.: '06, 26¢; '10, 26¢; '12, 4¢; '13, 16¢; '20, \$2.21. Next earnings report due late Apr. (B) Div'ds earned on avg. com. eq. in '11: 10.9%; paid mid-Mar., June, Sept., & Dec. (C) Div'd reinv. plan avail. (C) Incl. intang. In '19: \$20.79/sh. (D) In mill. (E) Rate base: Net orig. cost, adj. Rate all'd on com. eq. in '11: 10.9%; earned on avg. com. eq., '19: 6.7%. Regul. Clim.: Avg. (F) 6-mo. figs. pending restatement.

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**ROE and ROR Analysis for NSPM
Comparison Group Screening
Exelon Announces Generation Spinoff**

**Docket No. PU-20-441
Attachment ____ (MFG-8)**

**S&P Global
Market Intelligence**

Exelon Corporation to spin off Gas and Electric Utilities Business of Exelon Corporation | Spinoff or Splitoff

MI Deal Key: 1806405; SPCIQ TRANSACTION ID: 705573315

Overview

Distributed Company (Target)	Gas and Electric Utilities Business of Exelon Corporation	Release Date	2/24/2021
Primary Industry (MI)	Electric Utilities	Announcement Date	2/24/2021
Location	USA	Letter of Intent Date	2/21/2021
Parent Company (Seller)	Exelon Corporation		
Deal Structure	Other		
Status	Announced		
Expected Completion Date	1/1/2022 - 3/31/2022		
Primary Feature	Spinoff or Splitoff		

Summary

Deal Summary

The Board of Directors of Exelon Corporation (NasdaqGS:EXC) announced to spin off Gas and Electric Utilities Business on February 21, 2021. Under the transaction, Exelon Corporation shareholders will retain their current shares of Exelon stock and receive a pro-rata dividend of shares of the new company's stock in a transaction. Post completion, Gas and Electric Utilities Business will list on Stock Exchange as separate entity. RemainCo would become the corporate name for the utilities side, with SpinCo assigned to the energy side. In related transaction, The Board of Directors of Exelon Corporation announced to spin off Exelon Generation Company, LLC on February 21, 2021. Exelon Corporation will continue to be led by Chief Executive Officer Chris Crane and the existing management team until the transaction is complete. The transaction is subject to final approval by the Board of Directors of Exelon Corporation, a Form 10 registration statement being declared effective by the Securities and Exchange Commission, regulatory approvals and satisfaction of other conditions. The transaction is also subject to approval by the Federal Energy Regulatory Commission, the Nuclear Regulatory Commission, New York Public Service Commission and receipt of a private letter ruling from the Internal Revenue Service and tax opinion from Exelon's tax advisors. Exelon shareholder approval is not required. The Board of Directors of Exelon Corporation has approved the plan of transaction. Completion is expected to take place during first quarter of 2022. Barclays acted as financial advisor to Exelon.

Pre-Deal Situation

Exelon Corporation (NasdaqGS:EXC) is currently conducting a strategic review of its corporate structure to determine how to best create value and position its businesses for success. As part of the review, Exelon is considering separating Exelon Generation from Exelon Utilities. As Exelon continues this review, it is focused on creating value and taking into account the interests of all stakeholders – investors, employees, customers and the communities it serves. There can be no assurance that the strategic review will result in any particular action, nor can there be any assurance regarding the timing of any action. Exelon will provide an update on its progress on its next earnings call. Exelon has retained advisors to assist with the review process.

Valuation

Deal Valuation

	ANNOUNCEMENT
Percent Distributed (%)	100.00

Terms

Deal Features	Corporate Divestiture; Spinoff
Deal Condition	Approval By Distributing Company Board; Subject to Approval by Regulatory Authority

Advisers

FIRM NAME	ROLE	PARTY ADVISED	COMPANY NAME	ADVISER NAME	ADVISER FEES	FAIRNESS	ADVISER FEES
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Avangrid reaches settlement with PUCT staff for PNM acquisition

Tuesday, March 30, 2021 4:15 PM CT

By Stephen Cedric Jumchai
Market Intelligence

Avangrid Inc. and PNM Resources Inc. utility Texas-New Mexico Power Co. reached a unanimous settlement with the staff of the Public Utility Commission of Texas and intervenors regarding Avangrid's proposed acquisition of PNM.

Under the settlement, all parties agreed that the proposed \$8.3 billion merger, including the regulatory commitments made by the applicants, is in the public interest.

The agreement, filed March 30 with the PUCT (docket 51547), includes extinguishing all debt at PNM Resources "promptly following the closing of the transaction and maintaining it at zero going forward unless authorized in advance by the commission."

The settlement also calls for ring-fencing Texas-New Mexico Power, or TNMP, in the event of a bankruptcy filing by Avangrid.

"Avangrid will obtain a non-consolidation legal opinion that provides that, in the event of a bankruptcy of Avangrid or any affiliate of Avangrid, a bankruptcy court will not consolidate the assets and liabilities of TNMP with Avangrid or any affiliate of Avangrid," the companies wrote in the filing.

Avangrid and its parent, Iberdrola SA, also agreed that they will not "own or control any customer facing competitive affiliates in [the Electric Reliability Council Of Texas Inc.] including retail electric providers, brokers or aggregators.

Within six months of closing, Iberdrola Solutions LLC, which does business as Iberdrola Texas, will either file an application with the PUCT to "voluntarily relinquish its retail electric provider certificate or transfer its certificate to an unaffiliated third party."

TNMP agreed that it will not implement any involuntary workforce or wage reductions for at least two years and will provide a \$16.2 million rate credit to wholesale and retail customers over a three-year period following closing of the transaction.

The utility will maintain a seven-member board of directors with at least three "disinterested directors."

The PUCT is expected to consider the settlement in the near future, according to a March 30 news release.

PUCT staff had filed testimony March 2 concluding that the merger is not in the public interest despite various commitments Avangrid outlined in a November 2020 application for deal approval. On March 19, the parties announced they had reached a tentative settlement.

The settlement announcement follows the recent approval from the Federal Communications Commission to transfer operating licenses, the approval of the merger by PNM shareholders, the receipt of regulatory clearance from the Committee on Foreign Investment in the United States and the expiration of the waiting period under the Hart-Scott-Rodino Antitrust Improvements Act.

Avangrid said the merger remains on track to close in the second half of the year.

Avangrid is still pursuing other state and federal regulatory approvals for the transaction, including from the Nuclear Regulatory Commission, the Federal Energy Regulatory Commission and the New Mexico Public Regulation Commission.

**ROE and ROR Analysis for NSPM
Comparison Group Screening
Avangrid is a controlled company**

**Docket No. PU-20-441
Attachment ____ (MFG-9)
Schedule 2, Page 1 of 3**

PART I

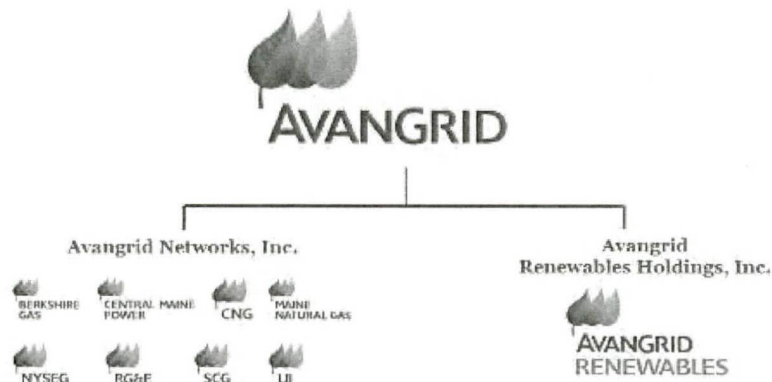
Item 1. Business

Overview

AVANGRID is one of the leading sustainable energy companies in the United States. Our purpose is to work every day to deliver a more accessible clean energy model that promotes healthier, more sustainable communities. A commitment to sustainability is firmly entrenched in the values and principles that guide AVANGRID, with environmental, social, governance and financial sustainability key priorities driving our business strategy.

AVANGRID has approximately \$38 billion in assets and operations in 24 states concentrated in our two primary lines of business - Avangrid Networks and Avangrid Renewables. Avangrid Networks owns eight electric and natural gas utilities, serving approximately 3.3 million customers in New York and New England. Avangrid Renewables owns and operates 8.5 gigawatts of electricity capacity, primarily through wind and solar power, with a presence in 22 states across the United States. AVANGRID supports the achievement of the Sustainable Development Goals approved by the member states of the United Nations, and was named among the World's Most Ethical companies in 2019 and 2020 by the Ethisphere Institute. AVANGRID employs approximately 7,000 people and is listed by Forbes and JUST Capital as one of the 2021 JUST 100, an annual ranking of the most just U.S. public companies. Iberdrola S.A., a corporation (*sociedad anónima*) organized under the laws of the Kingdom of Spain, a worldwide leader in the energy industry, directly owns 81.5% of the outstanding shares of AVANGRID common stock. AVANGRID's primary businesses are described below.

Our direct, wholly-owned subsidiaries include Avangrid Networks, Inc., or Networks, and Avangrid Renewables Holdings, Inc., or ARHI. ARHI in turn holds subsidiaries including Avangrid Renewables, LLC, or Renewables. Networks owns and operates our regulated utility businesses through its subsidiaries, including electric transmission and distribution and natural gas distribution, transportation and sales. Renewables operates a portfolio of renewable energy generation facilities primarily using onshore wind power and also solar, biomass and thermal power. The following chart depicts our current organizational structure.



Through Networks, we own electric generation, transmission and distribution companies and natural gas distribution, transportation and sales companies in New York, Maine, Connecticut and Massachusetts, delivering electricity to approximately 2.3 million electric utility customers and delivering natural gas to approximately 1.0 million natural gas utility customers as of December 31, 2020. The interstate transmission and wholesale sale of electricity by these regulated utilities is regulated by the Federal Energy Regulatory Commission, or FERC, under the Federal Power Act, or FPA, including with respect to transmission rates. Further, Networks' electric and gas distribution utilities in New York, Maine, Connecticut and Massachusetts are subject to regulation by the New York State Public Service Commission, or NYPSC; the Maine Public Utilities Commission, or MPUC; the Connecticut Public Utilities Regulatory Authority, or PURA; and the Massachusetts Department of Public Utilities, or DPU, respectively. Networks strives to be a leader in safety, reliability and quality of service to its utility customers.

Through Renewables, we had a combined wind, solar and thermal installed capacity of 8,499 megawatts, or MW, as of December 31, 2020, including Renewables' share of joint projects, of which 7,734 MW was installed wind capacity. As of December 31, 2020, approximately 67% of the capacity was contracted, for an average period of 9.0 years, and 18% of installed capacity was hedged. Renewables is among the top three largest wind operators in the United States based on installed capacity as of December 31, 2020 and strives to lead the transformation of the U.S. energy industry to a sustainable, competitive, clean

cost-competitive due to reduced government targets, increases in the costs, new regulations, incentives that favor other forms of energy, cheaper alternatives or otherwise, demand for renewable energy could decrease.

There are a limited number of purchasers of utility-scale quantities of electricity, which exposes Renewables' utility-scale projects to additional risk that could have an adverse effect on its business.

Since the transmission and distribution of electricity is highly concentrated in most jurisdictions, there are a limited number of possible purchasers for utility-scale quantities of electricity in a given geographic location, including transmission grid operators, state and investor-owned power companies, public utility districts and cooperatives. As a result, there is a concentrated pool of potential buyers for electricity generated by Renewables' businesses, which may restrict our ability to negotiate favorable terms under new PPAs and could impact our ability to find new customers for the electricity generated by our generation facilities should this become necessary. Renewables' PPA portfolio is mostly contracted with low risk regulated utility companies. In the past few years, there has been increased participation from commercial and industrial customers. The higher long-term business risk profile of these companies results in increased credit risk. Furthermore, if the financial condition of these utilities and/or power purchasers deteriorated or the RPS programs, climate change programs or other regulations to which they are currently subject and that compel them to source renewable energy supplies change, demand for electricity produced by Renewables' businesses could be negatively impacted.

The benefits of any warranties provided by the suppliers of equipment for Networks and Renewables' projects may be limited by the ability of a supplier to satisfy its warranty obligations, or if the term of the warranty has expired or has liability limits which could have an adverse effect on our business and financial condition.

Networks and Renewables expect to benefit from various warranties, including product quality and performance warranties, provided by suppliers in connection with the purchase of equipment by our operating subsidiaries. The suppliers may fail to fulfill their warranty obligations, or the warranty may not be sufficient to compensate for all losses or cover a particular defect. In addition, these warranties generally expire within two to five years after the date of equipment delivery or commissioning and are subject to liability limits. If installation is delayed, the operating subsidiaries may lose all or a portion of the benefit of warranty.

Renewables' revenue may be reduced upon expiration or early termination of PPAs if the market price of electricity decreases and Renewables is otherwise unable to negotiate favorable pricing terms which could have a negative effect on our business and financial condition.

Renewables' PPA portfolio primarily has fixed or otherwise predetermined electricity prices for the life of each PPA. A decrease in the market price of electricity could result in a decrease in revenues upon expiry or extension of a PPA. The majority of Renewables' energy generation projects become merchant upon the expiration of a PPA and are subject to market risks unless Renewables can negotiate an extension or replacement contract. If Renewables is not able to secure a replacement contract with equivalent terms and conditions or otherwise obtain prices that permit operation of the related facility on a profitable basis, the affected project may temporarily or permanently cease operations and trigger an asset value impairment.

Our risk management policies cannot fully eliminate the risk associated with some of our operating subsidiaries' commodity trading and hedging activities, which may result in significant losses and adversely impact our financial condition.

Our subsidiaries' commodity trading and hedging activities are inherently uncertain and involve projections and estimates of factors that can be difficult to predict such as future prices and demand for power and other energy-related commodities. In addition, Renewables has exposure to commodity price movements through their "natural" long positions in electricity in addition to proprietary trading and hedging activities. We manage the exposure to risks of such activities through internal risk management policies, enforcement of established risk limits and risk management procedures but they may not be effective and, even if effective, cannot fully eliminate the risks associated with such activities.

Risk Factors Relating to Ownership of Our Common Stock

Iberdrola exercises significant influence over AVANGRID, and its interests may be different from yours. Additionally, future sales or issuances of our common stock by Iberdrola could have a negative impact on the price of our common stock.

Iberdrola owns approximately 81.5% of outstanding shares of our common stock and will be able to exercise significant influence over AVANGRID's policies and affairs, including the composition of our board of directors and any action requiring the approval of our shareholders, including the adoption of amendments to the certificate of incorporation and bylaws and the approval of a merger or sale of substantially all of our assets, subject to applicable law and the limitations set forth in the shareholder agreement to which we and Iberdrola are parties. The directors designated by Iberdrola may have significant authority to effect decisions affecting our capital structure, including the issuance of additional capital stock, incurrence of additional indebtedness, the implementation of stock repurchase programs and the decision of whether or not to declare dividends.

**ROE and ROR Analysis for NSPM
Comparison Group Screening
Avangrid is a controlled company**

**Docket No. PU-20-441
Attachment ____ (MFG-9)
Schedule 2, Page 3 of 3**

The interests of Iberdrola may conflict with the interests of our other shareholders. For example, Iberdrola may support certain long-term strategies or objectives for us that may not be accretive to shareholders in the short term. The concentration of ownership may also delay, defer or even prevent a change in control, even if such a change in control would benefit our other shareholders, and may make some transactions more difficult or impossible without the support of Iberdrola. This significant concentration of share ownership may adversely affect the trading price for shares of our common stock because investors may perceive disadvantages in owning stock in companies with shareholders who own significant percentages of a company's outstanding stock.

Further, sales of our common stock by Iberdrola or the perception that sales may be made by it could significantly reduce the market price of shares of our common stock. Even if Iberdrola does not sell a large number of shares of our common stock into the market, its right to transfer such shares may depress the price of our common stock. Furthermore, pursuant to the shareholder agreement, Iberdrola is entitled to customary registration rights of our common stock, including the right to choose the method by which the common stock is distributed, a choice as to the underwriter and fees and expenses to be borne by us. Iberdrola also retains preemptive rights to protect against dilution in connection with issuances of equity by us. If Iberdrola exercises its registration rights and/or its preemptive rights, the market price of shares of our common stock may be adversely affected. Additionally, being a controlled company, relevant risks materializing at the ultimate parent level could have a negative impact on our share price, financial condition, credit ratings or reputation.

We have elected to take advantage of the "controlled company" exemption to the corporate governance rules for NYSE-listed companies, which could make shares of our common stock less attractive to some investors or otherwise harm our stock price.

Under the rules of the NYSE, a company in which over 50% of the voting power is held by an individual, a group or another company is a "controlled company" and may elect to take advantage of certain exemptions to the corporate governance rules for NYSE-listed companies. AVANGRID has elected to take advantage of these exemptions and, as a controlled company, is not required to have a majority of its board of directors be independent directors, a compensation committee, or to have such committees be composed entirely of independent directors, and a nominating and corporate governance committee, or to have such committee composed entirely of independent directors. Because we are a "controlled company," you will not have the same protections afforded to shareholders of companies that are subject to all the corporate governance requirements of the NYSE without regard to the exemptions available for "controlled companies." Our status as a "controlled company" could make our shares of common stock less attractive to some investors or otherwise harm our stock price.

Our dividend policy is subject to the discretion of our board of directors and may be limited by our debt agreements and limitations under New York law.

Although we currently anticipate paying a regular quarterly dividend, any such determination to pay dividends is at the discretion of our board of directors and dependent on conditions such as our financial condition, earnings, legal requirements, including limitations under New York law and other factors the board of directors deem relevant. Our board of directors may, in its sole discretion, change the amount or frequency of dividends or discontinue the payment of dividends entirely. For these reasons, investors may not be able to rely on dividends to receive a return on their investments.

AVANGRID may be unable to meet our financial obligations and to pay dividends on our common stock if our subsidiaries are unable to pay dividends or repay loans from us.

We are a holding company and, as such, have no revenue-generating operations of our own. We are dependent on dividends and the repayment of loans from our subsidiaries and on external financings to provide the cash necessary to make future investments, service debt we have incurred, pay administrative costs and pay dividends. Our subsidiaries are separate legal entities and have no independent obligation to pay dividends. Our regulated utilities are restricted by regulatory decision from paying us dividends unless a minimum equity-to-total capital ratio is maintained. The future enactment of laws or regulations may prohibit or further restrict the ability of our subsidiaries to pay upstream dividends or to repay funds. In addition, in the event of a subsidiary's liquidation or reorganization, our right to participate in a distribution of assets is subject to the prior claims of the subsidiary's creditors. As a result, our ability to pay dividends on our common stock and meet our financial obligations is reliant on the ability of our subsidiaries to generate sustained earnings and cash flows and pay dividends to and repay loans from us.

General Risk Factors

If we are unable to implement and maintain effective internal control over financial reporting in the future, investors may lose confidence in the accuracy and completeness of our financial reports and the trading price of our common stock may be negatively affected.

As a public company, we are subject to reporting, disclosure control and other obligations in accordance with applicable laws and rules adopted, and to be adopted, by the SEC and the NYSE such as the requirement that our management to report on

Bribery case prompts S&P to place FirstEnergy, subsidiaries on CreditWatch

Thursday, July 23, 2020 12:40 PM CT

By Usman Khalid
Market Intelligence

S&P Global Ratings placed the ratings of FirstEnergy Corp. and its subsidiaries on CreditWatch with negative implications July 23 after a federal criminal complaint implied the company's involvement in an approximately \$60 million racketeering scheme.

On July 21, the U.S. Attorney's Office for the Southern District of Ohio and the Federal Bureau of Investigation announced charges related to more than \$60 million in bribes allegedly paid to Ohio House Speaker Larry Householder and his associates to steer a nuclear subsidy bill, House Bill 6, through the state Legislature.

Although FirstEnergy was not explicitly named in the affidavit, Ratings said the company could be implicated in the charges in the coming months.

The nuclear subsidy legislation was signed into law in July 2019 and provides \$150 million in annual financial support for the 908-MW Davis-Besse and 1,268-MW Perry nuclear plants owned by Energy Harbor Corp. FirstEnergy's competitive subsidiary, FirstEnergy Solutions Corp., emerged from Chapter 11 bankruptcy protection earlier in 2020 as Energy Harbor.

The charges outlined in the criminal complaint allege that the bribery payments began as early as March 2017, prior to Energy Harbor's emergence from bankruptcy.

"If subsequent investigations directly implicate FirstEnergy, we believe it could reflect a material deficiency in the company's governance, insufficient internal controls, or could result in a weakening of the company's management of regulatory risk," S&P Global Ratings said in a research note. "Any of the above determinations would likely cause us to downgrade the company by one or more notches."

FirstEnergy shares dropped 20.91% on July 22, closing at \$27.09 following a 17% decline July 21. At around 1:30 p.m. ET on July 23, shares were up about 4.6% in heavy trading.

This S&P Global Market Intelligence news article may contain information about credit ratings issued by S&P Global Ratings. Descriptions in this news article were not prepared by S&P Global Ratings.

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S&P Global Ratings

(/en_US/web/guest/home)
**General Criteria: Understanding
S&P Global Ratings' Rating
Definitions**

03-Jun-2009 14:39 EDT

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(Editor's Note: We're republishing this article following our periodic review completed on Feb. 23, 2018. See the "Revisions And Updates" section for details.)

Executive Summary

S&P Global Ratings' credit ratings are designed primarily to provide relative rankings among issuers and obligations of overall creditworthiness; the ratings are not measures of absolute default probability. Creditworthiness encompasses likelihood of default, and also includes (i) payment priority, (ii) recovery, and (iii) credit stability.

In addition, our rating symbols are intended to connote the same general level of creditworthiness for issuers and bonds in different sectors and at different times. In order to promote the comparability of ratings across sectors, geographies, and over time, we are introducing stress scenarios associated with each rating category. These stress scenarios will be an important tool for calibrating our criteria to help maintain comparability. The scenarios will not become part of the rating definitions. Nor will they be the sole or primary drivers of our criteria.

S&P Global Ratings is committed to taking action to help restore confidence in ratings. As one example, over the past year, we have launched a number of initiatives designed to foster greater transparency in our analytics and processes. These initiatives have included publishing "what-if" scenario analyses discussing factors that could cause ratings to change, more

explicit discussions of the assumptions we used in forming our opinions, and changes we have made to our rating criteria for several asset classes resulting from macroeconomic developments and ongoing performance data.

By providing more information and data about ratings, we can help market participants better understand how we develop our ratings and -- whether they agree or disagree with our assessment -- act accordingly.

This article is designed to help market participants better understand what our credit ratings mean. Although the official definitions appear outwardly to be very simple, they embody multiple factors that compose the overall assessment of creditworthiness.

S&P Global Ratings has striven to maintain comparability of ratings across sectors. This has been done by relating all ratings to common default behavior and measurement and by common approaches to risk analysis. In the spirit of promoting greater transparency, S&P Global Ratings is now articulating a set of economic stress scenarios enumerated in Appendix IV, which we intend to use as benchmarks for enhancing the consistency and comparability of ratings across sectors and over time. Each scenario describes particular conditions of economic stress, which we associate with a particular rating level, as described in the appendix. Credits rated in each category are intended to be able to withstand particular conditions of economic stress without defaulting (though they might be downgraded significantly as economic stresses increase).

This publication intends to promote greater understanding of ratings and help investors attribute clearer meanings to different rating categories.

Key Attributes Of S&P Global Ratings' Credit Ratings

Rank ordering of creditworthiness

Our credit ratings express forward-looking opinions about the creditworthiness of issuers and obligations (see Appendix I for a description of "issuer" and "issue" ratings). More specifically, our credit ratings express a relative ranking of creditworthiness. Issuers and obligations with higher ratings are judged by us to be more creditworthy than issuers and obligations with lower credit ratings. (See Appendix III for a relevant excerpt from the rating definitions.)

Creditworthiness is a multi-faceted phenomenon. Although there is no "formula" for combining the various facets, our credit ratings attempt to condense their combined effects into rating symbols along a simple, one-dimensional scale. Indeed, as discussed below, the relative importance of the various factors may change in different situations.

The term creditworthiness refers to the question of whether a bond or other financial instrument will be paid according to its contractual terms. At first blush, the idea of creditworthiness seems entirely straightforward. However, delving beneath the outward simplicity reveals the true multi-dimensional nature.

Primary factor -- likelihood of default

In our view, likelihood of default is the centerpiece of creditworthiness. That means likelihood of default--encompassing both capacity and willingness to pay--is the single most important factor in our assessment of the creditworthiness of an issuer or an obligation. Therefore, consistent with our goal of achieving a rank ordering of creditworthiness, higher ratings on issuers and obligations reflect our expectation that the rated issuer or obligation should default less frequently than issuers and obligations with lower ratings, all other things being equal.

Although we emphasize the rank ordering of default likelihood, we do not view the rating categories solely in relative terms. We associate each successively higher rating category with the ability to withstand successively more stressful economic environments, which we view as less likely to occur. We associate issuers and obligations rated in the highest categories with the ability to withstand extreme or severe stress in absolute terms without defaulting. Conversely, we associate issuers and obligations rated in lower categories with vulnerability to mild or modest stress. (See Appendix IV for stress scenarios by rating level that we intend to use in promoting ratings comparability. Appendix V contains a listing of historical examples of stress conditions, including the magnitude of stress that we associate with each.)

Looking to absolute stress levels is part of how we try to achieve comparability of ratings across different types of securities, different times, different currencies, and different regions. That is, we strive to make our rating symbols correspond to the same approximate level of creditworthiness wherever they appear. Thus, when we use a given rating

**ROE and ROR Analysis for NSPM
Comparison Group Screening
S&P Credit Ratings
S&P Global Market Intelligence, April 13, 2021**

**Docket No. PU-20-441
Attachment ____ (MFG-12)**

Company	Ticker	S&P Credit Rating BBB+ to A
Alliant Energy Corporation	LNT	A-
American Electric Power Co., Inc.	AEP	A-
Consolidated Edison, Inc.	ED	A-
Duke Energy Corporation	DUK	A-
Evergy, Inc.	EVRG	A-
Eversource Energy	ES	A-
Fortis Inc.	FTS.TO	A-
NextEra Energy, Inc.	NEE	A-
Pinnacle West Capital Corporation	PNW	A-
PPL Corporation	PPL	A-
Southern Company	SO	A-
WEC Energy Group, Inc.	WEC	A-
Ameren Corporation	AEE	BBB+
Black Hills Corporation	BKH	BBB+
CMS Energy Corporation	CMS	BBB+
Dominion Energy	D	BBB+
DTE Energy Company	DTE	BBB+
Entergy Corporation	ETR	BBB+
OGE Energy Corp.	OGE	BBB+
Portland General Electric Company	POR	BBB+
Public Service Enterprise Group Inc	PEG	BBB+
Sempra Energy	SRE	BBB+
Unitil Corporation	UTL	BBB+
ALLETE, Inc.	ALE	BBB
Avista Corporation	AVA	BBB
Edison International	EIX	BBB
Emera Incorporated	EMA	BBB
IDACORP, Inc.	IDA	BBB
NorthWestern Corporation	NWE	BBB
Otter Tail Corporation	OTTR	BBB
Hawaiian Electric Industries, Inc.	HE	BBB-

Excluded for credit rating

Northern States Power Minnesota A-
Xcel Energy A-

ROE and ROR Analysis for NSPM
 Regulated Electric Percentage screen
 From Company 2020 10Ks, amounts in thousands of dollars (000)

Docket No. PU-20-441
 Attachment ____ (MFG-13)

Name	SIC Code	Regulated Electricity Income**,**			Company Income**,**			Regulated Electricity as % of Company**,**			Average % Electricity	Source: 2020 10K Pages except where indicated
		2020	2019	2018	2020	2019	2018	2020	2019	2018		
Unitil Corporation***	4931	12,900	11,500	11,400	32,200	44,200	33,000	40.1%	26.0%	34.5%	33.5%	P. 58
Black Hills Energy	4911	156,055	160,297	155,869	428,303	406,042	397,037	36.4%	39.5%	39.3%	38.4%	P. 122-124
Sempra Energy*	4932	4,614,000	4,263,000	3,999,000	11,370,000	10,829,000	10,102,000	40.6%	39.4%	39.6%	39.8%	P. 66
PSEG ^E	4931	1,208,111	1,031,226	1,145,419	2,270,000	1,943,000	2,298,000	53.2%	53.1%	49.8%	52.0%	P. 102-103, 178-179
PPL Corporation ^D	4911	1,731,000	1,586,000	1,515,000	2,803,000	2,840,000	2,852,000	61.8%	55.8%	53.1%	56.9%	P. 96, 103, 108
Fortis Inc. ^C	NA	1,600,000	1,586,000	1,406,000	2,508,000	3,038,000	2,365,000	63.8%	52.2%	59.5%	58.5%	Annual Reports: 2020, P. 79; 2019, P. 81
DTE Energy Company**	4911	777,000	714,000	664,000	1,368,000	1,169,000	1,120,000	56.8%	61.1%	59.3%	59.1%	P. 152-153
Ameren Corporation*	4931	795,000	757,000	778,000	8,971,000	838,000	815,000	8.9%	90.3%	95.5%	64.9%	P. 144
Dominion Energy** ^A	4911	2,310,000	2,143,044	1,596,000	1,358,000	1,358,000	2,447,000	170.1%	157.8%	65.2%	65.2%	P. 217
Consolidated Edison, Inc.	4931	1,830,000	1,856,000	1,892,000	2,654,000	2,676,000	2,664,000	69.0%	69.4%	71.0%	69.8%	P. 174-175
NextEra Energy	4911	3,800,000	3,302,000	3,154,000	5,116,000	5,353,000	4,280,000	74.3%	61.7%	73.7%	69.9%	P. 60, 65
Southern Co.	4911	4,217,000	4,674,000	3,201,000	4,885,000	7,736,000	4,191,000	86.3%	60.4%	76.4%	74.4%	P. II-81, II-89, II-98, II-106, II-114, II-125, II-271
CMS Energy Corporation**	4931	554,000	509,000	535,000	755,000	680,000	657,000	67.4%	78.7%	81.4%	75.8%	P. 62, 112
WEC Energy Group, Inc. ** ^F	4931	934,100	864,600	809,400	1,201,400	1,134,700	1,060,500	77.8%	76.2%	76.3%	76.8%	P. 134-135
Eversource Energy	4911	1,621,000	1,285,000	1,415,800	1,988,700	1,590,500	1,699,900	81.5%	80.8%	83.3%	81.9%	P. 135
Alliant Energy Corporation	4931	678,900	610,200	601,700	777,700	694,400	671,200	87.3%	87.9%	89.6%	88.3%	P. 92, 93
Duke Energy	4931	3,985,000	5,313,000	4,767,000	4,553,000	5,709,000	4,685,000	87.5%	93.1%	101.8%	94.1%	P. 47, 79; 2019, P. 44
American Electric Power Co. Energy, Inc.	4911	2,690,000	2,523,000	2,612,200	2,987,700	2,592,300	2,682,700	90.0%	97.3%	97.4%	94.9%	P. 81, 87, 93, 125
Portland General Electric Co.*	4931	1,101,600	1,023,000	960,300	1,143,900	1,185,800	933,600	96.3%	86.3%	102.9%	95.1%	P. 71, 76, 81
OGE Energy Corp.	4911	269,000	353,000	346,000	269,000	353,000	346,000	100.0%	100.0%	100.0%	100.0%	P. 66
Pinnacle West Capital Corp.*	4911	524,800	507,700	494,200	522,200	504,300	489,600	100.5%	100.7%	100.9%	100.7%	P. 128-129
Entergy Corporation ^B	4911	802,011	686,984	829,768	788,152	671,960	773,687	101.8%	102.2%	107.2%	103.7%	P. 89, 100
Xcel Energy Inc.**	4911	1,914,345	1,735,372	1,219,641	1,769,195	1,390,497	469,365	108.2%	124.8%	259.8%	116.5%	P. 43, 332, 357, 379, 402, 423, 447

Notes

The dollar amounts are operating income unless indicated otherwise

*-Indicates percentage of Operating Revenues

**-Indicates percentage of Net Income

***-Indicates percentage of Segment Profit

A-Dominion's 2020 and 2019 results are affected by extraordinary events including cancellation of the Atlantic Coast Pipeline

B-Entergy had one-time expenses in 2018, average is 2020, 2019.

C-Includes small regulated UNS Energy Gas Operations.

D-Overstated, Kentucky Regulated includes LGE&E gas income.

E-Regulated operating income allocated according to service revenue percentages.

F-Overstated, includes Gas Operations in Wisconsin.

ROE and ROR Analysis for NPSM
 Comparison Group Screening
 Operating Income Analysis from Attachment MFG-12

Docket No. PU-20-441
 Attachment ____ (MFG-14)

Company	Ticker	S&P Credit Rating	≥ Percent of operating income from regulated electric operations (Companies' 2020 10Ks)
Alliant Energy Corporation	ETR	A-	88.3%
Ameren Corporation*	ALE	BBB+	64.9%
American Electric Power Co.	ES	A-	94.9%
CMS Energy Corporation**	ED	BBB+	75.8%
Consolidated Edison, Inc.	AEP	A-	69.8%
Dominion Energy**	AEE	BBB+	65.2%
Duke Energy	EVRG	BBB+	94.1%
Entergy Corporation	OTTR	BBB+	116.5%
Eversource Energy	EIX	A-	81.9%
NextEra Energy	AVA	A-	69.9%
OGE Energy Corp.	NEW	BBB+	100.7%
Pinnacle West Capital Corp.*	OGE	A-	103.7%
Portland General Electric Co.*	NEE	BBB+	100.0%
Southern Co.	CMS	A-	74.4%
WEC Energy Group, Inc.**	DUK	A-	76.8%

*-Indicates percentage of Operating Revenues

BBB+

7

** -Indicates percentage of Net Income

A-

9

ROE/ROR for NSPM
 Equity Prices
 Yahoo! Fin. March 15-April 9, 2021

Alliant Energy (LNT)

Date	Close
3/15/2021	\$ 52.70
3/16/2021	\$ 52.70
3/17/2021	\$ 51.71
3/18/2021	\$ 51.78
3/19/2021	\$ 51.77
3/22/2021	\$ 51.51
3/23/2021	\$ 53.07
3/24/2021	\$ 53.32
3/25/2021	\$ 53.75
3/26/2021	\$ 53.97
3/29/2021	\$ 54.64
3/30/2021	\$ 54.16
3/31/2021	\$ 54.16
4/1/2021	\$ 54.36
4/5/2021	\$ 54.84
4/6/2021	\$ 54.82
4/7/2021	\$ 54.39
4/8/2021	\$ 54.15
4/9/2021	\$ 54.01

Mean \$ 53.46

Ameren (AEE)

Date	Close
3/15/2021	\$ 78.82
3/16/2021	\$ 78.49
3/17/2021	\$ 78.11
3/18/2021	\$ 78.54
3/19/2021	\$ 78.80
3/22/2021	\$ 77.97
3/23/2021	\$ 79.98
3/24/2021	\$ 80.99
3/25/2021	\$ 81.59
3/26/2021	\$ 81.46
3/29/2021	\$ 82.67
3/30/2021	\$ 81.33
3/31/2021	\$ 81.36
4/1/2021	\$ 81.03
4/5/2021	\$ 81.49
4/6/2021	\$ 81.50
4/7/2021	\$ 81.30
4/8/2021	\$ 81.11
4/9/2021	\$ 80.53

Mean \$ 80.37

American Electric Power (AEP)

Date	Close
3/15/2021	\$ 82.28
3/16/2021	\$ 83.50
3/17/2021	\$ 82.12
3/18/2021	\$ 82.60
3/19/2021	\$ 83.67
3/22/2021	\$ 83.63
3/23/2021	\$ 84.64
3/24/2021	\$ 84.99
3/25/2021	\$ 84.72
3/26/2021	\$ 84.99
3/29/2021	\$ 85.84
3/30/2021	\$ 84.73
3/31/2021	\$ 84.70
4/1/2021	\$ 85.54
4/5/2021	\$ 86.29
4/6/2021	\$ 86.77
4/7/2021	\$ 86.69
4/8/2021	\$ 86.07
4/9/2021	\$ 85.89

Mean \$ 84.72

CMS Energy (CMS)

Date	Close
3/15/2021	\$ 58.50
3/16/2021	\$ 58.38
3/17/2021	\$ 57.87
3/18/2021	\$ 58.03
3/19/2021	\$ 58.35
3/22/2021	\$ 58.50
3/23/2021	\$ 60.53
3/24/2021	\$ 60.88
3/25/2021	\$ 61.10
3/26/2021	\$ 60.93
3/29/2021	\$ 61.92
3/30/2021	\$ 61.02
3/31/2021	\$ 61.22
4/1/2021	\$ 61.02
4/5/2021	\$ 61.48
4/6/2021	\$ 61.71
4/7/2021	\$ 61.14
4/8/2021	\$ 60.60
4/9/2021	\$ 60.46

Mean \$ 60.19

Consolidated Edison (ED)

Date	Close
3/15/2021	\$ 71.82
3/16/2021	\$ 72.08
3/17/2021	\$ 71.79
3/18/2021	\$ 72.22
3/19/2021	\$ 72.30
3/22/2021	\$ 72.05
3/23/2021	\$ 73.24
3/24/2021	\$ 73.43
3/25/2021	\$ 74.27
3/26/2021	\$ 74.44
3/29/2021	\$ 75.45
3/30/2021	\$ 74.38
3/31/2021	\$ 74.80
4/1/2021	\$ 74.29
4/5/2021	\$ 75.28
4/6/2021	\$ 75.69
4/7/2021	\$ 75.31
4/8/2021	\$ 75.12
4/9/2021	\$ 75.17

Mean \$ 73.85

Dominion (D)

Date	Close
3/15/2021	\$ 74.54
3/16/2021	\$ 74.29
3/17/2021	\$ 73.17
3/18/2021	\$ 73.50
3/19/2021	\$ 73.35
3/22/2021	\$ 73.50
3/23/2021	\$ 74.18
3/24/2021	\$ 74.16
3/25/2021	\$ 75.22
3/26/2021	\$ 75.78
3/29/2021	\$ 76.70
3/30/2021	\$ 75.53
3/31/2021	\$ 75.96
4/1/2021	\$ 75.72
4/5/2021	\$ 76.41
4/6/2021	\$ 76.38
4/7/2021	\$ 76.22
4/8/2021	\$ 76.21
4/9/2021	\$ 76.30

Mean \$ 75.11

Duke Energy (DUK)

Date	Close
3/15/2021	\$ 92.33
3/16/2021	\$ 93.02
3/17/2021	\$ 91.85
3/18/2021	\$ 92.33
3/19/2021	\$ 92.72
3/22/2021	\$ 93.12
3/23/2021	\$ 94.02
3/24/2021	\$ 94.39
3/25/2021	\$ 95.53
3/26/2021	\$ 95.83
3/29/2021	\$ 97.58
3/30/2021	\$ 96.24
3/31/2021	\$ 96.53
4/1/2021	\$ 96.28
4/5/2021	\$ 96.93
4/6/2021	\$ 97.57
4/7/2021	\$ 97.82
4/8/2021	\$ 97.62
4/9/2021	\$ 97.54

Mean \$ 95.22

Entergy Corporation (ETR)

Date	Close
3/15/2021	\$ 98.13
3/16/2021	\$ 98.91
3/17/2021	\$ 98.94
3/18/2021	\$ 98.05
3/19/2021	\$ 98.44
3/22/2021	\$ 97.68
3/23/2021	\$ 98.11
3/24/2021	\$ 97.43
3/25/2021	\$ 98.31
3/26/2021	\$ 98.44
3/29/2021	\$ 99.16
3/30/2021	\$ 98.66
3/31/2021	\$ 99.47
4/1/2021	\$ 99.64
4/5/2021	\$ 100.53
4/6/2021	\$ 101.90
4/7/2021	\$ 101.72
4/8/2021	\$ 101.28
4/9/2021	\$ 101.14

Mean \$ 99.26

Evergy, Inc. (EVERG)

Date	Close
3/15/2021	\$ 59.19
3/16/2021	\$ 59.61
3/17/2021	\$ 58.38
3/18/2021	\$ 58.64
3/19/2021	\$ 59.54
3/22/2021	\$ 58.63
3/23/2021	\$ 58.89
3/24/2021	\$ 59.04
3/25/2021	\$ 59.83
3/26/2021	\$ 59.14
3/29/2021	\$ 60.16
3/30/2021	\$ 59.37
3/31/2021	\$ 59.53
4/1/2021	\$ 59.93
4/5/2021	\$ 60.63
4/6/2021	\$ 61.16
4/7/2021	\$ 61.26
4/8/2021	\$ 60.90
4/9/2021	\$ 60.66
Mean	\$ 59.71

Eversource Energy (ES)

Date	Close
3/15/2021	\$ 82.75
3/16/2021	\$ 82.72
3/17/2021	\$ 81.94
3/18/2021	\$ 81.37
3/19/2021	\$ 82.14
3/22/2021	\$ 82.25
3/23/2021	\$ 84.47
3/24/2021	\$ 85.63
3/25/2021	\$ 86.03
3/26/2021	\$ 85.79
3/29/2021	\$ 86.95
3/30/2021	\$ 86.29
3/31/2021	\$ 86.59
4/1/2021	\$ 86.47
4/5/2021	\$ 87.59
4/6/2021	\$ 87.68
4/7/2021	\$ 87.60
4/8/2021	\$ 87.24
4/9/2021	\$ 86.18
Mean	\$ 85.14

NextEra Energy (NEE)

Date	Close
3/15/2021	\$ 75.52
3/16/2021	\$ 75.38
3/17/2021	\$ 72.96
3/18/2021	\$ 71.13
3/19/2021	\$ 70.84
3/22/2021	\$ 71.69
3/23/2021	\$ 74.02
3/24/2021	\$ 72.83
3/25/2021	\$ 73.45
3/26/2021	\$ 74.06
3/29/2021	\$ 74.80
3/30/2021	\$ 74.22
3/31/2021	\$ 75.61
4/1/2021	\$ 75.77
4/5/2021	\$ 76.78
4/6/2021	\$ 77.56
4/7/2021	\$ 77.41
4/8/2021	\$ 77.76
4/9/2021	\$ 77.94
Mean	\$ 74.72

OGE Energy Corp. (OGE)

Date	Close
3/15/2021	\$ 33.15
3/16/2021	\$ 33.02
3/17/2021	\$ 32.40
3/18/2021	\$ 32.49
3/19/2021	\$ 32.28
3/22/2021	\$ 32.08
3/23/2021	\$ 32.01
3/24/2021	\$ 32.02
3/25/2021	\$ 32.25
3/26/2021	\$ 32.40
3/29/2021	\$ 32.78
3/30/2021	\$ 32.45
3/31/2021	\$ 32.36
4/1/2021	\$ 32.61
4/5/2021	\$ 32.83
4/6/2021	\$ 32.70
4/7/2021	\$ 32.99
4/8/2021	\$ 32.66
4/9/2021	\$ 32.20
Mean	\$ 32.51

Pinnacle West Capital (PNW)

Date	Close
3/15/2021	\$ 80.41
3/16/2021	\$ 79.58
3/17/2021	\$ 79.20
3/18/2021	\$ 79.58
3/19/2021	\$ 80.79
3/22/2021	\$ 79.73
3/23/2021	\$ 79.90
3/24/2021	\$ 79.60
3/25/2021	\$ 80.27
3/26/2021	\$ 80.22
3/29/2021	\$ 81.43
3/30/2021	\$ 80.72
3/31/2021	\$ 81.35
4/1/2021	\$ 81.81
4/5/2021	\$ 83.05
4/6/2021	\$ 83.33
4/7/2021	\$ 82.26
4/8/2021	\$ 81.82
4/9/2021	\$ 81.77

Mean \$ 80.89

Portland General Electric (POR)

Date	Close
3/15/2021	\$ 48.42
3/16/2021	\$ 47.80
3/17/2021	\$ 46.90
3/18/2021	\$ 47.19
3/19/2021	\$ 47.60
3/22/2021	\$ 46.81
3/23/2021	\$ 47.42
3/24/2021	\$ 46.80
3/25/2021	\$ 47.42
3/26/2021	\$ 47.46
3/29/2021	\$ 47.80
3/30/2021	\$ 47.24
3/31/2021	\$ 47.47
4/1/2021	\$ 47.24
4/5/2021	\$ 48.22
4/6/2021	\$ 48.42
4/7/2021	\$ 48.52
4/8/2021	\$ 48.63
4/9/2021	\$ 48.82

Mean \$ 47.69

Southern Co. (SO)

Date	Close
3/15/2021	\$ 60.98
3/16/2021	\$ 61.25
3/17/2021	\$ 60.70
3/18/2021	\$ 60.40
3/19/2021	\$ 59.70
3/22/2021	\$ 59.69
3/23/2021	\$ 60.63
3/24/2021	\$ 60.69
3/25/2021	\$ 61.38
3/26/2021	\$ 61.66
3/29/2021	\$ 62.32
3/30/2021	\$ 61.54
3/31/2021	\$ 62.16
4/1/2021	\$ 62.33
4/5/2021	\$ 62.66
4/6/2021	\$ 63.11
4/7/2021	\$ 62.80
4/8/2021	\$ 62.86
4/9/2021	\$ 62.73

Mean \$ 61.56

WEC Energy Group (WEC)

Date	Close
3/15/2021	\$ 88.91
3/16/2021	\$ 88.89
3/17/2021	\$ 87.45
3/18/2021	\$ 88.04
3/19/2021	\$ 88.82
3/22/2021	\$ 88.76
3/23/2021	\$ 92.37
3/24/2021	\$ 91.95
3/25/2021	\$ 93.19
3/26/2021	\$ 93.03
3/29/2021	\$ 94.79
3/30/2021	\$ 93.39
3/31/2021	\$ 93.59
4/1/2021	\$ 93.32
4/5/2021	\$ 93.81
4/6/2021	\$ 93.80
4/7/2021	\$ 93.42
4/8/2021	\$ 92.86
4/9/2021	\$ 92.35

Mean \$ 91.72

**ROE and ROR Analysis for NSPM
Comparison Group
Dividends**

**Docket No. PU-20-441
Attachment ____ (MFG-16)**

Name	Value Line	Zacks	Highest
Alliant Energy Corporation	\$ 1.61	\$ 1.61	\$ 1.61
Ameren Corporation	\$ 2.24	\$ 2.20	\$ 2.24
American Electric Power Co.	\$ 3.04	\$ 2.96	\$ 3.04
CMS Energy Corporation	\$ 1.77	\$ 1.74	\$ 1.77
Consolidated Edison, Inc.	\$ 3.10	\$ 3.10	\$ 3.10
Dominion Energy	\$ 2.52	\$ 2.52	\$ 2.52
Duke Energy	\$ 3.90	\$ 3.86	\$ 3.90
Entergy Corporation	\$ 3.92	\$ 3.80	\$ 3.92
Evergy, Inc.	\$ 2.20	\$ 2.14	\$ 2.20
Eversource Energy	\$ 2.41	\$ 2.41	\$ 2.41
NextEra Energy	\$ 1.54	\$ 1.54	\$ 1.54
OGE Energy Corp.	\$ 1.64	\$ 1.61	\$ 1.64
Pinnacle West Capital Corp.	\$ 3.42	\$ 3.32	\$ 3.42
Portland General Electric Co.	\$ 1.72	\$ 1.63	\$ 1.72
Southern Co.	\$ 2.62	\$ 2.56	\$ 2.62
WEC Energy Group, Inc.	\$ 2.76	\$ 2.71	\$ 2.76

Value Line dividends taken from website on April 13, 2021.

Zacks dividends taken from website on April 15, 2021.

ROE and ROR Analysis for NSPM

Comparison Group

Discounted Cash Flow Model Analysis

Common Equity Share Prices: March 15-April 9, 2021

Zacks, Yahoo! Finance, and Value Line EPS Growth-Rate Estimates--January-April, 2021

Docket No. PU-20-441

Attachment ____ (MFG-17), Schedule I

	A	B	C	D	E	F
Company Name	Zacks EPS Growth Rate (%)	Yahoo! Finance EPS Growth Rates (%)	Value Line EPS Growth Rates (%)	Mean EPS Growth Rate (%)	Average of Closing Prices	Annualized Dividend
Alliant Energy Corporation	5.82%	5.70%	5.50%	5.67%	\$ 53.46	\$ 1.61
Ameren Corporation	7.26%	7.50%	6.00%	6.92%	\$ 80.37	\$ 2.24
American Electric Power Co.	5.69%	6.15%	6.50%	6.11%	\$ 84.72	\$ 3.04
CMS Energy Corporation	6.95%	7.20%	7.50%	7.22%	\$ 60.19	\$ 1.77
Consolidated Edison, Inc.	2.00%	2.95%	2.50%	2.48%	\$ 73.85	\$ 3.10
Dominion Energy	6.72%	2.78%	7.00%	5.50%	\$ 75.11	\$ 2.52
Duke Energy	5.23%	5.00%	5.00%	5.08%	\$ 95.22	\$ 3.90
Entergy Corporation	5.10%	5.50%	3.00%	4.53%	\$ 99.26	\$ 3.92
Evergy, Inc.	5.90%	5.65%	8.00%	6.52%	\$ 59.71	\$ 2.20
Eversource Energy	6.78%	7.05%	6.50%	6.78%	\$ 85.14	\$ 2.41
NextEra Energy	7.83%	8.49%	10.50%	8.94%	\$ 74.72	\$ 1.54
OGE Energy Corp.	4.41%	3.80%	4.00%	4.07%	\$ 32.51	\$ 1.64
Pinnacle West Capital Corp.	3.37%	3.50%	4.50%	3.79%	\$ 80.89	\$ 3.42
Portland General Electric Co.	13.36%	13.40%	4.00%	10.25%	\$ 47.69	\$ 1.72
Southern Co.	5.03%	6.49%	3.50%	5.01%	\$ 61.56	\$ 2.62
WEC Energy Group, Inc.	6.07%	6.10%	6.50%	6.22%	\$ 91.72	\$ 2.76
Mean	6.10%	6.08%	5.66%	5.94%		
Median	5.86%	5.90%	5.75%	5.89%		

	G	H	I	J	K
Company Name	Dividend Yield (Rate/Price)	Expected Dividend Yield	Flotation Adjusted Dividend Yield	Required Rate of Return on Equity	J > 5.80%: BAA Corporate Bonds yield (Four-week average 3.75%) plus 20% of CAPM risk premium (2.05%)
Alliant Energy Corporation	3.01%	3.18%	3.31%	8.98%	Yes
Ameren Corporation	2.79%	2.98%	3.10%	10.02%	Yes
American Electric Power Co.	3.59%	3.81%	3.96%	10.07%	Yes
CMS Energy Corporation	2.94%	3.15%	3.28%	10.49%	Yes
Consolidated Edison, Inc.	4.20%	4.30%	4.47%	6.95%	Yes
Dominion Energy	3.36%	3.54%	3.68%	9.18%	Yes
Duke Energy	4.10%	4.30%	4.47%	9.55%	Yes
Entergy Corporation	3.95%	4.13%	4.29%	8.82%	Yes
Evergy, Inc.	3.68%	3.92%	4.08%	10.59%	Yes
Eversource Energy	2.83%	3.02%	3.14%	9.92%	Yes
NextEra Energy	2.06%	2.25%	2.33%	11.27%	Yes
OGE Energy Corp.	5.04%	5.25%	5.46%	9.53%	Yes
Pinnacle West Capital Corp.	4.23%	4.39%	4.56%	8.35%	Yes
Portland General Electric Co.	3.61%	3.98%	4.13%	14.38%	Yes
Southern Co.	4.26%	4.47%	4.64%	9.65%	Yes
WEC Energy Group, Inc.	3.01%	3.20%	3.32%	9.54%	Yes
Mean	3.54%	3.74%	3.89%	9.83%	
Median				9.60%	

A: Zacks website, April 15, 2021

B: Yahoo! Finance website, April 13, 2021

C: Value Line Investment Survey website: April 13, 2021

E: Yahoo! Finance website, March 15-April 9, 2021. See Attachment ____ (MFG-15), pages 1-4.

F: Higher of Value Line Investment Survey: April 13, 2021; or Zacks report: April 15, 2021. See Attachment ____ (MFG-16).

K: Moody's BAA Corporate Bonds Index plus 20 percent of CAPM risk premium See Attachment ____ (MFG-18, Schedule 9).

D: (A + B + C)/3

G: F/E

H: G*(1+D)

I: H/(1 - .03759)

J: D + 1

Low-End Test

Moody's 10-Year Baa Corporate Bond Index (see MFG-18, Schedule 8)	3.75%
CAPM Risk Premium, Column C (see MFG-18, Schedule 9)	10.26%
20 percent of CAPM risk premium	2.05%

High-End Test:

Moody's 10-Year Baa Public Utilities Bond Index + 20 percent of CAPM risk premium	5.80%
Proxy Group median, Column K (see MFG-18, Schedule 9)	11.59%
150 percent of Proxy Group median	17.39%

ry Finance

costs of bond/stock issues in order to finance capital projects designed to serve future as well as current generations. Moreover, expensing flotation costs requires an estimate of the market pressure effect for each individual issue, which is likely to prove unreliable. A more reliable approach is to estimate market pressure for a large sample of stock offerings rather than for one individual issue.

An alternative regulatory treatment is to incorporate flotation costs into the rate base as an intangible asset. While this solves the intergenerational problem and compensates investors fairly for their investment, the method clashes with the "used and useful" principle of rate base inclusions. An intangible asset related to flotation costs is unlikely to be viewed as a used and useful asset in public service by regulators.

The conventional approach to flotation cost adjustment can be derived as follows. From the standard DCF model, the investor's required return on equity capital is expressed as:

$$K = D_1/P_0 + g \quad (10-1)$$

If P_0 is regarded as the proceeds per share actually received by the company from which dividends and earnings will be generated, that is, P_0 equals B_0 , the book value per share, then the company's required return is:

$$r = D_1/B_0 + g \quad (10-2)$$

Denoting the percentage flotation costs f , the proceeds per share B_0 are related to market price P_0 as follows:

$$\begin{aligned} P - fP &= B_0 \\ P(1 - f) &= B_0 \end{aligned} \quad (10-3)$$

Substituting Equation 10-3 into 10-2, we obtain:

$$r = D_1/P(1 - f) + g \quad (10-4)$$

which is the utility's required return adjusted for flotation cost.³

³ Another way to look at it is that in order to prevent dilution of book value per share, the market-to-book ratio must be at least $1/(1 - f)$. The Target Market-to-Book method discussed in Chapter 12 can be used to translate the DCF cost of equity figure into an appropriate allowed return on book equity. As shown in Chapter 12, the allowed return consistent with a target M/B ratio that allows for the recapture of flotation costs is:

$$r = M/B (K - g) + g$$

Table 1.1.11. Real Gross Domestic Product: Percent Change From Quarter One Year Ago

[Percent]

Bureau of Economic Analysis

Last Revised on: March 25, 2021 - Next Release Date April 29, 2021

Line		2018				2019				2020			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Gross domestic product (GDP)	3.1	3.3	3.1	2.5	2.3	2.0	2.1	2.3	0.3	-9.0	-2.8	-2.4
2	Personal consumption expenditures	2.6	2.9	3	2.4	2.3	2.4	2.5	2.5	0.2	-10.2	-2.8	-2.7
3	Goods	4.7	4.5	4.2	2.9	3	3.9	4.2	3.7	3.1	-1.7	7.2	6.7
4	Durable goods	8.1	8.3	6.8	4.2	3.4	4.7	5.5	5.7	2	-1.5	12.8	11.6
5	Nondurable goods	3	2.6	2.9	2.3	2.8	3.5	3.6	2.7	3.6	-1.8	4.3	4.1
6	Services	1.6	2.2	2.5	2.1	2	1.8	1.7	1.9	-1.1	-14	-7.3	-6.8

Legend / Footnotes:

1. Final sales to domestic purchasers less government consumption expenditures and gross investment.

2. The arithmetic average of gross domestic product and of gross domestic income, deflated by the implicit price deflator for GDP.

3. Food excludes personal consumption expenditures for purchased meals and beverages, which are classified in food services.

4. Market-based PCE is a supplemental measure that is based on household expenditures for which there are observable price measures. It excludes most imputed transactions (for Note. Percent changes for real estimates are calculated from corresponding quantity indexes presented in NIPA tables 1.1.3, 1.2.3, 1.4.3, and 1.7.3. Percent changes in price estimates

Table VI.G6.—Selected Economic Variables, Calendar Years 2019-2095
 [GDP and taxable payroll in billions]

Calendar year	Adjusted CPI ^a	Average wage index	Taxable payroll ^b	Gross domestic product	Compound new-issue interest factor ^c	Compound effective trust-fund interest factor ^d
Intermediate:						
2019	97.78	\$53,756.28	\$7,643	\$21,426	0.9782	0.9861
2020	100.00	55,641.66	7,988	22,341	1.0000	1.0135
2021	102.43	58,112.16	8,334	23,342	1.0228	1.0403
2022	104.89	60,499.07	8,687	24,344	1.0529	1.0669
2023	107.41	62,823.60	9,071	25,369	1.0881	1.0937
2024	109.98	65,207.33	9,464	26,441	1.1281	1.1212
2025	112.62	67,697.32	9,864	27,552	1.1732	1.1501
2026	115.33	70,300.71	10,282	28,709	1.2229	1.1809
2027	118.09	73,036.06	10,720	29,917	1.2776	1.2142
2028	120.93	75,872.79	11,176	31,179	1.3364	1.2501
2029	123.83	78,696.64	11,629	32,475	1.3989	1.2888
2030	126.80	81,571.95	12,088	33,806	1.4654	1.3316
2035	142.77	97,553.46	14,639	41,307	1.8485	1.6415
2040	160.74	116,333.72	17,640	50,291	2.3319	2.0707
2045	180.98	138,027.12	21,319	61,380	2.9416	2.6122
2050	203.76	163,825.17	25,874	75,119	3.7108	3.2952
2055	229.42	194,916.95	31,448	91,939	4.6810	4.1568
2060	258.30	232,104.78	38,154	112,240	5.9050	5.2437
2065	290.82	276,280.79	46,155	136,656	7.4490	6.6147
2070	327.43	328,546.45	55,768	166,204	9.3967	8.3443
2075	368.66	390,640.80	67,504	202,410	11.8537	10.5261
2080	415.07	464,287.88	81,907	247,188	14.9531	13.2784
2085	467.33	551,706.00	99,517	302,272	18.8629	16.7503
2090	526.17	656,106.73	120,981	369,382	23.7951	21.1301
2095	592.41	780,772.56	146,900	450,425	30.0168	26.6551
Growth Rate 2026-2050*				4.09%		

Source: Social Security 2020 Trustees' Report

* = (2050/2026)^(1/24) - 1

Chapter 9: Discounted Cash Flow Application

growth than to insert a constant growth rate into the plain vanilla DCF equation. The practical challenge is to establish a reasonable growth path for future dividends. As previously discussed, an excellent starting point is security analysts' earnings growth forecasts (available from IBES, Zacks, Reuters, First Call) as a proxy for dividend forecasts. These forecasts are typically for the next five years. From the standpoint of the DCF model that extends into perpetuity, this forecasting horizon may be too short. For example, it is quite possible that a company's dividends can grow faster than the general economy for five years, but it is quite implausible for such growth to continue into perpetuity. The two-stage DCF model is based on the premise that investors expect the growth rate for the utilities to be equal to the company-specific growth rates for the next 5 years, let us say, (Stage 1 Growth), and to converge to an expected steady-state long-run rate of growth from year 6 onward (Stage 2 Growth). For example, it is quite plausible that near-term DCF growth estimates for a given company are unduly high and unsustainable over long periods, and that such growth rates are expected to decline toward a lower long-run level over time. Another example of this situation is that of companies that operate in a relatively undeveloped industry (e.g. wholesale power generation) or companies that are experiencing very high growth rates. Here again, the assumption of a constant perpetual growth rate may not be reasonable.

Blended Growth Approach

One way to account for the two stages of growth is to modify the single-stage DCF model by specifying the growth rate as a weighted average of short-term and long-term growth rates. The blended growth rate is calculated as a weighted average giving two-thirds weight to the analysts' five-year growth projections (Zacks, IBES, etc.) and one-third to historical long-term growth of the economy as a whole and/or the long-range projections of growth in Gross Domestic Product (GDP) projected for the very long term. FERC has adopted such a method in the past for determining the return on equity for gas and oil utilities.

To illustrate, two-stage DCF estimates for a group of widely traded dividend-paying diversified natural gas producers are shown on Table 9-5. Column 1 shows the spot dividend yield for each company, Column 2 shows the analyst consensus growth forecast for the next five years for each company, and column 3 shows the long-range GDP forecast of 6.5% for the U.S. economy at that time. Column 4 computes the weighed average growth, giving 2/3 weight to column 1 and 1/3 weight to column 2. Averages are shown at the bottom of the table. Adding the average blended growth rate of 9.02% to the average expected dividend yield of 2.83% shown at the bottom of Column 6 produces an estimate of equity costs of 11.85% for the group, unadjusted for flotation costs. Allowance for flotation costs to the results of Column 7 brings the return on equity estimate to 12.00%, shown in Column 7. Note

	A	B	C	D	E	F	G
	Zacks-Yahoo!						
	Zacks EPS	Yahoo!	Value Line	Finance-	Average of	Annualized	Dividend
Company Name	Growth	Finance EPS	EPS Growth	Value Line	Closing Prices	Dividend	Yield
	Rate (%)	Growth	Rates (%)	Mean Growth			(Rate/Price)
		Rates (%)	Rates (%)	Rate (%)			
Alliant Energy Corporation	5.82%	5.70%	5.50%	5.67%	\$ 53.46	\$ 1.61	3.01%
Ameren Corporation	7.26%	7.50%	6.00%	6.92%	\$ 80.37	\$ 2.24	2.79%
American Electric Power Co.	5.69%	6.15%	6.50%	6.11%	\$ 84.72	\$ 3.04	3.59%
CMS Energy Corporation	6.95%	7.20%	7.50%	7.22%	\$ 60.19	\$ 1.77	2.94%
Consolidated Edison, Inc.	2.00%	2.95%	2.50%	2.48%	\$ 73.85	\$ 3.10	4.20%
Dominion Energy	6.72%	2.78%	7.00%	5.50%	\$ 75.11	\$ 2.52	3.36%
Duke Energy	5.23%	5.00%	5.00%	5.08%	\$ 95.22	\$ 3.90	4.10%
Entergy Corporation	5.10%	5.50%	3.00%	4.53%	\$ 99.26	\$ 3.92	3.95%
Eergy, Inc.	5.90%	5.65%	8.00%	6.52%	\$ 59.71	\$ 2.20	3.68%
Eversource Energy	6.78%	7.05%	6.50%	6.78%	\$ 85.14	\$ 2.41	2.83%
NextEra Energy	7.83%	8.49%	10.50%	8.94%	\$ 74.72	\$ 1.54	2.06%
OGE Energy Corp.	4.41%	3.80%	4.00%	4.07%	\$ 32.51	\$ 1.64	5.04%
Pinnacle West Capital Corp.	3.37%	3.50%	4.50%	3.79%	\$ 80.89	\$ 3.42	4.23%
Portland General Electric Co.	13.36%	13.40%	4.00%	10.25%	\$ 47.69	\$ 1.72	3.61%
Southern Co.	5.03%	6.49%	3.50%	5.01%	\$ 61.56	\$ 2.62	4.26%
WEC Energy Group, Inc.	6.07%	6.10%	6.50%	6.22%	\$ 91.72	\$ 2.76	3.01%

	H	I	J	K	L	M	N	O
	SSA Long-Run				Weighted		N > 5.80%: BAA Corporate Bonds	
	Expected	Flotation	Projected	EIA Long-	Long-Run	Weighted	Weighted	yield (Four-week
Company Name	Dividend	Adjusted	EPS Growth	Run	Projected EPS	Projected	Cost of	average 3.75%) plus
	Yield	Dividend	Rate =	Projected	Growth Rate	Projected	Equity, Long-	20% of CAPM risk
		Yield	4.09%	EPS Growth	= 4.23%	Growth Rate	Run Rate	premium (2.05%)
			Rate =	Rate = 4.36%	= 4.23%			
Alliant Energy Corporation	3.18%	3.31%	4.09%	4.36%	4.23%	5.19%	8.50%	Yes
Ameren Corporation	2.98%	3.10%	4.09%	4.36%	4.23%	6.02%	9.12%	Yes
American Electric Power Co.	3.81%	3.96%	4.09%	4.36%	4.23%	5.48%	9.44%	Yes
CMS Energy Corporation	3.15%	3.28%	4.09%	4.36%	4.23%	6.22%	9.50%	Yes
Consolidated Edison, Inc.	4.30%	4.47%	4.09%	4.36%	4.23%	3.06%	7.53%	Yes
Dominion Energy	3.54%	3.68%	4.09%	4.36%	4.23%	5.08%	8.75%	Yes
Duke Energy	4.30%	4.47%	4.09%	4.36%	4.23%	4.79%	9.26%	Yes
Entergy Corporation	4.13%	4.29%	4.09%	4.36%	4.23%	4.43%	8.72%	Yes
Eergy, Inc.	3.92%	4.08%	4.09%	4.36%	4.23%	5.75%	9.83%	Yes
Eversource Energy	3.02%	3.14%	4.09%	4.36%	4.23%	5.93%	9.07%	Yes
NextEra Energy	2.25%	2.33%	4.09%	4.36%	4.23%	7.37%	9.70%	Yes
OGE Energy Corp.	5.25%	5.46%	4.09%	4.36%	4.23%	4.12%	9.58%	Yes
Pinnacle West Capital Corp.	4.39%	4.56%	4.09%	4.36%	4.23%	3.94%	8.49%	Yes
Portland General Electric Co.	3.98%	4.13%	4.09%	4.36%	4.23%	8.24%	12.38%	Yes
Southern Co.	4.47%	4.64%	4.09%	4.36%	4.23%	4.75%	9.39%	Yes
WEC Energy Group, Inc.	3.20%	3.32%	4.09%	4.36%	4.23%	5.56%	8.88%	Yes
Mean		3.89%			Mean	5.37%	9.26%	Mean
							9.19%	Median

A: Zacks website, April 15, 2021

B: Yahoo! Finance website; April 13, 2021

C: Value Line Investment Survey website: April 13, 2021

E: Yahoo! Finance website, March 15-April 9, 2021. See Attachment ____ (MFG-15), pages 1-4.

F: Higher of Value Line Investment Survey: April 13, 2021; or Zacks report: April 15, 2021. See Attachment ____ (MFG-16).

J: U.S. Social Security Administration, The 2020 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, June 5, 2020 (OASDI Trustees Report), Table VI.G6. See Attachment ____ MFG-17, Schedule 4.

K: U.S. Energy Information Administration, *Annual Energy Outlook 2018, Macroeconomic Indicators* (Real GDP Growth + GDP Chain-Type Index Increase 2018-2050), <https://www.eia.gov/analysis/projection-data.php#annualproj>. See Attachment ____ MFG-17, Schedule 5.

O: Moody's BAA Corporate Bonds Index plus 20 percent of CAPM risk premium) See Attachment ____ (MFG-18, Schedule 9).

D: = (A + B + C)/3

H: = G*(1+D))

L: = (J + K)/2

M: = 2/3*D + 1/3*L

N: = I + M

G: = F/E

I: = H/(1 - .0376)

**ROE and ROR Analysis for NSPM
CAPM Analysis
Risk-Free Rate Analysis**

**Docket No. PU-20-441
Attachment _____ (MFG-18), Schedule 1**

Daily Treasury Yield Curve Rates

March 15, 2021-April 9, 2021

Date	1 mo	2 mo	3 mo	6 mo	1 yr	2 yr	3 yr	5 yr	7 yr	10 yr	20 yr	30 yr
3/15/2021	0.02	0.02	0.04	0.06	0.08	0.14	0.33	0.84	1.28	1.62	2.27	2.37
3/16/2021	0.01	0.02	0.02	0.06	0.07	0.15	0.33	0.83	1.28	1.62	2.3	2.38
3/17/2021	0.01	0.02	0.02	0.05	0.07	0.13	0.29	0.8	1.27	1.63	2.32	2.42
3/18/2021	0.01	0.01	0.01	0.03	0.08	0.16	0.33	0.86	1.35	1.71	2.36	2.45
3/19/2021	0.01	0.01	0.01	0.03	0.07	0.16	0.33	0.9	1.38	1.74	2.36	2.45
3/22/2021	0.02	0.02	0.03	0.05	0.06	0.15	0.32	0.87	1.34	1.69	2.29	2.38
3/23/2021	0.02	0.02	0.01	0.04	0.08	0.15	0.31	0.83	1.29	1.63	2.24	2.34
3/24/2021	0.02	0.02	0.02	0.04	0.07	0.14	0.31	0.83	1.27	1.62	2.21	2.31
3/25/2021	0.02	0.03	0.02	0.04	0.07	0.14	0.3	0.82	1.29	1.63	2.24	2.34
3/26/2021	0.02	0.02	0.02	0.04	0.06	0.14	0.31	0.85	1.32	1.67	2.27	2.37
3/29/2021	0.02	0.03	0.03	0.04	0.06	0.14	0.32	0.89	1.37	1.73	2.32	2.43
3/30/2021	0.01	0.01	0.02	0.04	0.06	0.16	0.33	0.9	1.39	1.73	2.29	2.38
3/31/2021	0.01	0.01	0.03	0.05	0.07	0.16	0.35	0.92		1.74	2.31	2.41
4/1/2021	0.02	0.02	0.02	0.04	0.06	0.17	0.35	0.9	1.37	1.69	2.24	2.34
4/2/2021	0.02	0.02	0.02	0.04	0.07	0.19	0.39	0.97	1.42	1.72	2.27	2.35
4/5/2021	0.03	0.02	0.03	0.04	0.06	0.17	0.37	0.94	1.4	1.73	2.28	2.36
4/6/2021	0.02	0.02	0.02	0.04	0.06	0.16	0.35	0.88	1.34	1.67	2.24	2.32
4/7/2021	0.01	0.02	0.02	0.04	0.06	0.16	0.34	0.87	1.34	1.68	2.26	2.35
4/8/2021	0.02	0.02	0.01	0.04	0.05	0.14	0.33	0.85	1.3	1.64	2.22	2.32
4/9/2021	0.02	0.01	0.02	0.03	0.06	0.16	0.35	0.87	1.33	1.67	2.23	2.34
											Mean	2.37

ROE and ROR Analysis for NSPM

CAPM Analysis

Beta calculation for Comparison Group

Value Line Investment Survey Betas taken from website April 13, 2021

Docket No. PU-20-441

Attachment ____ MFG-18, Schedule 2

Company Name	Value Line Betas-- Comparison Group
Alliant Energy Corporation	0.85
Ameren Co.	0.80
American Electric Power Co.	0.75
CMS Energy Corporation	0.75
Consolidated Edison, Inc.	0.75
Dominion Energy	0.80
Duke Energy	0.85
Entergy Corporation	0.95
Evergy, Inc.	0.95
Eversource Energy	0.90
NextEra Energy	0.90
OGE Energy Corp.	1.05
Pinnacle West Capital Corp.	0.90
Portland General Electric Co.	0.90
Southern Co.	0.95
WEC Energy Group, Inc.	0.80

Constant-Growth DCF Analysis for S&P 500

A: IBES, April 13, 2021

B and E: Value Line Analyzer, April 13, 2021

$C = B * (1 + A)$

$F = E / (\text{Sum of E})$

$D = A + C$

$G = D * F$

Company Name	Ticker	A EPS Growth Rate (%)	B Dividend Yield (%)	C Expected Dividend Yield (%)	D Rate of Return on Equity (%)	E Market Cap \$ (Mil)	F Market Cap Weight Factor	G Rate of Return on Equity (%)
3M Company	MMM	8.04	3.04	3.28	11.32	112,451	0.00299	0.0338
Abbott Labs.	ABT	15.58	1.50	1.73	17.31	212,878	0.00565	0.0979
AbbVie Inc.	ABBV	4.10	4.94	5.14	9.24	185,710	0.00493	0.0456
ABIOMED Inc.	ABMD	17.10	0.00	0.00	17.10	14,500	0.00038	0.0066
Accenture Plc	ACN	9.75	1.30	1.43	11.18	179,762	0.00477	0.0533
Activision Blizzard	ATVI	17.83	0.49	0.58	18.41	74,976	0.00199	0.0366
Adobe Inc.	ADBE	17.50	0.00	0.00	17.50	236,343	0.00627	0.1098
Advance Auto Parts	AAP	14.01	0.55	0.63	14.64	12,119	0.00032	0.0047
Advanced Micro Dev.	AMD	26.31	0.00	0.00	26.31	99,544	0.00264	0.0695
AES Corp.	AES	8.15	2.21	2.39	10.54	18,018	0.00048	0.0050
Aflac Inc.	AFL	6.11	2.63	2.79	8.90	35,814	0.00095	0.0085
Agilent Technologies	A	10.80	0.60	0.66	11.46	39,449	0.00105	0.0120
Air Products & Chem.	APD	9.01	2.12	2.31	11.32	62,509	0.00166	0.0188
Akamai Technologies	AKAM	12.00	0.00	0.00	12.00	16,676	0.00044	0.0053
Alaska Air Group	ALK	-18.50	0.00	0.00	-18.50	8,988	0.00024	-0.0044
Albemarle Corp.	ALB	25.61	1.09	1.37	26.98	15,353	0.00041	0.0110
Alexandria Real Estate	ARE	0.10	2.57	2.57	2.67	18,872	0.00050	0.0013

ROE and ROR for NSPM
 CAPM Analysis
 Market Return

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 Attachment _____ MFG-18 Sch 3
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Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Alexion Pharmac.	ALXN	8.78	0.00	0.00	8.78	33,441	0.00089	0.0078
Align Techn.	ALGN	24.14	0.00	0.00	24.14	43,569	0.00116	0.0279
Allegion plc	ALLE	4.20	1.10	1.15	5.35	11,982	0.00032	0.0017
Alliant Energy	LNT	5.70	2.96	3.13	8.83	13,590	0.00036	0.0032
Allstate Corp.	ALL	-0.40	2.78	2.77	2.37	35,380	0.00094	0.0022
Alphabet Inc.	GOOG	16.95	0.00	0.00	16.95	1,519,034	0.04033	0.6836
Alphabet Inc. 'A'	GOOGL	16.95	0.00	0.00	16.95	1,525,261	0.04049	0.6864
Altria Group	MO	4.42	6.73	7.03	11.45	95,021	0.00252	0.0289
Amazon.com	AMZN	37.20	0.00	0.00	37.20	1,649,533	0.04379	1.6291
Amcors plc	AMCR	7.64	4.04	4.35	11.99	18,829	0.00050	0.0060
Amer. Airlines	AAL	-45.70	0.00	0.00	-45.70	14,872	0.00039	-0.0180
Amer. Elec. Power	AEP	6.15	3.51	3.73	9.88	43,051	0.00114	0.0113
Amer. Express	AXP	15.60	1.22	1.41	17.01	118,440	0.00314	0.0535
Amer. Int'l Group	AIG	17.30	2.72	3.19	20.49	40,562	0.00108	0.0221
Amer. Tower 'A'	AMT	17.31	2.21	2.59	19.90	108,732	0.00289	0.0575
Amer. Water Works	AWK	8.60	1.57	1.71	10.31	27,726	0.00074	0.0076
Ameren Corp.	AEE	7.50	2.76	2.97	10.47	20,593	0.00055	0.0057
Ameriprise Fin'l	AMP	10.11	1.75	1.93	12.04	27,797	0.00074	0.0089
AmerisourceBergen	ABC	9.20	1.51	1.65	10.85	23,788	0.00063	0.0069
AMETEK, Inc.	AME	-1.20	0.62	0.61	-0.59	29,864	0.00079	-0.0005
Amgen	AMGN	6.86	2.91	3.11	9.97	143,488	0.00381	0.0380
Amphenol Corp.	APH	11.20	0.86	0.96	12.16	40,280	0.00107	0.0130
Analog Devices	ADI	11.78	1.73	1.93	13.71	58,820	0.00156	0.0214
ANSYS, Inc.	ANSS	8.00	0.00	0.00	8.00	30,763	0.00082	0.0065
Anthem, Inc.	ANTM	13.59	1.28	1.45	15.04	86,428	0.00229	0.0345
Aon plc	AON	10.41	0.78	0.86	11.27	54,153	0.00144	0.0162
APA Corp.	APA	-24.00	0.56	0.43	-23.57	6,800	0.00018	-0.0043
Apple Inc.	AAPL	14.69	0.69	0.79	15.48	2,151,695	0.05712	0.8844
Applied Materials	AMAT	21.28	0.69	0.84	22.12	127,683	0.00339	0.0750

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Aptiv PLC	APTV	43.37	0.00	0.00	43.37	37,995	0.00101	0.0437
Archer Daniels Mid'l'd	ADM	4.30	2.63	2.74	7.04	32,159	0.00085	0.0060
Arista Networks	ANET	6.60	0.00	0.00	6.60	23,448	0.00062	0.0041
Assurant Inc.	AIZ	19.40	1.81	2.16	21.56	8,439	0.00022	0.0048
AT&T Inc.	T	1.89	6.72	6.85	8.74	220,378	0.00585	0.0511
Atmos Energy	ATO	7.17	2.65	2.84	10.01	12,588	0.00033	0.0033
Autodesk, Inc.	ADSK	35.58	0.00	0.00	35.58	62,861	0.00167	0.0594
Automatic Data Proc.	ADP	10.26	2.08	2.29	12.55	79,545	0.00211	0.0265
AutoZone Inc.	AZO	6.70	0.00	0.00	6.70	31,572	0.00084	0.0056
AvalonBay Communities	AVB	2.54	3.44	3.53	6.07	26,200	0.00070	0.0042
Avery Dennison	AVY	7.84	1.30	1.40	9.24	15,849	0.00042	0.0039
Baker Hughes	BKR	3.25	3.36	3.47	6.72	15,515	0.00041	0.0028
Ball Corp.	BLL	13.60	0.69	0.78	14.38	28,346	0.00075	0.0108
Bank of America	BAC	1.11	1.80	1.82	2.93	346,465	0.00920	0.0270
Bank of New York Mellon	BK	12.59	2.59	2.92	15.51	42,423	0.00113	0.0175
Baxter Int'l Inc.	BAX	9.00	1.16	1.26	10.26	43,259	0.00115	0.0118
Becton, Dickinson	BDX	12.00	1.38	1.55	13.55	70,902	0.00188	0.0255
Berkley (W.R.)	WRB	23.47	0.61	0.75	24.22	13,973	0.00037	0.0090
Best Buy Co.	BBY	9.63	2.32	2.54	12.17	31,112	0.00083	0.0101
Bio-Rad Labs. 'A'	BIO	17.80	0.00	0.00	17.80	17,209	0.00046	0.0081
Biogen	BIIB	-10.08	0.00	0.00	-10.08	41,248	0.00110	-0.0110
BlackRock, Inc.	BLK	11.61	2.10	2.34	13.95	120,167	0.00319	0.0445
Boeing	BA	12.33	0.00	0.00	12.33	147,082	0.00390	0.0481
Booking Holdings	BKNG	135.59	0.00	0.00	135.59	98,725	0.00262	0.3554
BorgWarner	BWA	19.41	1.50	1.79	21.20	11,126	0.00030	0.0063
Boston Properties	BXP	7.00	3.81	4.08	11.08	16,304	0.00043	0.0048
Boston Scientific	BSX	6.55	0.00	0.00	6.55	55,628	0.00148	0.0097
Bristol-Myers Squibb	BMJ	7.35	3.16	3.39	10.74	139,263	0.00370	0.0397
Broadcom Inc.	AVGO	8.60	2.98	3.24	11.84	196,844	0.00523	0.0619

ROE and ROR for NSPM
CAPM Analysis
Market Return

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Broadridge Fin'l	BR	10.00	1.49	1.64	11.64	17,912	0.00048	0.0055
Brown-Forman 'B'	BF/B	7.53	1.02	1.10	8.63	33,688	0.00089	0.0077
C.H. Robinson	CHRW	9.94	2.16	2.37	12.31	13,083	0.00035	0.0043
Cabot Oil & Gas 'A'	COG	43.75	2.60	3.74	47.49	7,371	0.00020	0.0093
Cadence Design Sys.	CDNS	11.10	0.00	0.00	11.10	39,766	0.00106	0.0117
Campbell Soup	CPB	8.64	3.01	3.27	11.91	14,914	0.00040	0.0047
Capital One Fin'l	COF	4.19	1.20	1.25	5.44	60,820	0.00161	0.0088
Cardinal Health	CAH	7.57	3.23	3.47	11.04	17,846	0.00047	0.0052
CarMax, Inc.	KMX	6.34	0.00	0.00	6.34	20,559	0.00055	0.0035
Carnival Corp.	CCL	-72.42	0.00	0.00	-72.42	30,740	0.00082	-0.0591
Carrier Global	CARR	5.53	1.12	1.18	6.71	37,048	0.00098	0.0066
Catalent, Inc.	CTLT	15.97	0.00	0.00	15.97	18,061	0.00048	0.0077
Caterpillar Inc.	CAT	-1.11	1.79	1.77	0.66	125,643	0.00334	0.0022
Cboe Global Markets	CBOE	1.80	1.68	1.71	3.51	10,758	0.00029	0.0010
CBRE Group	CBRE	11.00	0.00	0.00	11.00	26,308	0.00070	0.0077
CDW Corp.	CDW	11.59	0.94	1.05	12.64	24,168	0.00064	0.0081
Celanese Corp.	CE	21.06	1.80	2.18	23.24	17,702	0.00047	0.0109
Centene Corp.	CNC	10.53	0.00	0.00	10.53	36,412	0.00097	0.0102
CenterPoint Energy	CNP	-5.88	2.78	2.62	-3.26	12,880	0.00034	-0.0011
Cerner Corp.	CERN	11.51	1.22	1.36	12.87	22,101	0.00059	0.0076
CF Industries	CF	-5.21	2.65	2.51	-2.70	9,864	0.00026	-0.0007
Charter Communic.	CHTR	33.74	0.00	0.00	33.74	118,491	0.00315	0.1061
Chevron Corp.	CVX	-4.90	4.95	4.71	-0.19	200,585	0.00533	-0.0010
Chipotle Mex. Grill	CMG	52.78	0.00	0.00	52.78	41,969	0.00111	0.0588
Chubb Ltd.	CB	22.88	1.94	2.38	25.26	72,545	0.00193	0.0487
Church & Dwight	CHD	8.71	1.15	1.25	9.96	21,557	0.00057	0.0057
Cigna Corp.	CI	10.35	1.66	1.83	12.18	88,206	0.00234	0.0285
Cincinnati Financial	CINF	7.92	2.39	2.58	10.50	16,935	0.00045	0.0047
Cintas Corp.	CTAS	12.85	0.86	0.97	13.82	36,795	0.00098	0.0135

ROE and ROR for NSPM
 CAPM Analysis
 Market Return

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Cisco Systems	CSCO	6.60	2.86	3.05	9.65	218,521	0.00580	0.0560
Citigroup Inc.	C	1.28	2.81	2.85	4.13	151,338	0.00402	0.0166
Citizens Fin'l Group	CFG	-2.76	3.47	3.37	0.61	19,220	0.00051	0.0003
Citrix Sys.	CTXS	10.70	1.04	1.15	11.85	17,481	0.00046	0.0055
Clorox Co.	CLX	5.07	2.29	2.41	7.48	24,390	0.00065	0.0048
CME Group	CME	4.87	1.76	1.85	6.72	73,177	0.00194	0.0130
CMS Energy Corp.	CMS	7.20	2.89	3.10	10.30	17,666	0.00047	0.0048
Coca-Cola	KO	6.14	3.15	3.34	9.48	229,211	0.00609	0.0577
Cognizant Technology	CTSH	3.40	1.21	1.25	4.65	41,981	0.00111	0.0052
Colgate-Palmolive	CL	7.46	2.26	2.43	9.89	67,668	0.00180	0.0178
Comcast Corp.	CMCSA	14.57	1.83	2.10	16.67	250,104	0.00664	0.1107
Comerica Inc.	CMA	-10.70	3.79	3.38	-7.32	10,002	0.00027	-0.0019
Conagra Brands	CAG	6.33	3.03	3.22	9.55	17,873	0.00047	0.0045
ConocoPhillips	COP	-8.50	3.28	3.00	-5.50	55,944	0.00149	-0.0082
Consol. Edison	ED	2.95	4.12	4.24	7.19	25,778	0.00068	0.0049
Constellation Brands	STZ	9.35	1.28	1.40	10.75	45,409	0.00121	0.0130
Cooper Cos.	COO	10.00	0.02	0.02	10.02	18,790	0.00050	0.0050
Copart, Inc.	CPRT	22.30	0.00	0.00	22.30	26,802	0.00071	0.0159
Corning Inc.	GLW	12.75	2.17	2.45	15.20	33,882	0.00090	0.0137
Corteva, Inc.	CTVA	18.25	1.22	1.44	19.69	34,757	0.00092	0.0182
Costco Wholesale	COST	8.64	0.82	0.89	9.53	158,829	0.00422	0.0402
Crown Castle Int'l	CCI	19.60	3.17	3.79	23.39	75,968	0.00202	0.0472
CSX Corp.	CSX	15.34	1.15	1.33	16.67	73,927	0.00196	0.0327
Cummins Inc.	CMI	14.98	2.09	2.40	17.38	38,235	0.00102	0.0176
CVS Health	CVS	3.77	2.68	2.78	6.55	97,507	0.00259	0.0170
Danaher Corp.	DHR	12.19	0.37	0.42	12.61	160,736	0.00427	0.0538
Darden Restaurants	DRI	36.64	2.41	3.29	39.93	19,070	0.00051	0.0202
DaVita Inc.	DVA	13.83	0.00	0.00	13.83	11,729	0.00031	0.0043
Deere & Co.	DE	34.00	0.96	1.29	35.29	117,474	0.00312	0.1101

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Delta Air Lines	DAL	-26.15	0.00	0.00	-26.15	32,037	0.00085	-0.0222
Dentsply Sirona	XRAY	24.08	0.63	0.78	24.86	13,971	0.00037	0.0092
Devon Energy	DVN	25.00	1.95	2.44	27.44	8,625	0.00023	0.0063
DexCom Inc.	DXCM	23.60	0.00	0.00	23.60	35,462	0.00094	0.0222
Diamondback Energy	FANG	49.13	2.10	3.13	52.26	12,046	0.00032	0.0167
Digital Realty Trust	DLR	30.98	3.29	4.31	35.29	40,053	0.00106	0.0375
Discover Fin'l Svcs.	DFS	6.27	1.78	1.89	8.16	30,292	0.00080	0.0066
Discovery Communic. 'C'	DISCK	12.90	0.00	0.00	12.90	19,425	0.00052	0.0067
Discovery, Inc.	DISCA	9.92	0.00	0.00	9.92	21,131	0.00056	0.0056
Dish Network 'A'	DISH	-23.01	0.00	0.00	-23.01	19,857	0.00053	-0.0121
Disney (Walt)	DIS	48.53	0.00	0.00	48.53	334,044	0.00887	0.4304
Dollar General	DG	13.57	0.82	0.93	14.50	49,537	0.00132	0.0191
Dollar Tree, Inc.	DLTR	9.78	0.00	0.00	9.78	27,343	0.00073	0.0071
Dominion Energy	D	2.78	3.31	3.40	6.18	61,433	0.00163	0.0101
Domino's Pizza	DPZ	10.43	0.98	1.08	11.51	14,859	0.00039	0.0045
Dover Corp.	DOV	9.50	1.42	1.55	11.05	20,042	0.00053	0.0059
Dow Inc.	DOW	-5.43	4.45	4.21	-1.22	47,557	0.00126	-0.0015
DTE Energy	DTE	4.65	3.29	3.44	8.09	26,295	0.00070	0.0056
Duke Energy	DUK	4.99	3.99	4.19	9.18	75,224	0.00200	0.0183
Duke Realty Corp.	DRE	6.00	2.46	2.61	8.61	16,054	0.00043	0.0037
DuPont de Nemours	DD	29.80	1.61	2.09	31.89	55,506	0.00147	0.0470
DXC Technology	DXC	-8.82	0.00	0.00	-8.82	7,937	0.00021	-0.0019
Eastman Chemical	EMN	3.83	2.47	2.56	6.39	15,154	0.00040	0.0026
Eaton Corp. plc	ETN	15.69	2.17	2.51	18.20	55,955	0.00149	0.0270
eBay Inc.	EBAY	18.79	1.17	1.39	20.18	42,244	0.00112	0.0226
Ecolab Inc.	ECL	17.07	0.89	1.04	18.11	61,328	0.00163	0.0295
Edison Int'l	EIX	-0.50	4.47	4.45	3.95	22,719	0.00060	0.0024
Edwards Lifesciences	EW	12.99	0.00	0.00	12.99	52,516	0.00139	0.0181
Electronic Arts	EA	14.52	0.49	0.56	15.08	40,962	0.00109	0.0164

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Emerson Electric	EMR	9.63	2.23	2.44	12.07	54,636	0.00145	0.0175
Enphase Energy	ENPH	37.70	0.00	0.00	37.70	18,942	0.00050	0.0190
Entergy Corp.	ETR	5.50	3.85	4.06	9.56	20,369	0.00054	0.0052
EOG Resources	EOG	58.35	2.25	3.56	61.91	42,776	0.00114	0.0703
Equifax, Inc.	EFX	10.63	0.86	0.95	11.58	22,081	0.00059	0.0068
Equinix, Inc.	EQIX	28.95	1.72	2.22	31.17	61,008	0.00162	0.0505
Equity Residential	EQR	6.10	3.33	3.53	9.63	26,932	0.00072	0.0069
Essex Property Trust	ESS	7.90	2.96	3.19	11.09	18,384	0.00049	0.0054
Etsy, Inc.	ETSY	48.10	0.00	0.00	48.10	25,673	0.00068	0.0328
Everest Re Group Ltd.	RE	62.70	2.46	4.00	66.70	10,226	0.00027	0.0181
Evergy, Inc.	EVRG	5.65	3.59	3.79	9.44	13,896	0.00037	0.0035
Eversource Energy	ES	7.05	2.75	2.94	9.99	30,043	0.00080	0.0080
Exelon Corp.	EXC	-0.34	3.40	3.39	3.05	43,871	0.00116	0.0036
Expedia Group	EXPE	-15.06	0.00	0.00	-15.06	24,331	0.00065	-0.0097
Expeditors Int'l	EXPD	4.20	0.97	1.01	5.21	18,211	0.00048	0.0025
Extra Space Storage	EXR	6.00	2.91	3.08	9.08	18,075	0.00048	0.0044
Exxon Mobil Corp.	XOM	10.59	6.15	6.80	17.39	239,545	0.00636	0.1106
F5 Networks	FFIV	6.04	0.00	0.00	6.04	12,998	0.00035	0.0021
Facebook Inc.	FB	21.50	0.00	0.00	21.50	891,994	0.02368	0.5091
Fastenal Co.	FAST	7.94	2.24	2.42	10.36	28,668	0.00076	0.0079
Federal Rlty. Inv. Trust	FRT	6.70	4.07	4.34	11.04	8,060	0.00021	0.0024
FedEx Corp.	FDX	29.41	0.93	1.20	30.61	74,060	0.00197	0.0602
Fidelity Nat'l Info.	FIS	13.97	1.06	1.21	15.18	91,066	0.00242	0.0367
Fifth Third Bancorp	FITB	-2.98	2.81	2.73	-0.25	27,370	0.00073	-0.0002
First Republic Bank	FRC	10.99	0.50	0.55	11.54	29,102	0.00077	0.0089
FirstEnergy Corp.	FE	-1.97	4.45	4.36	2.39	19,025	0.00051	0.0012
Fiserv Inc.	FISV	18.81	0.00	0.00	18.81	82,527	0.00219	0.0412
FleetCor Technologies	FLT	12.04	0.00	0.00	12.04	23,533	0.00062	0.0075
FLIR Systems	FLIR	6.40	1.19	1.27	7.67	7,522	0.00020	0.0015

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
FMC Corp.	FMC	9.00	1.74	1.90	10.90	14,427	0.00038	0.0042
Ford Motor	F	27.66	0.00	0.00	27.66	49,743	0.00132	0.0365
Fortinet Inc.	FTNT	15.00	0.00	0.00	15.00	31,335	0.00083	0.0125
Fortive Corp.	FTV	7.05	0.39	0.42	7.47	24,076	0.00064	0.0048
Fortune Brands Home	FBHS	9.25	1.06	1.16	10.41	13,639	0.00036	0.0038
Franklin Resources	BEN	5.64	3.68	3.89	9.53	15,392	0.00041	0.0039
Freep't-McMoRan Inc.	FCX	41.83	0.94	1.33	43.16	49,543	0.00132	0.0568
Gallagher (Arthur J.)	AJG	9.67	1.48	1.62	11.29	25,148	0.00067	0.0075
Gap (The), Inc.	GPS	4.90	0.00	0.00	4.90	11,482	0.00030	0.0015
Garmin Ltd.	GRMN	6.37	1.98	2.11	8.48	25,804	0.00069	0.0058
Gartner Inc.	IT	9.95	0.00	0.00	9.95	16,728	0.00044	0.0044
Gen'l Dynamics	GD	4.83	2.58	2.70	7.53	52,899	0.00140	0.0106
Gen'l Electric	GE	322.80	0.30	1.27	324.07	117,370	0.00312	1.0098
Gen'l Mills	GIS	4.16	3.37	3.51	7.67	37,558	0.00100	0.0076
Gen'l Motors	GM	11.84	0.00	0.00	11.84	87,066	0.00231	0.0274
Generac Holdings	GNRC	8.00	0.00	0.00	8.00	23,477	0.00062	0.0050
Genuine Parts	GPC	4.60	2.79	2.92	7.52	16,836	0.00045	0.0034
Gilead Sciences	GILD	3.26	4.33	4.47	7.73	82,262	0.00218	0.0169
Global Payments	GPN	9.73	0.37	0.41	10.14	62,755	0.00167	0.0169
Globe Life Inc.	GL	7.37	0.80	0.86	8.23	10,389	0.00028	0.0023
Goldman Sachs	GS	18.20	1.53	1.81	20.01	112,362	0.00298	0.0597
Grainger (W.W.)	GWV	12.65	1.55	1.75	14.40	20,943	0.00056	0.0080
Halliburton Co.	HAL	15.50	0.84	0.97	16.47	18,957	0.00050	0.0083
Hanesbrands, Inc.	HBI	4.66	3.01	3.15	7.81	6,938	0.00018	0.0014
Hartford Fin'l Svcs.	HIG	4.41	2.05	2.14	6.55	24,414	0.00065	0.0042
Hasbro, Inc.	HAS	17.50	2.80	3.29	20.79	13,318	0.00035	0.0074
HCA Healthcare	HCA	12.39	1.03	1.16	13.55	63,395	0.00168	0.0228
Healthpeak Properties	PEAK	2.50	3.68	3.77	6.27	17,568	0.00047	0.0029
Henry (Jack) & Assoc.	JKHY	10.02	1.19	1.31	11.33	11,731	0.00031	0.0035

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Hershey Co.	HSY	7.60	2.06	2.22	9.82	33,435	0.00089	0.0087
Hess Corp.	HES	-23.40	1.37	1.05	-22.35	22,420	0.00060	-0.0133
Hewlett Packard Ent.	HPE	12.51	3.02	3.40	15.91	20,678	0.00055	0.0087
Hilton Worldwide Hldgs.	HLT	-6.25	0.00	0.00	-6.25	34,566	0.00092	-0.0057
HollyFrontier Corp.	HFC	-10.70	4.02	3.59	-7.11	5,985	0.00016	-0.0011
Hologic, Inc.	HOLX	10.47	0.00	0.00	10.47	18,768	0.00050	0.0052
Home Depot	HD	8.37	2.11	2.29	10.66	336,218	0.00893	0.0951
Honeywell Int'l	HON	11.98	1.70	1.90	13.88	152,251	0.00404	0.0561
Hormel Foods	HRL	3.70	2.10	2.18	5.88	25,673	0.00068	0.0040
Horton D.R.	DHI	17.90	0.88	1.04	18.94	33,517	0.00089	0.0169
Host Hotels & Resorts	HST	28.40	0.00	0.00	28.40	12,359	0.00033	0.0093
Howmet Aerospace	HWM	27.53	0.00	0.00	27.53	13,789	0.00037	0.0101
HP Inc.	HPQ	15.07	2.42	2.78	17.85	40,447	0.00107	0.0192
Humana Inc.	HUM	12.28	0.68	0.76	13.04	54,399	0.00144	0.0188
Hunt (J.B.)	JBHT	20.73	0.68	0.82	21.55	17,893	0.00048	0.0102
Huntington Bancshs.	HBAN	-2.15	3.72	3.64	1.49	16,418	0.00044	0.0006
Huntington Ingalls	HII	0.38	2.22	2.23	2.61	8,304	0.00022	0.0006
IDEX Corp.	IEX	11.50	0.93	1.04	12.54	16,213	0.00043	0.0054
IDEXX Labs.	IDXX	16.09	0.00	0.00	16.09	41,735	0.00111	0.0178
IHS Markit	INFO	11.45	0.81	0.90	12.35	39,393	0.00105	0.0129
Illinois Tool Works	ITW	7.50	2.07	2.23	9.73	69,614	0.00185	0.0180
Illumina Inc.	ILMN	21.50	0.00	0.00	21.50	58,480	0.00155	0.0334
Incyte Corp.	INCY	20.89	0.00	0.00	20.89	17,891	0.00047	0.0099
Ingersoll Rand Inc.	IR	15.99	0.00	0.00	15.99	20,990	0.00056	0.0089
Int'l Business Mach.	IBM	6.09	4.83	5.12	11.21	120,446	0.00320	0.0359
Int'l Flavors & Frag.	IFF	10.00	2.25	2.48	12.48	14,810	0.00039	0.0049
Int'l Paper	IP	25.83	3.73	4.69	30.52	21,597	0.00057	0.0175
Intel Corp.	INTC	5.43	2.10	2.21	7.64	269,108	0.00714	0.0546
Intercontinental Exch.	ICE	10.20	1.15	1.27	11.47	64,375	0.00171	0.0196

ROE and ROR for NSPM
CAPM Analysis
Market Return

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Interpublic Group	IPG	5.05	3.66	3.84	8.89	11,539	0.00031	0.0027
Intuit Inc.	INTU	12.30	0.62	0.70	13.00	105,018	0.00279	0.0362
Intuitive Surgical	ISRG	9.15	0.00	0.00	9.15	89,420	0.00237	0.0217
Invesco Ltd.	IVZ	3.21	2.39	2.47	5.68	11,920	0.00032	0.0018
IPG Photonics	IPGP	45.60	0.00	0.00	45.60	11,751	0.00031	0.0142
IQVIA Holdings	IQV	14.85	0.00	0.00	14.85	38,647	0.00103	0.0152
Iron Mountain	IRM	1.70	6.58	6.69	8.39	10,861	0.00029	0.0024
Jacobs Engineering	J	12.49	0.64	0.72	13.21	17,093	0.00045	0.0060
Johnson & Johnson	JNJ	8.14	2.47	2.67	10.81	430,649	0.01143	0.1236
Johnson Ctrls. Int'l plc	JCI	14.31	1.80	2.06	16.37	43,324	0.00115	0.0188
JPMorgan Chase	JPM	1.28	2.32	2.35	3.63	472,449	0.01254	0.0455
Juniper Networks	JNPR	6.65	3.23	3.44	10.09	8,330	0.00022	0.0022
Kansas City South'n	KSU	16.61	0.82	0.96	17.57	24,037	0.00064	0.0112
Kellogg	K	2.93	3.66	3.77	6.70	21,895	0.00058	0.0039
KeyCorp	KEY	11.40	3.60	4.01	15.41	20,042	0.00053	0.0082
Keysight Technologies	KEYS	12.41	0.00	0.00	12.41	26,818	0.00071	0.0088
Kimberly-Clark	KMB	3.65	3.33	3.45	7.10	46,385	0.00123	0.0087
Kimco Realty	KIM	4.60	4.12	4.31	8.91	8,391	0.00022	0.0020
Kinder Morgan Inc.	KMI	1.13	6.20	6.27	7.40	38,334	0.00102	0.0075
KLA Corp.	KLAC	14.90	1.03	1.18	16.08	53,654	0.00142	0.0229
Kraft Heinz Co.	KHC	-2.88	3.94	3.83	0.95	49,703	0.00132	0.0012
Kroger Co.	KR	7.60	2.10	2.26	9.86	28,160	0.00075	0.0074
L Brands	LB	14.02	0.93	1.06	15.08	17,873	0.00047	0.0072
L3Harris Technologies	LHX	11.49	1.96	2.19	13.68	45,255	0.00120	0.0164
Laboratory Corp.	LH	10.93	0.00	0.00	10.93	24,574	0.00065	0.0071
Lam Research	LRCX	22.97	0.83	1.02	23.99	94,341	0.00250	0.0601
Lamb Weston Holdings	LW	10.65	1.22	1.35	12.00	11,390	0.00030	0.0036
Las Vegas Sands	LVS	-6.25	0.00	0.00	-6.25	47,458	0.00126	-0.0079
Lauder (Estee)	EL	21.10	0.75	0.91	22.01	107,024	0.00284	0.0625

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Leggett & Platt	LEG	5.20	3.44	3.62	8.82	6,167	0.00016	0.0014
Leidos Hldgs.	LDOS	9.93	1.38	1.52	11.45	13,991	0.00037	0.0043
Lennar Corp.	LEN	10.70	0.99	1.10	11.80	32,401	0.00086	0.0101
Lilly (Eli)	LLY	11.60	1.87	2.09	13.69	174,406	0.00463	0.0634
Lincoln Nat'l Corp.	LNC	24.92	2.73	3.41	28.33	12,267	0.00033	0.0092
Linde plc	LIN	11.71	1.54	1.72	13.43	147,669	0.00392	0.0527
Live Nation Entertain.	LYV	80.30	0.00	0.00	80.30	18,820	0.00050	0.0401
LKQ Corp.	LKQ	33.50	0.00	0.00	33.50	13,337	0.00035	0.0119
Lockheed Martin	LMT	6.08	2.79	2.96	9.04	106,073	0.00282	0.0255
Loews Corp.	L	14.03	0.47	0.54	14.57	14,370	0.00038	0.0056
Lowe's Cos.	LOW	13.74	1.29	1.47	15.21	145,640	0.00387	0.0588
Lumen Technologies	LUMN	3.00	7.42	7.64	10.64	14,787	0.00039	0.0042
LyondellBasell Inds.	LYB	-4.07	4.05	3.89	-0.18	34,604	0.00092	-0.0002
M&T Bank Corp.	MTB	13.40	2.85	3.23	16.63	19,788	0.00053	0.0087
Marathon Oil Corp.	MRO	-19.63	1.10	0.88	-18.75	8,632	0.00023	-0.0043
Marathon Petroleum	MPC	-6.76	4.30	4.01	-2.75	35,040	0.00093	-0.0026
MarketAxess Holdings	MKTX	10.29	0.51	0.56	10.85	19,801	0.00053	0.0057
Marriott Int'l	MAR	612.60	0.00	0.00	612.60	48,274	0.00128	0.7851
Marsh & McLennan	MMC	8.93	1.53	1.67	10.60	62,480	0.00166	0.0176
Martin Marietta	MLM	8.85	0.69	0.75	9.60	21,007	0.00056	0.0054
Masco Corp.	MAS	10.25	1.54	1.70	11.95	15,776	0.00042	0.0050
MasterCard Inc.	MA	14.91	0.47	0.54	15.45	369,225	0.00980	0.1514
Maxim Integrated	MXIM	18.44	0.00	0.00	18.44	25,554	0.00068	0.0125
McCormick & Co.	MKC	6.00	1.54	1.63	7.63	23,809	0.00063	0.0048
McDonald's Corp.	MCD	18.20	2.24	2.65	20.85	173,387	0.00460	0.0960
McKesson Corp.	MCK	10.35	0.87	0.96	11.31	30,761	0.00082	0.0092
Medtronic plc	MDT	9.08	1.99	2.17	11.25	162,545	0.00432	0.0486
Merck & Co.	MRK	8.70	3.42	3.72	12.42	192,601	0.00511	0.0635
MetLife Inc.	MET	4.20	2.98	3.11	7.31	55,946	0.00149	0.0109

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

**Docket No. PU-20-441
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Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Mettler-Toledo Int'l	MTD	13.80	0.00	0.00	13.80	28,163	0.00075	0.0103
MGM Resorts Int'l	MGM	-39.13	0.02	0.01	-39.12	20,312	0.00054	-0.0211
Microchip Technology	MCHP	11.80	0.98	1.10	12.90	43,003	0.00114	0.0147
Micron Technology	MU	60.47	0.00	0.00	60.47	105,329	0.00280	0.1691
Microsoft Corp.	MSFT	18.17	0.90	1.06	19.23	1,885,745	0.05006	0.9629
Mid-America Apartment	MAA	7.00	2.77	2.96	9.96	16,943	0.00045	0.0045
Mohawk Inds.	MHK	4.00	0.00	0.00	4.00	13,897	0.00037	0.0015
Molson Coors Beverage	TAP	2.74	2.22	2.28	5.02	11,208	0.00030	0.0015
Mondelez Int'l	MDLZ	9.45	2.28	2.50	11.95	84,001	0.00223	0.0266
Monolithic Power Sys.	MPWR	25.00	0.64	0.80	25.80	16,890	0.00045	0.0116
Monster Beverage	MNST	15.35	0.00	0.00	15.35	49,763	0.00132	0.0203
Moody's Corp.	MCO	9.28	0.81	0.89	10.17	57,837	0.00154	0.0156
Morgan Stanley	MS	4.33	1.77	1.85	6.18	143,033	0.00380	0.0235
Mosaic Company	MOS	7.00	0.97	1.04	8.04	11,676	0.00031	0.0025
Motorola Solutions	MSI	5.88	1.50	1.59	7.47	32,174	0.00085	0.0064
MSCI Inc.	MSCI	14.37	0.78	0.89	15.26	36,327	0.00096	0.0147
Nasdaq, Inc.	NDAQ	6.37	1.30	1.38	7.75	24,869	0.00066	0.0051
NetApp, Inc.	NTAP	7.66	2.82	3.04	10.70	16,428	0.00044	0.0047
Netflix, Inc.	NFLX	44.43	0.00	0.00	44.43	242,259	0.00643	0.2858
Newell Brands	NWL	2.03	3.40	3.47	5.50	11,480	0.00030	0.0017
Newmont Corp.	NEM	-1.24	3.55	3.51	2.27	49,608	0.00132	0.0030
News Corp. 'A'	NWSA	49.01	0.76	1.13	50.14	15,607	0.00041	0.0208
NextEra Energy	NEE	8.59	1.99	2.16	10.75	151,724	0.00403	0.0433
Nielsen Hldgs. plc	NLSN	5.30	0.96	1.01	6.31	8,957	0.00024	0.0015
NIKE, Inc. 'B'	NKE	34.55	0.81	1.09	35.64	215,597	0.00572	0.2040
NiSource Inc.	NI	4.37	3.57	3.73	8.10	9,436	0.00025	0.0020
Norfolk Southern	NSC	13.87	1.46	1.66	15.53	68,439	0.00182	0.0282
Northern Trust Corp.	NTRS	7.05	2.62	2.80	9.85	22,234	0.00059	0.0058
Northrop Grumman	NOC	5.44	1.74	1.83	7.27	55,678	0.00148	0.0108

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
NortonLifeLock Inc.	NLOK	21.90	2.30	2.80	24.70	12,767	0.00034	0.0084
Norwegian Cruise Line	NCLH	-24.13	0.00	0.00	-24.13	9,883	0.00026	-0.0063
NOV Inc.	NOV	18.90	0.00	0.00	18.90	5,252	0.00014	0.0026
NRG Energy	NRG	-12.70	3.41	2.98	-9.72	9,314	0.00025	-0.0024
Nucor Corp.	NUE	8.22	2.03	2.20	10.42	24,097	0.00064	0.0067
NVIDIA Corp.	NVDA	25.19	0.11	0.14	25.33	350,759	0.00931	0.2359
NVR, Inc.	NVR	4.80	0.00	0.00	4.80	17,654	0.00047	0.0022
NXP Semiconductors NV	NXPI	16.76	1.06	1.24	18.00	59,500	0.00158	0.0284
O'Reilly Automotive	ORLY	10.07	0.00	0.00	10.07	36,461	0.00097	0.0097
Occidental Petroleum	OXY	-5.15	0.32	0.30	-4.85	23,564	0.00063	-0.0030
Old Dominion Freight	ODFL	15.89	0.34	0.39	16.28	28,558	0.00076	0.0123
Omnicom Group	OMC	9.80	3.61	3.96	13.76	16,693	0.00044	0.0061
ONEOK Inc.	OKE	-1.60	7.53	7.41	5.81	22,751	0.00060	0.0035
Oracle Corp.	ORCL	12.20	1.73	1.94	14.14	214,433	0.00569	0.0805
Otis Worldwide	OTIS	8.99	1.15	1.25	10.24	30,178	0.00080	0.0082
PACCAR Inc.	PCAR	22.24	3.57	4.36	26.60	32,050	0.00085	0.0226
Packaging Corp.	PKG	5.97	2.90	3.07	9.04	13,091	0.00035	0.0031
Parker-Hannifin	PH	13.73	1.11	1.26	14.99	40,898	0.00109	0.0163
Paychex, Inc.	PAYX	4.85	2.79	2.93	7.78	34,160	0.00091	0.0071
Paycom Software	PAYC	27.10	0.00	0.00	27.10	21,479	0.00057	0.0155
PayPal Holdings	PYPL	22.24	0.00	0.00	22.24	299,563	0.00795	0.1769
Penn Nat'l Gaming	PENN	141.92	0.00	0.00	141.92	15,893	0.00042	0.0599
Pentair plc	PNR	7.90	1.30	1.40	9.30	10,213	0.00027	0.0025
People's United Fin'l	PBCT	13.73	4.06	4.62	18.35	7,640	0.00020	0.0037
PepsiCo, Inc.	PEP	9.27	3.00	3.28	12.55	197,906	0.00525	0.0659
PerkinElmer Inc.	PKI	17.20	0.22	0.26	17.46	14,564	0.00039	0.0068
Perrigo Co. plc	PRGO	10.00	2.40	2.64	12.64	5,379	0.00014	0.0018
Pfizer, Inc.	PFE	10.07	4.34	4.78	14.85	199,911	0.00531	0.0788
Philip Morris Int'l	PM	11.12	5.44	6.04	17.16	137,485	0.00365	0.0627

ROE and ROR for NSPM
CAPM Analysis
Market Return

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Phillips 66	PSX	-7.75	4.62	4.26	-3.49	34,944	0.00093	-0.0032
Pinnacle West Capital	PNW	3.50	4.16	4.31	7.81	9,276	0.00025	0.0019
Pioneer Natural Res.	PXD	91.92	1.47	2.82	94.74	25,252	0.00067	0.0635
PNC Financial Serv.	PNC	-1.62	2.58	2.54	0.92	75,578	0.00201	0.0018
Pool Corp.	POOL	17.00	0.65	0.76	17.76	14,349	0.00038	0.0068
PPG Inds.	PPG	8.56	1.46	1.58	10.14	35,022	0.00093	0.0094
PPL Corp.	PPL	-16.20	5.76	4.83	-11.37	22,298	0.00059	-0.0067
Price (T. Rowe) Group	TROW	13.43	2.44	2.77	16.20	40,057	0.00106	0.0172
Principal Fin'l Group	PFG	9.77	3.61	3.96	13.73	17,019	0.00045	0.0062
Procter & Gamble	PG	9.13	2.31	2.52	11.65	336,719	0.00894	0.1042
Progressive Corp.	PGR	-9.11	0.42	0.38	-8.73	56,097	0.00149	-0.0130
Prologis	PLD	-6.05	2.34	2.20	-3.85	81,058	0.00215	-0.0083
Prudential Fin'l	PRU	6.34	4.90	5.21	11.55	37,151	0.00099	0.0114
Public Serv. Enterprise	PEG	2.55	3.33	3.41	5.96	30,860	0.00082	0.0049
Public Storage	PSA	17.00	3.15	3.69	20.69	44,644	0.00119	0.0245
PulteGroup, Inc.	PHM	13.80	1.07	1.22	15.02	14,264	0.00038	0.0057
PVH Corp.	PVH	-4.87	0.00	0.00	-4.87	7,326	0.00019	-0.0009
Qorvo Inc.	QRVO	16.50	0.00	0.00	16.50	21,945	0.00058	0.0096
Qualcomm Inc.	QCOM	24.48	1.95	2.43	26.91	158,392	0.00421	0.1131
Quanta Services	PWR	14.96	0.26	0.30	15.26	12,599	0.00033	0.0051
Quest Diagnostics	DGX	9.22	1.94	2.12	11.34	16,989	0.00045	0.0051
Ralph Lauren	RL	4.97	0.00	0.00	4.97	9,038	0.00024	0.0012
Raymond James Fin'l	RJF	18.66	1.23	1.46	20.12	17,490	0.00046	0.0093
Raytheon Technologies	RTX	23.66	2.47	3.05	26.71	117,908	0.00313	0.0836
Realty Income Corp.	O	5.45	4.39	4.63	10.08	23,683	0.00063	0.0063
Regency Centers Corp.	REG	9.10	4.08	4.45	13.55	9,764	0.00026	0.0035
Regeneron Pharmac.	REGN	11.11	0.00	0.00	11.11	50,637	0.00134	0.0149
Regions Financial	RF	-21.60	2.94	2.30	-19.30	20,285	0.00054	-0.0104
Republic Services	RSG	7.70	1.71	1.84	9.54	36,283	0.00096	0.0092

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
ResMed Inc.	RMD	22.10	0.79	0.96	23.06	28,682	0.00076	0.0176
Robert Half Int'l	RHI	2.70	1.95	2.00	4.70	9,003	0.00024	0.0011
Rockwell Automation	ROK	10.60	1.66	1.84	12.44	30,337	0.00081	0.0100
Rollins, Inc.	ROL	8.20	0.93	1.01	9.21	16,951	0.00045	0.0041
Roper Tech.	ROP	9.70	0.54	0.59	10.29	43,506	0.00116	0.0119
Ross Stores	ROST	46.74	0.00	0.00	46.74	43,989	0.00117	0.0546
Royal Caribbean	RCL	58.70	0.00	0.00	58.70	21,613	0.00057	0.0337
S&P Global	SPGI	10.96	0.85	0.94	11.90	87,049	0.00231	0.0275
salesforce.com	CRM	12.92	0.00	0.00	12.92	201,802	0.00536	0.0692
SBA Communications	SBAC	104.68	0.82	1.68	106.36	31,671	0.00084	0.0894
Schein (Henry)	HSIC	14.43	0.00	0.00	14.43	9,781	0.00026	0.0037
Schlumberger Ltd.	SLB	41.84	1.83	2.60	44.44	38,080	0.00101	0.0449
Schwab (Charles)	SCHW	14.19	1.12	1.28	15.47	120,778	0.00321	0.0496
Seagate Technology	STX	6.74	3.39	3.62	10.36	18,931	0.00050	0.0052
Sealed Air	SEE	7.60	1.42	1.53	9.13	7,003	0.00019	0.0017
Sempra Energy	SRE	5.20	3.37	3.55	8.75	38,517	0.00102	0.0089
ServiceNow, Inc.	NOW	23.50	0.00	0.00	23.50	99,618	0.00264	0.0622
Sherwin-Williams	SHW	9.70	0.91	1.00	10.70	67,626	0.00180	0.0192
Simon Property Group	SPG	8.60	4.44	4.82	13.42	38,437	0.00102	0.0137
Skyworks Solutions	SWKS	11.95	1.07	1.20	13.15	30,874	0.00082	0.0108
Smith (A.O.)	AOS	8.00	1.54	1.66	9.66	10,903	0.00029	0.0028
Smucker (J.M.)	SJM	-0.42	2.86	2.85	2.43	14,037	0.00037	0.0009
Snap-on Inc.	SNA	7.95	2.16	2.33	10.28	12,725	0.00034	0.0035
Southern Co.	SO	6.49	4.17	4.44	10.93	66,346	0.00176	0.0193
Southwest Airlines	LUV	-21.00	0.00	0.00	-21.00	37,507	0.00100	-0.0209
Stanley Black & Decker	SWK	9.92	1.41	1.55	11.47	35,423	0.00094	0.0108
Starbucks Corp.	SBUX	50.81	1.68	2.53	53.34	133,247	0.00354	0.1887
State Street Corp.	STT	16.00	2.45	2.84	18.84	29,926	0.00079	0.0150
STERIS plc	STE	10.00	0.83	0.91	10.91	16,537	0.00044	0.0048

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Stryker Corp.	SYK	12.41	1.02	1.15	13.56	92,988	0.00247	0.0335
SVB Fin'l Group	SIVB	8.00	0.00	0.00	8.00	25,096	0.00067	0.0053
Synchrony Financial	SYF	3.05	2.07	2.13	5.18	24,804	0.00066	0.0034
Synopsys, Inc.	SNPS	11.50	0.00	0.00	11.50	39,158	0.00104	0.0120
Sysco Corp.	SYF	23.41	2.23	2.75	26.16	41,131	0.00109	0.0286
T-Mobile US	TMUS	38.46	0.00	0.00	38.46	161,460	0.00429	0.1649
Take-Two Interactive	TTWO	17.21	0.00	0.00	17.21	21,135	0.00056	0.0097
Tapestry Inc.	TPR	48.12	0.00	0.00	48.12	11,970	0.00032	0.0153
Target Corp.	TGT	9.94	1.33	1.46	11.40	102,379	0.00272	0.0310
TE Connectivity	TEL	11.00	1.54	1.71	12.71	42,880	0.00114	0.0145
Teledyne Technologies	TDY	12.80	0.00	0.00	12.80	15,337	0.00041	0.0052
Teleflex Inc.	TFX	11.00	0.32	0.36	11.36	19,587	0.00052	0.0059
Teradyne Inc.	TER	12.76	0.30	0.34	13.10	21,881	0.00058	0.0076
Tesla, Inc.	TSLA	32.10	0.00	0.00	32.10	636,080	0.01689	0.5421
Texas Instruments	TXN	10.00	2.11	2.32	12.32	177,518	0.00471	0.0581
Textron, Inc.	TXT	23.76	0.14	0.17	23.93	12,923	0.00034	0.0082
Thermo Fisher Sci.	TMO	4.12	0.22	0.23	4.35	184,843	0.00491	0.0213
TJX Companies	TJX	63.31	1.53	2.50	65.81	81,379	0.00216	0.1422
Tractor Supply	TSCO	11.08	1.17	1.30	12.38	20,583	0.00055	0.0068
Trane Technologies plc	TT	12.56	1.42	1.60	14.16	39,762	0.00106	0.0149
TransDigm Group	TDG	15.48	0.00	0.00	15.48	33,146	0.00088	0.0136
Travelers Cos.	TRV	5.97	2.23	2.36	8.33	38,438	0.00102	0.0085
Trimble Inc.	TRMB	10.00	0.00	0.00	10.00	19,999	0.00053	0.0053
Truist Fin'l	TFC	-9.10	3.03	2.75	-6.35	80,169	0.00213	-0.0135
Twitter Inc.	TWTR	0.43	0.00	0.00	0.43	54,809	0.00146	0.0006
Tyler Technologies	TYL	10.00	0.00	0.00	10.00	17,516	0.00047	0.0047
Tyson Foods 'A'	TSN	4.45	2.35	2.45	6.90	27,638	0.00073	0.0051
U.S. Bancorp	USB	6.00	2.96	3.14	9.14	85,619	0.00227	0.0208
UDR, Inc.	UDR	-34.21	3.29	2.16	-32.05	13,235	0.00035	-0.0113

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Ulta Beauty	ULTA	41.80	0.00	0.00	41.80	17,784	0.00047	0.0197
Under Armour 'A'	UAA	-4.50	0.00	0.00	-4.50	10,380	0.00028	-0.0012
Under Armour 'C'	UA	21.80	0.00	0.00	21.80	8,557	0.00023	0.0050
Union Pacific	UNP	12.94	1.75	1.98	14.92	148,597	0.00395	0.0588
United Airlines Hldgs.	UAL	-25.40	0.00	0.00	-25.40	17,334	0.00046	-0.0117
United Parcel Serv.	UPS	10.06	2.44	2.69	12.75	148,496	0.00394	0.0502
United Rentals	URI	8.60	0.00	0.00	8.60	23,247	0.00062	0.0053
UnitedHealth Group	UNH	12.41	1.37	1.54	13.95	346,992	0.00921	0.1285
Universal Health 'B'	UHS	5.98	0.59	0.63	6.61	11,609	0.00031	0.0020
Unum Group	UNM	1.37	4.08	4.14	5.51	5,694	0.00015	0.0008
V.F. Corp.	VFC	9.89	2.33	2.56	12.45	32,835	0.00087	0.0109
Valero Energy	VLO	-13.00	5.27	4.58	-8.42	30,389	0.00081	-0.0068
Varian Medical Sys.	VAR	9.90	0.00	0.00	9.90	16,098	0.00043	0.0042
Ventas, Inc.	VTR	-0.50	3.39	3.37	2.87	20,416	0.00054	0.0016
VeriSign Inc.	VRSN	8.00	0.00	0.00	8.00	23,190	0.00062	0.0049
Verisk Analytics	VRSK	10.32	0.64	0.71	11.03	29,294	0.00078	0.0086
Verizon Communic.	VZ	3.29	4.30	4.44	7.73	244,148	0.00648	0.0501
Vertex Pharmac.	VRTX	18.33	0.00	0.00	18.33	55,284	0.00147	0.0269
ViacomCBS Inc.	VIAC	-4.20	2.19	2.10	-2.10	27,036	0.00072	-0.0015
Viatis Inc.	VTRS	-3.65	0.00	0.00	-3.65	-	-	0.0000
Visa Inc.	V	13.84	0.59	0.67	14.51	428,015	0.01136	0.1649
Vornado R'lty Trust	VNO	17.33	4.62	5.42	22.75	8,789	0.00023	0.0053
Vulcan Materials	VMC	13.65	0.88	1.00	14.65	22,383	0.00059	0.0087
Wabtec Corp.	WAB	7.30	0.62	0.67	7.97	14,746	0.00039	0.0031
Walgreens Boots	WBA	3.63	3.37	3.49	7.12	48,016	0.00127	0.0091
Walmart Inc.	WMT	6.29	1.57	1.67	7.96	395,774	0.01051	0.0836
Waste Management	WM	11.17	1.74	1.93	13.10	55,955	0.00149	0.0195
Waters Corp.	WAT	7.17	0.00	0.00	7.17	18,381	0.00049	0.0035
WEC Energy Group	WEC	6.10	2.95	3.13	9.23	29,468	0.00078	0.0072

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Wells Fargo	WFC	112.99	1.00	2.13	115.12	165,259	0.00439	0.5051
Welltower Inc.	WELL	13.00	3.30	3.73	16.73	31,389	0.00083	0.0139
West Pharmac. Svcs.	WST	22.60	0.23	0.28	22.88	21,370	0.00057	0.0130
Western Digital	WDC	-22.00	0.00	0.00	-22.00	22,099	0.00059	-0.0129
Western Union	WU	9.25	3.56	3.89	13.14	10,386	0.00028	0.0036
WestRock Co.	WRK	24.38	1.51	1.88	26.26	13,900	0.00037	0.0097
Weyerhaeuser Co.	WY	5.00	1.85	1.94	6.94	27,526	0.00073	0.0051
Whirlpool Corp.	WHR	3.00	2.17	2.24	5.24	14,283	0.00038	0.0020
Williams Cos.	WMB	5.00	6.80	7.14	12.14	29,258	0.00078	0.0094
Willis Towers Wat. plc	WLTW	5.66	1.19	1.26	6.92	30,672	0.00081	0.0056
Wynn Resorts	WYNN	-1.10	0.00	0.00	-1.10	14,315	0.00038	-0.0004
Xcel Energy Inc.	XEL	6.30	2.69	2.86	9.16	36,573	0.00097	0.0089
Xilinx Inc.	XLNX	9.00	0.00	0.00	9.00	32,288	0.00086	0.0077
Xylem Inc.	XYL	18.16	1.06	1.25	19.41	19,112	0.00051	0.0098
Yum! Brands	YUM	12.61	1.75	1.97	14.58	34,215	0.00091	0.0132
Zebra Techn. 'A'	ZBRA	10.00	0.00	0.00	10.00	25,946	0.00069	0.0069
Zimmer Biomet Hldgs.	ZBH	11.29	0.61	0.68	11.97	33,738	0.00090	0.0107
Zions Bancorp.	ZION	-32.40	2.45	1.66	-30.74	9,115	0.00024	-0.0074
Zoetis Inc.	ZTS	11.43	0.63	0.70	12.13	75,043	0.00199	0.0242
						37,666,693	1.00	18.89
								Weighted Rate of Return on Equity (%)

Constant-Growth DCF Analysis for S&P 500

Companies not paying dividends, with non-positive EPS growth rate, or EPS growth rate greater than 20 percent excluded

A: IBES, April 13, 2021

B and E: Value Line Analyzer, April 13, 2021

$C = B * (1 + A)$

$D = A + C$

$F = E / (\text{Sum of } E)$

$G = D * F$

Companies Excluded

Companies not paying dividends

Companies with EPS \leq 0%

Companies with EPS $>$ 20%

5-Year EPS Market Return

%

12.63

Company Name	Ticker	A EPS Growth Rate (%)	B Dividend Yield (%)	C Expected Dividend Yield (%)	D Rate of Return on Equity (%)	E Market Cap \$ (Mil)	F Market Cap Weight Factor	G Rate of Return on Equity (%)
<u>Companies not paying dividends</u>								
ABIOMED Inc.	ABMD	17.10	0.00	0.00	17.10	14,500	0.00065	0.0111
Adobe Inc.	ADBE	17.50	0.00	0.00	17.50	236,343	0.01054	0.1845
Advanced Micro Dev.	AMD	26.31	0.00	0.00	26.31	99,544	0.00444	0.1169
Akamai Technologies	AKAM	12.00	0.00	0.00	12.00	16,676	0.00074	0.0089
Alaska Air Group	ALK	-18.50	0.00	0.00	-18.50	8,988	0.00040	-0.0074
Alexion Pharmac.	ALXN	8.78	0.00	0.00	8.78	33,441	0.00149	0.0131
Align Techn.	ALGN	24.14	0.00	0.00	24.14	43,569	0.00194	0.0469
Alphabet Inc.	GOOG	16.95	0.00	0.00	16.95	1,519,034	0.06777	1.1488
Alphabet Inc. 'A'	GOOGL	16.95	0.00	0.00	16.95	1,525,261	0.06805	1.1535
Amazon.com	AMZN	37.20	0.00	0.00	37.20	1,649,533	0.07360	2.7378
Amer. Airlines	AAL	-45.70	0.00	0.00	-45.70	14,872	0.00066	-0.0303
ANSYS, Inc.	ANSS	8.00	0.00	0.00	8.00	30,763	0.00137	0.0110
Aptiv PLC	APTV	43.37	0.00	0.00	43.37	37,995	0.00170	0.0735
Arista Networks	ANET	6.60	0.00	0.00	6.60	23,448	0.00105	0.0069
Autodesk, Inc.	ADSK	35.58	0.00	0.00	35.58	62,861	0.00280	0.0998

ROE/ROR for NSPM
CAPM Analysis
Market Return

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
AutoZone Inc.	AZO	6.70	0.00	0.00	6.70	31,572	0.00141	0.0094
Bio-Rad Labs. 'A'	BIO	17.80	0.00	0.00	17.80	17,209	0.00077	0.0137
Biogen	BIIB	-10.08	0.00	0.00	-10.08	41,248	0.00184	-0.0186
Boeing	BA	12.33	0.00	0.00	12.33	147,082	0.00656	0.0809
Booking Holdings	BKNG	135.59	0.00	0.00	135.59	98,725	0.00440	0.5972
Boston Scientific	BSX	6.55	0.00	0.00	6.55	55,628	0.00248	0.0163
Cadence Design Sys.	CDNS	11.10	0.00	0.00	11.10	39,766	0.00177	0.0197
CarMax, Inc.	KMX	6.34	0.00	0.00	6.34	20,559	0.00092	0.0058
Carnival Corp.	CCL	-72.42	0.00	0.00	-72.42	30,740	0.00137	-0.0993
Catalent, Inc.	CTLT	15.97	0.00	0.00	15.97	18,061	0.00081	0.0129
CBRE Group	CBRE	11.00	0.00	0.00	11.00	26,308	0.00117	0.0129
Centene Corp.	CNC	10.53	0.00	0.00	10.53	36,412	0.00162	0.0171
Charter Communic.	CHTR	33.74	0.00	0.00	33.74	118,491	0.00529	0.1784
Chipotle Mex. Grill	CMG	52.78	0.00	0.00	52.78	41,969	0.00187	0.0988
Copart, Inc.	CPRT	22.30	0.00	0.00	22.30	26,802	0.00120	0.0267
DaVita Inc.	DVA	13.83	0.00	0.00	13.83	11,729	0.00052	0.0072
Delta Air Lines	DAL	-26.15	0.00	0.00	-26.15	32,037	0.00143	-0.0374
DexCom Inc.	DXCM	23.60	0.00	0.00	23.60	35,462	0.00158	0.0373
Discovery Communic. 'C'	DISCK	12.90	0.00	0.00	12.90	19,425	0.00087	0.0112
Discovery, Inc.	DISCA	9.92	0.00	0.00	9.92	21,131	0.00094	0.0094
Dish Network 'A'	DISH	-23.01	0.00	0.00	-23.01	19,857	0.00089	-0.0204
Disney (Walt)	DIS	48.53	0.00	0.00	48.53	334,044	0.01490	0.7233
Dollar Tree, Inc.	DLTR	9.78	0.00	0.00	9.78	27,343	0.00122	0.0119
DXC Technology	DXC	-8.82	0.00	0.00	-8.82	7,937	0.00035	-0.0031
Edwards Lifesciences	EW	12.99	0.00	0.00	12.99	52,516	0.00234	0.0304
Enphase Energy	ENPH	37.70	0.00	0.00	37.70	18,942	0.00085	0.0319
Etsy, Inc.	ETSY	48.10	0.00	0.00	48.10	25,673	0.00115	0.0551
Expedia Group	EXPE	-15.06	0.00	0.00	-15.06	24,331	0.00109	-0.0163
F5 Networks	FFIV	6.04	0.00	0.00	6.04	12,998	0.00058	0.0035

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Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Facebook Inc.	FB	21.50	0.00	0.00	21.50	891,994	0.03980	0.8556
Fiserv Inc.	FISV	18.81	0.00	0.00	18.81	82,527	0.00368	0.0693
FleetCor Technologies	FLT	12.04	0.00	0.00	12.04	23,533	0.00105	0.0126
Ford Motor	F	27.66	0.00	0.00	27.66	49,743	0.00222	0.0614
Fortinet Inc.	FTNT	15.00	0.00	0.00	15.00	31,335	0.00140	0.0210
Gap (The), Inc.	GPS	4.90	0.00	0.00	4.90	11,482	0.00051	0.0025
Gartner Inc.	IT	9.95	0.00	0.00	9.95	16,728	0.00075	0.0074
Gen'l Motors	GM	11.84	0.00	0.00	11.84	87,066	0.00388	0.0460
Generac Holdings	GNRC	8.00	0.00	0.00	8.00	23,477	0.00105	0.0084
Hilton Worldwide Hldgs.	HLT	-6.25	0.00	0.00	-6.25	34,566	0.00154	-0.0096
Hologic, Inc.	HOLX	10.47	0.00	0.00	10.47	18,768	0.00084	0.0088
Host Hotels & Resorts	HST	28.40	0.00	0.00	28.40	12,359	0.00055	0.0157
Howmet Aerospace	HWM	27.53	0.00	0.00	27.53	13,789	0.00062	0.0169
IDEXX Labs.	IDXX	16.09	0.00	0.00	16.09	41,735	0.00186	0.0300
Illumina Inc.	ILMN	21.50	0.00	0.00	21.50	58,480	0.00261	0.0561
Incyte Corp.	INCY	20.89	0.00	0.00	20.89	17,891	0.00080	0.0167
Ingersoll Rand Inc.	IR	15.99	0.00	0.00	15.99	20,990	0.00094	0.0150
Intuitive Surgical	ISRG	9.15	0.00	0.00	9.15	89,420	0.00399	0.0365
IPG Photonics	IPGP	45.60	0.00	0.00	45.60	11,751	0.00052	0.0239
IQVIA Holdings	IQV	14.85	0.00	0.00	14.85	38,647	0.00172	0.0256
Keysight Technologies	KEYS	12.41	0.00	0.00	12.41	26,818	0.00120	0.0148
Laboratory Corp.	LH	10.93	0.00	0.00	10.93	24,574	0.00110	0.0120
Las Vegas Sands	LVS	-6.25	0.00	0.00	-6.25	47,458	0.00212	-0.0132
Live Nation Entertain.	LYV	80.30	0.00	0.00	80.30	18,820	0.00084	0.0674
LKQ Corp.	LKQ	33.50	0.00	0.00	33.50	13,337	0.00060	0.0199
Marriott Int'l	MAR	612.60	0.00	0.00	612.60	48,274	0.00215	1.3194
Maxim Integrated	MXIM	18.44	0.00	0.00	18.44	25,554	0.00114	0.0210
Mettler-Toledo Int'l	MTD	13.80	0.00	0.00	13.80	28,163	0.00126	0.0173
Micron Technology	MU	60.47	0.00	0.00	60.47	105,329	0.00470	0.2842

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Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Mohawk Inds.	MHK	4.00	0.00	0.00	4.00	13,897	0.00062	0.0025
Monster Beverage	MNST	15.35	0.00	0.00	15.35	49,763	0.00222	0.0341
Netflix, Inc.	NFLX	44.43	0.00	0.00	44.43	242,259	0.01081	0.4802
Norwegian Cruise Line	NCLH	-24.13	0.00	0.00	-24.13	9,883	0.00044	-0.0106
NOV Inc.	NOV	18.90	0.00	0.00	18.90	5,252	0.00023	0.0044
NVR, Inc.	NVR	4.80	0.00	0.00	4.80	17,654	0.00079	0.0038
O'Reilly Automotive	ORLY	10.07	0.00	0.00	10.07	36,461	0.00163	0.0164
Paycom Software	PAYC	27.10	0.00	0.00	27.10	21,479	0.00096	0.0260
PayPal Holdings	PYPL	22.24	0.00	0.00	22.24	299,563	0.01337	0.2972
Penn Nat'l Gaming	PENN	141.92	0.00	0.00	141.92	15,893	0.00071	0.1006
PVH Corp.	PVH	-4.87	0.00	0.00	-4.87	7,326	0.00033	-0.0016
Qorvo Inc.	QRVO	16.50	0.00	0.00	16.50	21,945	0.00098	0.0162
Ralph Lauren	RL	4.97	0.00	0.00	4.97	9,038	0.00040	0.0020
Regeneron Pharmac.	REGN	11.11	0.00	0.00	11.11	50,637	0.00226	0.0251
Ross Stores	ROST	46.74	0.00	0.00	46.74	43,989	0.00196	0.0917
Royal Caribbean	RCL	58.70	0.00	0.00	58.70	21,613	0.00096	0.0566
salesforce.com	CRM	12.92	0.00	0.00	12.92	201,802	0.00900	0.1163
Schein (Henry)	HSIC	14.43	0.00	0.00	14.43	9,781	0.00044	0.0063
ServiceNow, Inc.	NOW	23.50	0.00	0.00	23.50	99,618	0.00444	0.1044
Southwest Airlines	LUV	-21.00	0.00	0.00	-21.00	37,507	0.00167	-0.0351
SVB Fin'l Group	SIVB	8.00	0.00	0.00	8.00	25,096	0.00112	0.0090
Synopsys, Inc.	SNPS	11.50	0.00	0.00	11.50	39,158	0.00175	0.0201
T-Mobile US	TMUS	38.46	0.00	0.00	38.46	161,460	0.00720	0.2771
Take-Two Interactive	TTWO	17.21	0.00	0.00	17.21	21,135	0.00094	0.0162
Tapestry Inc.	TPR	48.12	0.00	0.00	48.12	11,970	0.00053	0.0257
Teledyne Technologies	TDY	12.80	0.00	0.00	12.80	15,337	0.00068	0.0088
Tesla, Inc.	TSLA	32.10	0.00	0.00	32.10	636,080	0.02838	0.9110
TransDigm Group	TDG	15.48	0.00	0.00	15.48	33,146	0.00148	0.0229
Trimble Inc.	TRMB	10.00	0.00	0.00	10.00	19,999	0.00089	0.0089

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Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Twitter Inc.	TWTR	0.43	0.00	0.00	0.43	54,809	0.00245	0.0011
Tyler Technologies	TYL	10.00	0.00	0.00	10.00	17,516	0.00078	0.0078
Ulta Beauty	ULTA	41.80	0.00	0.00	41.80	17,784	0.00079	0.0332
Under Armour 'A'	UAA	-4.50	0.00	0.00	-4.50	10,380	0.00046	-0.0021
Under Armour 'C'	UA	21.80	0.00	0.00	21.80	8,557	0.00038	0.0083
United Airlines Hldgs.	UAL	-25.40	0.00	0.00	-25.40	17,334	0.00077	-0.0196
United Rentals	URI	8.60	0.00	0.00	8.60	23,247	0.00104	0.0089
Varian Medical Sys.	VAR	9.90	0.00	0.00	9.90	16,098	0.00072	0.0071
VeriSign Inc.	VRSN	8.00	0.00	0.00	8.00	23,190	0.00103	0.0083
Vertex Pharmac.	VRTX	18.33	0.00	0.00	18.33	55,284	0.00247	0.0452
Viatis Inc.	VTRS	-3.65	0.00	0.00	-3.65	-	-	0.0000
Waters Corp.	WAT	7.17	0.00	0.00	7.17	18,381	0.00082	0.0059
Western Digital	WDC	-22.00	0.00	0.00	-22.00	22,099	0.00099	-0.0217
Wynn Resorts	WYNN	-1.10	0.00	0.00	-1.10	14,315	0.00064	-0.0007
Xilinx Inc.	XLNX	9.00	0.00	0.00	9.00	32,288	0.00144	0.0130
Zebra Techn. 'A'	ZBRA	10.00	0.00	0.00	10.00	25,946	0.00116	0.0116

Companies with EPS ≤ 0%

Allstate Corp.	ALL	-0.40	2.78	2.77	2.37	35,380	0.00158	0.0037
AMETEK, Inc.	AME	-1.20	0.62	0.61	-0.59	29,864	0.00133	-0.0008
APA Corp.	APA	-24.00	0.56	0.43	-23.57	6,800	0.00030	-0.0072
Caterpillar Inc.	CAT	-1.11	1.79	1.77	0.66	125,643	0.00561	0.0037
CenterPoint Energy	CNP	-5.88	2.78	2.62	-3.26	12,880	0.00057	-0.0019
CF Industries	CF	-5.21	2.65	2.51	-2.70	9,864	0.00044	-0.0012
Chevron Corp.	CVX	-4.90	4.95	4.71	-0.19	200,585	0.00895	-0.0017
Citizens Fin'l Group	CFG	-2.76	3.47	3.37	0.61	19,220	0.00086	0.0005

**ROE/ROR for NSPM
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Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Comerica Inc.	CMA	-10.70	3.79	3.38	-7.32	10,002	0.00045	-0.0033
ConocoPhillips	COP	-8.50	3.28	3.00	-5.50	55,944	0.00250	-0.0137
Dow Inc.	DOW	-5.43	4.45	4.21	-1.22	47,557	0.00212	-0.0026
Edison Int'l	EIX	-0.50	4.47	4.45	3.95	22,719	0.00101	0.0040
Exelon Corp.	EXC	-0.34	3.40	3.39	3.05	43,871	0.00196	0.0060
Fifth Third Bancorp	FITB	-2.98	2.81	2.73	-0.25	27,370	0.00122	-0.0003
FirstEnergy Corp.	FE	-1.97	4.45	4.36	2.39	19,025	0.00085	0.0020
Hess Corp.	HES	-23.40	1.37	1.05	-22.35	22,420	0.00100	-0.0224
HollyFrontier Corp.	HFC	-10.70	4.02	3.59	-7.11	5,985	0.00027	-0.0019
Huntington Bancshs.	HBAN	-2.15	3.72	3.64	1.49	16,418	0.00073	0.0011
Kraft Heinz Co.	KHC	-2.88	3.94	3.83	0.95	49,703	0.00222	0.0021
LyondellBasell Inds.	LYB	-4.07	4.05	3.89	-0.18	34,604	0.00154	-0.0003
Marathon Oil Corp.	MRO	-19.63	1.10	0.88	-18.75	8,632	0.00039	-0.0072
Marathon Petroleum	MPC	-6.76	4.30	4.01	-2.75	35,040	0.00156	-0.0043
MGM Resorts Int'l	MGM	-39.13	0.02	0.01	-39.12	20,312	0.00091	-0.0354
Newmont Corp.	NEM	-1.24	3.55	3.51	2.27	49,608	0.00221	0.0050
NRG Energy	NRG	-12.70	3.41	2.98	-9.72	9,314	0.00042	-0.0040
Occidental Petroleum	OXY	-5.15	0.32	0.30	-4.85	23,564	0.00105	-0.0051
ONEOK Inc.	OKE	-1.60	7.53	7.41	5.81	22,751	0.00102	0.0059
Phillips 66	PSX	-7.75	4.62	4.26	-3.49	34,944	0.00156	-0.0054
PNC Financial Serv.	PNC	-1.62	2.58	2.54	0.92	75,578	0.00337	0.0031
PPL Corp.	PPL	-16.20	5.76	4.83	-11.37	22,298	0.00099	-0.0113
Progressive Corp.	PGR	-9.11	0.42	0.38	-8.73	56,097	0.00250	-0.0218
Prologis	PLD	-6.05	2.34	2.20	-3.85	81,058	0.00362	-0.0139
Regions Financial	RF	-21.60	2.94	2.30	-19.30	20,285	0.00091	-0.0175
Smucker (J.M.)	SJM	-0.42	2.86	2.85	2.43	14,037	0.00063	0.0015
Truist Fin'l	TFC	-9.10	3.03	2.75	-6.35	80,169	0.00358	-0.0227
UDR, Inc.	UDR	-34.21	3.29	2.16	-32.05	13,235	0.00059	-0.0189
Valero Energy	VLO	-13.00	5.27	4.58	-8.42	30,389	0.00136	-0.0114

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Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Ventas, Inc.	VTR	-0.50	3.39	3.37	2.87	20,416	0.00091	0.0026
ViacomCBS Inc.	VIAC	-4.20	2.19	2.10	-2.10	27,036	0.00121	-0.0025
Zions Bancorp.	ZION	-32.40	2.45	1.66	-30.74	9,115	0.00041	-0.0125

Companies with EPS > 20%

Albemarle Corp.	ALB	25.61	1.09	1.37	26.98	15,353	0.00069	0.0185
Applied Materials	AMAT	21.28	0.69	0.84	22.12	127,683	0.00570	0.1260
Berkley (W.R.)	WRB	23.47	0.61	0.75	24.22	13,973	0.00062	0.0151
Cabot Oil & Gas 'A'	COG	43.75	2.60	3.74	47.49	7,371	0.00033	0.0156
Celanese Corp.	CE	21.06	1.80	2.18	23.24	17,702	0.00079	0.0184
Chubb Ltd.	CB	22.88	1.94	2.38	25.26	72,545	0.00324	0.0818
Darden Restaurants	DRI	36.64	2.41	3.29	39.93	19,070	0.00085	0.0340
Deere & Co.	DE	34.00	0.96	1.29	35.29	117,474	0.00524	0.1849
Dentsply Sirona	XRAY	24.08	0.63	0.78	24.86	13,971	0.00062	0.0155
Devon Energy	DVN	25.00	1.95	2.44	27.44	8,625	0.00038	0.0106
Diamondback Energy	FANG	49.13	2.10	3.13	52.26	12,046	0.00054	0.0281
Digital Realty Trust	DLR	30.98	3.29	4.31	35.29	40,053	0.00179	0.0631
DuPont de Nemours	DD	29.80	1.61	2.09	31.89	55,506	0.00248	0.0790
EOG Resources	EOG	58.35	2.25	3.56	61.91	42,776	0.00191	0.1182
Equinix, Inc.	EQIX	28.95	1.72	2.22	31.17	61,008	0.00272	0.0848
Everest Re Group Ltd.	RE	62.70	2.46	4.00	66.70	10,226	0.00046	0.0304
FedEx Corp.	FDX	29.41	0.93	1.20	30.61	74,060	0.00330	0.1012
Freep't-McMoRan Inc.	FCX	41.83	0.94	1.33	43.16	49,543	0.00221	0.0954
Gen'l Electric	GE	322.80	0.30	1.27	324.07	117,370	0.00524	1.6970
Hunt (J.B.)	JBHT	20.73	0.68	0.82	21.55	17,893	0.00080	0.0172
Int'l Paper	IP	25.83	3.73	4.69	30.52	21,597	0.00096	0.0294

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Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Lam Research	LRCX	22.97	0.83	1.02	23.99	94,341	0.00421	0.1010
Lauder (Estee)	EL	21.10	0.75	0.91	22.01	107,024	0.00478	0.1051
Lincoln Nat'l Corp.	LNC	24.92	2.73	3.41	28.33	12,267	0.00055	0.0155
Monolithic Power Sys.	MPWR	25.00	0.64	0.80	25.80	16,890	0.00075	0.0194
News Corp. 'A'	NWSA	49.01	0.76	1.13	50.14	15,607	0.00070	0.0349
NIKE, Inc. 'B'	NKE	34.55	0.81	1.09	35.64	215,597	0.00962	0.3428
NortonLifeLock Inc.	NLOK	21.90	2.30	2.80	24.70	12,767	0.00057	0.0141
NVIDIA Corp.	NVDA	25.19	0.11	0.14	25.33	350,759	0.01565	0.3964
PACCAR Inc.	PCAR	22.24	3.57	4.36	26.60	32,050	0.00143	0.0380
Pioneer Natural Res.	PXD	91.92	1.47	2.82	94.74	25,252	0.00113	0.1067
Qualcomm Inc.	QCOM	24.48	1.95	2.43	26.91	158,392	0.00707	0.1902
Raytheon Technologies	RTX	23.66	2.47	3.05	26.71	117,908	0.00526	0.1405
ResMed Inc.	RMD	22.10	0.79	0.96	23.06	28,682	0.00128	0.0295
SBA Communications	SBAC	104.68	0.82	1.68	106.36	31,671	0.00141	0.1503
Schlumberger Ltd.	SLB	41.84	1.83	2.60	44.44	38,080	0.00170	0.0755
Starbucks Corp.	SBUX	50.81	1.68	2.53	53.34	133,247	0.00595	0.3171
Sysco Corp.	SYY	23.41	2.23	2.75	26.16	41,131	0.00184	0.0480
Textron, Inc.	TXT	23.76	0.14	0.17	23.93	12,923	0.00058	0.0138
TJX Companies	TJX	63.31	1.53	2.50	65.81	81,379	0.00363	0.2389
Wells Fargo	WFC	112.99	1.00	2.13	115.12	165,259	0.00737	0.8488
West Pharmac. Svcs.	WST	22.60	0.23	0.28	22.88	21,370	0.00095	0.0218
WestRock Co.	WRK	24.38	1.51	1.88	26.26	13,900	0.00062	0.0163

Qualifying companies

3M Company	MMM	8.04	3.04	3.28	11.32	112,451	0.00502	0.0568
Abbott Labs.	ABT	15.58	1.50	1.73	17.31	212,878	0.00950	0.1644

**ROE/ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
AbbVie Inc.	ABBV	4.10	4.94	5.14	9.24	185,710	0.00829	0.0766
Accenture Plc	ACN	9.75	1.30	1.43	11.18	179,762	0.00802	0.0896
Activision Blizzard	ATVI	17.83	0.49	0.58	18.41	74,976	0.00335	0.0616
Advance Auto Parts	AAP	14.01	0.55	0.63	14.64	12,119	0.00054	0.0079
AES Corp.	AES	8.15	2.21	2.39	10.54	18,018	0.00080	0.0085
Aflac Inc.	AFL	6.11	2.63	2.79	8.90	35,814	0.00160	0.0142
Agilent Technologies	A	10.80	0.60	0.66	11.46	39,449	0.00176	0.0202
Air Products & Chem.	APD	9.01	2.12	2.31	11.32	62,509	0.00279	0.0316
Alexandria Real Estate	ARE	0.10	2.57	2.57	2.67	18,872	0.00084	0.0023
Allegion plc	ALLE	4.20	1.10	1.15	5.35	11,982	0.00053	0.0029
Alliant Energy	LNT	5.70	2.96	3.13	8.83	13,590	0.00061	0.0054
Altria Group	MO	4.42	6.73	7.03	11.45	95,021	0.00424	0.0485
Amcor plc	AMCR	7.64	4.04	4.35	11.99	18,829	0.00084	0.0101
Amer. Elec. Power	AEP	6.15	3.51	3.73	9.88	43,051	0.00192	0.0190
Amer. Express	AXP	15.60	1.22	1.41	17.01	118,440	0.00528	0.0899
Amer. Int'l Group	AIG	17.30	2.72	3.19	20.49	40,562	0.00181	0.0371
Amer. Tower 'A'	AMT	17.31	2.21	2.59	19.90	108,732	0.00485	0.0966
Amer. Water Works	AWK	8.60	1.57	1.71	10.31	27,726	0.00124	0.0127
Ameren Corp.	AEE	7.50	2.76	2.97	10.47	20,593	0.00092	0.0096
Ameriprise Fin'l	AMP	10.11	1.75	1.93	12.04	27,797	0.00124	0.0149
AmerisourceBergen	ABC	9.20	1.51	1.65	10.85	23,788	0.00106	0.0115
Amgen	AMGN	6.86	2.91	3.11	9.97	143,488	0.00640	0.0638
Amphenol Corp.	APH	11.20	0.86	0.96	12.16	40,280	0.00180	0.0218
Analog Devices	ADI	11.78	1.73	1.93	13.71	58,820	0.00262	0.0360
Anthem, Inc.	ANTM	13.59	1.28	1.45	15.04	86,428	0.00386	0.0580
Aon plc	AON	10.41	0.78	0.86	11.27	54,153	0.00242	0.0272
Apple Inc.	AAPL	14.69	0.69	0.79	15.48	2,151,695	0.09600	1.4862
Archer Daniels Mid'l'd	ADM	4.30	2.63	2.74	7.04	32,159	0.00143	0.0101
Assurant Inc.	AIZ	19.40	1.81	2.16	21.56	8,439	0.00038	0.0081

**ROE/ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
AT&T Inc.	T	1.89	6.72	6.85	8.74	220,378	0.00983	0.0859
Atmos Energy	ATO	7.17	2.65	2.84	10.01	12,588	0.00056	0.0056
Automatic Data Proc.	ADP	10.26	2.08	2.29	12.55	79,545	0.00355	0.0446
AvalonBay Communities	AVB	2.54	3.44	3.53	6.07	26,200	0.00117	0.0071
Avery Dennison	AVY	7.84	1.30	1.40	9.24	15,849	0.00071	0.0065
Baker Hughes	BKR	3.25	3.36	3.47	6.72	15,515	0.00069	0.0047
Ball Corp.	BLL	13.60	0.69	0.78	14.38	28,346	0.00126	0.0182
Bank of America	BAC	1.11	1.80	1.82	2.93	346,465	0.01546	0.0453
Bank of New York Mellon	BK	12.59	2.59	2.92	15.51	42,423	0.00189	0.0293
Baxter Int'l Inc.	BAX	9.00	1.16	1.26	10.26	43,259	0.00193	0.0198
Becton, Dickinson	BDX	12.00	1.38	1.55	13.55	70,902	0.00316	0.0429
Best Buy Co.	BBY	9.63	2.32	2.54	12.17	31,112	0.00139	0.0169
BlackRock, Inc.	BLK	11.61	2.10	2.34	13.95	120,167	0.00536	0.0748
BorgWarner	BWA	19.41	1.50	1.79	21.20	11,126	0.00050	0.0105
Boston Properties	BXP	7.00	3.81	4.08	11.08	16,304	0.00073	0.0081
Bristol-Myers Squibb	BMY	7.35	3.16	3.39	10.74	139,263	0.00621	0.0667
Broadcom Inc.	AVGO	8.60	2.98	3.24	11.84	196,844	0.00878	0.1040
Broadridge Fin'l	BR	10.00	1.49	1.64	11.64	17,912	0.00080	0.0093
Brown-Forman 'B'	BF/B	7.53	1.02	1.10	8.63	33,688	0.00150	0.0130
C.H. Robinson	CHRW	9.94	2.16	2.37	12.31	13,083	0.00058	0.0072
Campbell Soup	CPB	8.64	3.01	3.27	11.91	14,914	0.00067	0.0079
Capital One Fin'l	COF	4.19	1.20	1.25	5.44	60,820	0.00271	0.0148
Cardinal Health	CAH	7.57	3.23	3.47	11.04	17,846	0.00080	0.0088
Carrier Global	CARR	5.53	1.12	1.18	6.71	37,048	0.00165	0.0111
Cboe Global Markets	CBOE	1.80	1.68	1.71	3.51	10,758	0.00048	0.0017
CDW Corp.	CDW	11.59	0.94	1.05	12.64	24,168	0.00108	0.0136
Cerner Corp.	CERN	11.51	1.22	1.36	12.87	22,101	0.00099	0.0127
Church & Dwight	CHD	8.71	1.15	1.25	9.96	21,557	0.00096	0.0096
Cigna Corp.	CI	10.35	1.66	1.83	12.18	88,206	0.00394	0.0479

**ROE/ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Cincinnati Financial	CINF	7.92	2.39	2.58	10.50	16,935	0.00076	0.0079
Cintas Corp.	CTAS	12.85	0.86	0.97	13.82	36,795	0.00164	0.0227
Cisco Systems	CSCO	6.60	2.86	3.05	9.65	218,521	0.00975	0.0941
Citigroup Inc.	C	1.28	2.81	2.85	4.13	151,338	0.00675	0.0279
Citrix Sys.	CTXS	10.70	1.04	1.15	11.85	17,481	0.00078	0.0092
Clorox Co.	CLX	5.07	2.29	2.41	7.48	24,390	0.00109	0.0081
CME Group	CME	4.87	1.76	1.85	6.72	73,177	0.00326	0.0219
CMS Energy Corp.	CMS	7.20	2.89	3.10	10.30	17,666	0.00079	0.0081
Coca-Cola	KO	6.14	3.15	3.34	9.48	229,211	0.01023	0.0970
Cognizant Technology	CTSH	3.40	1.21	1.25	4.65	41,981	0.00187	0.0087
Colgate-Palmolive	CL	7.46	2.26	2.43	9.89	67,668	0.00302	0.0299
Comcast Corp.	CMCSA	14.57	1.83	2.10	16.67	250,104	0.01116	0.1860
Conagra Brands	CAG	6.33	3.03	3.22	9.55	17,873	0.00080	0.0076
Consol. Edison	ED	2.95	4.12	4.24	7.19	25,778	0.00115	0.0083
Constellation Brands	STZ	9.35	1.28	1.40	10.75	45,409	0.00203	0.0218
Cooper Cos.	COO	10.00	0.02	0.02	10.02	18,790	0.00084	0.0084
Corning Inc.	GLW	12.75	2.17	2.45	15.20	33,882	0.00151	0.0230
Corteva, Inc.	CTVA	18.25	1.22	1.44	19.69	34,757	0.00155	0.0305
Costco Wholesale	COST	8.64	0.82	0.89	9.53	158,829	0.00709	0.0675
Crown Castle Int'l	CCI	19.60	3.17	3.79	23.39	75,968	0.00339	0.0793
CSX Corp.	CSX	15.34	1.15	1.33	16.67	73,927	0.00330	0.0550
Cummins Inc.	CMI	14.98	2.09	2.40	17.38	38,235	0.00171	0.0297
CVS Health	CVS	3.77	2.68	2.78	6.55	97,507	0.00435	0.0285
Danaher Corp.	DHR	12.19	0.37	0.42	12.61	160,736	0.00717	0.0904
Discover Fin'l Svcs.	DFS	6.27	1.78	1.89	8.16	30,292	0.00135	0.0110
Dollar General	DG	13.57	0.82	0.93	14.50	49,537	0.00221	0.0321
Dominion Energy	D	2.78	3.31	3.40	6.18	61,433	0.00274	0.0169
Domino's Pizza	DPZ	10.43	0.98	1.08	11.51	14,859	0.00066	0.0076
Dover Corp.	DOV	9.50	1.42	1.55	11.05	20,042	0.00089	0.0099

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Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
DTE Energy	DTE	4.65	3.29	3.44	8.09	26,295	0.00117	0.0095
Duke Energy	DUK	4.99	3.99	4.19	9.18	75,224	0.00336	0.0308
Duke Realty Corp.	DRE	6.00	2.46	2.61	8.61	16,054	0.00072	0.0062
Eastman Chemical	EMN	3.83	2.47	2.56	6.39	15,154	0.00068	0.0043
Eaton Corp. plc	ETN	15.69	2.17	2.51	18.20	55,955	0.00250	0.0454
eBay Inc.	EBAY	18.79	1.17	1.39	20.18	42,244	0.00188	0.0380
Ecolab Inc.	ECL	17.07	0.89	1.04	18.11	61,328	0.00274	0.0496
Electronic Arts	EA	14.52	0.49	0.56	15.08	40,962	0.00183	0.0276
Emerson Electric	EMR	9.63	2.23	2.44	12.07	54,636	0.00244	0.0294
Entergy Corp.	ETR	5.50	3.85	4.06	9.56	20,369	0.00091	0.0087
Equifax, Inc.	EFX	10.63	0.86	0.95	11.58	22,081	0.00099	0.0114
Equity Residential	EQR	6.10	3.33	3.53	9.63	26,932	0.00120	0.0116
Essex Property Trust	ESS	7.90	2.96	3.19	11.09	18,384	0.00082	0.0091
Evergy, Inc.	EVRG	5.65	3.59	3.79	9.44	13,896	0.00062	0.0059
Eversource Energy	ES	7.05	2.75	2.94	9.99	30,043	0.00134	0.0134
Expeditors Int'l	EXPD	4.20	0.97	1.01	5.21	18,211	0.00081	0.0042
Extra Space Storage	EXR	6.00	2.91	3.08	9.08	18,075	0.00081	0.0073
Exxon Mobil Corp.	XOM	10.59	6.15	6.80	17.39	239,545	0.01069	0.1859
Fastenal Co.	FAST	7.94	2.24	2.42	10.36	28,668	0.00128	0.0132
Federal Rlty. Inv. Trust	FRT	6.70	4.07	4.34	11.04	8,060	0.00036	0.0040
Fidelity Nat'l Info.	FIS	13.97	1.06	1.21	15.18	91,066	0.00406	0.0617
First Republic Bank	FRC	10.99	0.50	0.55	11.54	29,102	0.00130	0.0150
FLIR Systems	FLIR	6.40	1.19	1.27	7.67	7,522	0.00034	0.0026
FMC Corp.	FMC	9.00	1.74	1.90	10.90	14,427	0.00064	0.0070
Fortive Corp.	FTV	7.05	0.39	0.42	7.47	24,076	0.00107	0.0080
Fortune Brands Home	FBHS	9.25	1.06	1.16	10.41	13,639	0.00061	0.0063
Franklin Resources	BEN	5.64	3.68	3.89	9.53	15,392	0.00069	0.0065
Gallagher (Arthur J.)	AJG	9.67	1.48	1.62	11.29	25,148	0.00112	0.0127
Garmin Ltd.	GRMN	6.37	1.98	2.11	8.48	25,804	0.00115	0.0098

**ROE/ROR for NSPM
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Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Gen'l Dynamics	GD	4.83	2.58	2.70	7.53	52,899	0.00236	0.0178
Gen'l Mills	GIS	4.16	3.37	3.51	7.67	37,558	0.00168	0.0129
Genuine Parts	GPC	4.60	2.79	2.92	7.52	16,836	0.00075	0.0056
Gilead Sciences	GILD	3.26	4.33	4.47	7.73	82,262	0.00367	0.0284
Global Payments	GPN	9.73	0.37	0.41	10.14	62,755	0.00280	0.0284
Globe Life Inc.	GL	7.37	0.80	0.86	8.23	10,389	0.00046	0.0038
Goldman Sachs	GS	18.20	1.53	1.81	20.01	112,362	0.00501	0.1003
Grainger (W.W.)	GWW	12.65	1.55	1.75	14.40	20,943	0.00093	0.0135
Halliburton Co.	HAL	15.50	0.84	0.97	16.47	18,957	0.00085	0.0139
Hanesbrands, Inc.	HBI	4.66	3.01	3.15	7.81	6,938	0.00031	0.0024
Hartford Fin'l Svcs.	HIG	4.41	2.05	2.14	6.55	24,414	0.00109	0.0071
Hasbro, Inc.	HAS	17.50	2.80	3.29	20.79	13,318	0.00059	0.0124
HCA Healthcare	HCA	12.39	1.03	1.16	13.55	63,395	0.00283	0.0383
Healthpeak Properties	PEAK	2.50	3.68	3.77	6.27	17,568	0.00078	0.0049
Henry (Jack) & Assoc.	JKHY	10.02	1.19	1.31	11.33	11,731	0.00052	0.0059
Hershey Co.	HSY	7.60	2.06	2.22	9.82	33,435	0.00149	0.0146
Hewlett Packard Ent.	HPE	12.51	3.02	3.40	15.91	20,678	0.00092	0.0147
Home Depot	HD	8.37	2.11	2.29	10.66	336,218	0.01500	0.1599
Honeywell Int'l	HON	11.98	1.70	1.90	13.88	152,251	0.00679	0.0943
Hormel Foods	HRL	3.70	2.10	2.18	5.88	25,673	0.00115	0.0067
Horton D.R.	DHI	17.90	0.88	1.04	18.94	33,517	0.00150	0.0283
HP Inc.	HPQ	15.07	2.42	2.78	17.85	40,447	0.00180	0.0322
Humana Inc.	HUM	12.28	0.68	0.76	13.04	54,399	0.00243	0.0317
Huntington Ingalls	HII	0.38	2.22	2.23	2.61	8,304	0.00037	0.0010
IDEX Corp.	IEX	11.50	0.93	1.04	12.54	16,213	0.00072	0.0091
IHS Markit	INFO	11.45	0.81	0.90	12.35	39,393	0.00176	0.0217
Illinois Tool Works	ITW	7.50	2.07	2.23	9.73	69,614	0.00311	0.0302
Int'l Business Mach.	IBM	6.09	4.83	5.12	11.21	120,446	0.00537	0.0603
Int'l Flavors & Frag.	IFF	10.00	2.25	2.48	12.48	14,810	0.00066	0.0082

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Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Intel Corp.	INTC	5.43	2.10	2.21	7.64	269,108	0.01201	0.0918
Intercontinental Exch.	ICE	10.20	1.15	1.27	11.47	64,375	0.00287	0.0329
Interpublic Group	IPG	5.05	3.66	3.84	8.89	11,539	0.00051	0.0046
Intuit Inc.	INTU	12.30	0.62	0.70	13.00	105,018	0.00469	0.0609
Invesco Ltd.	IVZ	3.21	2.39	2.47	5.68	11,920	0.00053	0.0030
Iron Mountain	IRM	1.70	6.58	6.69	8.39	10,861	0.00048	0.0041
Jacobs Engineering	J	12.49	0.64	0.72	13.21	17,093	0.00076	0.0101
Johnson & Johnson	JNJ	8.14	2.47	2.67	10.81	430,649	0.01921	0.2077
Johnson Ctrls. Int'l plc	JCI	14.31	1.80	2.06	16.37	43,324	0.00193	0.0316
JPMorgan Chase	JPM	1.28	2.32	2.35	3.63	472,449	0.02108	0.0765
Juniper Networks	JNPR	6.65	3.23	3.44	10.09	8,330	0.00037	0.0038
Kansas City South'n	KSU	16.61	0.82	0.96	17.57	24,037	0.00107	0.0188
Kellogg	K	2.93	3.66	3.77	6.70	21,895	0.00098	0.0065
KeyCorp	KEY	11.40	3.60	4.01	15.41	20,042	0.00089	0.0138
Kimberly-Clark	KMB	3.65	3.33	3.45	7.10	46,385	0.00207	0.0147
Kimco Realty	KIM	4.60	4.12	4.31	8.91	8,391	0.00037	0.0033
Kinder Morgan Inc.	KMI	1.13	6.20	6.27	7.40	38,334	0.00171	0.0127
KLA Corp.	KLAC	14.90	1.03	1.18	16.08	53,654	0.00239	0.0385
Kroger Co.	KR	7.60	2.10	2.26	9.86	28,160	0.00126	0.0124
L Brands	LB	14.02	0.93	1.06	15.08	17,873	0.00080	0.0120
L3Harris Technologies	LHX	11.49	1.96	2.19	13.68	45,255	0.00202	0.0276
Lamb Weston Holdings	LW	10.65	1.22	1.35	12.00	11,390	0.00051	0.0061
Leggett & Platt	LEG	5.20	3.44	3.62	8.82	6,167	0.00028	0.0024
Leidos Hldgs.	LDOS	9.93	1.38	1.52	11.45	13,991	0.00062	0.0071
Lennar Corp.	LEN	10.70	0.99	1.10	11.80	32,401	0.00145	0.0171
Lilly (Eli)	LLY	11.60	1.87	2.09	13.69	174,406	0.00778	0.1065
Linde plc	LIN	11.71	1.54	1.72	13.43	147,669	0.00659	0.0885
Lockheed Martin	LMT	6.08	2.79	2.96	9.04	106,073	0.00473	0.0428
Loews Corp.	L	14.03	0.47	0.54	14.57	14,370	0.00064	0.0093

**ROE/ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Lowe's Cos.	LOW	13.74	1.29	1.47	15.21	145,640	0.00650	0.0988
Lumen Technologies	LUMN	3.00	7.42	7.64	10.64	14,787	0.00066	0.0070
M&T Bank Corp.	MTB	13.40	2.85	3.23	16.63	19,788	0.00088	0.0147
MarketAxess Holdings	MKTX	10.29	0.51	0.56	10.85	19,801	0.00088	0.0096
Marsh & McLennan	MMC	8.93	1.53	1.67	10.60	62,480	0.00279	0.0295
Martin Marietta	MLM	8.85	0.69	0.75	9.60	21,007	0.00094	0.0090
Masco Corp.	MAS	10.25	1.54	1.70	11.95	15,776	0.00070	0.0084
MasterCard Inc.	MA	14.91	0.47	0.54	15.45	369,225	0.01647	0.2545
McCormick & Co.	MKC	6.00	1.54	1.63	7.63	23,809	0.00106	0.0081
McDonald's Corp.	MCD	18.20	2.24	2.65	20.85	173,387	0.00774	0.1613
McKesson Corp.	MCK	10.35	0.87	0.96	11.31	30,761	0.00137	0.0155
Medtronic plc	MDT	9.08	1.99	2.17	11.25	162,545	0.00725	0.0816
Merck & Co.	MRK	8.70	3.42	3.72	12.42	192,601	0.00859	0.1067
MetLife Inc.	MET	4.20	2.98	3.11	7.31	55,946	0.00250	0.0182
Microchip Technology	MCHP	11.80	0.98	1.10	12.90	43,003	0.00192	0.0247
Microsoft Corp.	MSFT	18.17	0.90	1.06	19.23	1,885,745	0.08414	1.6182
Mid-America Apartment	MAA	7.00	2.77	2.96	9.96	16,943	0.00076	0.0075
Molson Coors Beverage	TAP	2.74	2.22	2.28	5.02	11,208	0.00050	0.0025
Mondelez Int'l	MDLZ	9.45	2.28	2.50	11.95	84,001	0.00375	0.0448
Moody's Corp.	MCO	9.28	0.81	0.89	10.17	57,837	0.00258	0.0262
Morgan Stanley	MS	4.33	1.77	1.85	6.18	143,033	0.00638	0.0394
Mosaic Company	MOS	7.00	0.97	1.04	8.04	11,676	0.00052	0.0042
Motorola Solutions	MSI	5.88	1.50	1.59	7.47	32,174	0.00144	0.0107
MSCI Inc.	MSCI	14.37	0.78	0.89	15.26	36,327	0.00162	0.0247
Nasdaq, Inc.	NDAQ	6.37	1.30	1.38	7.75	24,869	0.00111	0.0086
NetApp, Inc.	NTAP	7.66	2.82	3.04	10.70	16,428	0.00073	0.0078
Newell Brands	NWL	2.03	3.40	3.47	5.50	11,480	0.00051	0.0028
NextEra Energy	NEE	8.59	1.99	2.16	10.75	151,724	0.00677	0.0728
Nielsen Hldgs. plc	NLSN	5.30	0.96	1.01	6.31	8,957	0.00040	0.0025

**ROE/ROR for NSPM
CAPM Analysis
Market Return**

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Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
NiSource Inc.	NI	4.37	3.57	3.73	8.10	9,436	0.00042	0.0034
Norfolk Southern	NSC	13.87	1.46	1.66	15.53	68,439	0.00305	0.0474
Northern Trust Corp.	NTRS	7.05	2.62	2.80	9.85	22,234	0.00099	0.0098
Northrop Grumman	NOC	5.44	1.74	1.83	7.27	55,678	0.00248	0.0181
Nucor Corp.	NUE	8.22	2.03	2.20	10.42	24,097	0.00108	0.0112
NXP Semiconductors NV	NXPI	16.76	1.06	1.24	18.00	59,500	0.00265	0.0478
Old Dominion Freight	ODFL	15.89	0.34	0.39	16.28	28,558	0.00127	0.0207
Omnicom Group	OMC	9.80	3.61	3.96	13.76	16,693	0.00074	0.0103
Oracle Corp.	ORCL	12.20	1.73	1.94	14.14	214,433	0.00957	0.1353
Otis Worldwide	OTIS	8.99	1.15	1.25	10.24	30,178	0.00135	0.0138
Packaging Corp.	PKG	5.97	2.90	3.07	9.04	13,091	0.00058	0.0053
Parker-Hannifin	PH	13.73	1.11	1.26	14.99	40,898	0.00182	0.0274
Paychex, Inc.	PAYX	4.85	2.79	2.93	7.78	34,160	0.00152	0.0119
Pentair plc	PNR	7.90	1.30	1.40	9.30	10,213	0.00046	0.0042
People's United Fin'l	PBCT	13.73	4.06	4.62	18.35	7,640	0.00034	0.0063
PepsiCo, Inc.	PEP	9.27	3.00	3.28	12.55	197,906	0.00883	0.1108
PerkinElmer Inc.	PKI	17.20	0.22	0.26	17.46	14,564	0.00065	0.0113
Perrigo Co. plc	PRGO	10.00	2.40	2.64	12.64	5,379	0.00024	0.0030
Pfizer, Inc.	PFE	10.07	4.34	4.78	14.85	199,911	0.00892	0.1324
Philip Morris Int'l	PM	11.12	5.44	6.04	17.16	137,485	0.00613	0.1053
Pinnacle West Capital	PNW	3.50	4.16	4.31	7.81	9,276	0.00041	0.0032
Pool Corp.	POOL	17.00	0.65	0.76	17.76	14,349	0.00064	0.0114
PPG Inds.	PPG	8.56	1.46	1.58	10.14	35,022	0.00156	0.0159
Price (T. Rowe) Group	TROW	13.43	2.44	2.77	16.20	40,057	0.00179	0.0289
Principal Fin'l Group	PFG	9.77	3.61	3.96	13.73	17,019	0.00076	0.0104
Procter & Gamble	PG	9.13	2.31	2.52	11.65	336,719	0.01502	0.1750
Prudential Fin'l	PRU	6.34	4.90	5.21	11.55	37,151	0.00166	0.0191
Public Serv. Enterprise	PEG	2.55	3.33	3.41	5.96	30,860	0.00138	0.0082
Public Storage	PSA	17.00	3.15	3.69	20.69	44,644	0.00199	0.0412

**ROE/ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
PulteGroup, Inc.	PHM	13.80	1.07	1.22	15.02	14,264	0.00064	0.0096
Quanta Services	PWR	14.96	0.26	0.30	15.26	12,599	0.00056	0.0086
Quest Diagnostics	DGX	9.22	1.94	2.12	11.34	16,989	0.00076	0.0086
Raymond James Fin'l	RJF	18.66	1.23	1.46	20.12	17,490	0.00078	0.0157
Realty Income Corp.	O	5.45	4.39	4.63	10.08	23,683	0.00106	0.0107
Regency Centers Corp.	REG	9.10	4.08	4.45	13.55	9,764	0.00044	0.0059
Republic Services	RSG	7.70	1.71	1.84	9.54	36,283	0.00162	0.0154
Robert Half Int'l	RHI	2.70	1.95	2.00	4.70	9,003	0.00040	0.0019
Rockwell Automation	ROK	10.60	1.66	1.84	12.44	30,337	0.00135	0.0168
Rollins, Inc.	ROL	8.20	0.93	1.01	9.21	16,951	0.00076	0.0070
Roper Tech.	ROP	9.70	0.54	0.59	10.29	43,506	0.00194	0.0200
S&P Global	SPGI	10.96	0.85	0.94	11.90	87,049	0.00388	0.0462
Schwab (Charles)	SCHW	14.19	1.12	1.28	15.47	120,778	0.00539	0.0834
Seagate Technology	STX	6.74	3.39	3.62	10.36	18,931	0.00084	0.0087
Sealed Air	SEE	7.60	1.42	1.53	9.13	7,003	0.00031	0.0029
Sempra Energy	SRE	5.20	3.37	3.55	8.75	38,517	0.00172	0.0150
Sherwin-Williams	SHW	9.70	0.91	1.00	10.70	67,626	0.00302	0.0323
Simon Property Group	SPG	8.60	4.44	4.82	13.42	38,437	0.00171	0.0230
Skyworks Solutions	SWKS	11.95	1.07	1.20	13.15	30,874	0.00138	0.0181
Smith (A.O.)	AOS	8.00	1.54	1.66	9.66	10,903	0.00049	0.0047
Snap-on Inc.	SNA	7.95	2.16	2.33	10.28	12,725	0.00057	0.0058
Southern Co.	SO	6.49	4.17	4.44	10.93	66,346	0.00296	0.0324
Stanley Black & Decker	SWK	9.92	1.41	1.55	11.47	35,423	0.00158	0.0181
State Street Corp.	STT	16.00	2.45	2.84	18.84	29,926	0.00134	0.0252
STERIS plc	STE	10.00	0.83	0.91	10.91	16,537	0.00074	0.0081
Stryker Corp.	SYK	12.41	1.02	1.15	13.56	92,988	0.00415	0.0562
Synchrony Financial	SYF	3.05	2.07	2.13	5.18	24,804	0.00111	0.0057
Target Corp.	TGT	9.94	1.33	1.46	11.40	102,379	0.00457	0.0521
TE Connectivity	TEL	11.00	1.54	1.71	12.71	42,880	0.00191	0.0243

**ROE/ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Teleflex Inc.	TFX	11.00	0.32	0.36	11.36	19,587	0.00087	0.0099
Teradyne Inc.	TER	12.76	0.30	0.34	13.10	21,881	0.00098	0.0128
Texas Instruments	TXN	10.00	2.11	2.32	12.32	177,518	0.00792	0.0976
Thermo Fisher Sci.	TMO	4.12	0.22	0.23	4.35	184,843	0.00825	0.0359
Tractor Supply	TSCO	11.08	1.17	1.30	12.38	20,583	0.00092	0.0114
Trane Technologies plc	TT	12.56	1.42	1.60	14.16	39,762	0.00177	0.0251
Travelers Cos.	TRV	5.97	2.23	2.36	8.33	38,438	0.00171	0.0143
Tyson Foods 'A'	TSN	4.45	2.35	2.45	6.90	27,638	0.00123	0.0085
U.S. Bancorp	USB	6.00	2.96	3.14	9.14	85,619	0.00382	0.0349
Union Pacific	UNP	12.94	1.75	1.98	14.92	148,597	0.00663	0.0989
United Parcel Serv.	UPS	10.06	2.44	2.69	12.75	148,496	0.00663	0.0844
UnitedHealth Group	UNH	12.41	1.37	1.54	13.95	346,992	0.01548	0.2160
Universal Health 'B'	UHS	5.98	0.59	0.63	6.61	11,609	0.00052	0.0034
Unum Group	UNM	1.37	4.08	4.14	5.51	5,694	0.00025	0.0014
V.F. Corp.	VFC	9.89	2.33	2.56	12.45	32,835	0.00146	0.0182
Verisk Analytics	VRSK	10.32	0.64	0.71	11.03	29,294	0.00131	0.0144
Verizon Communic.	VZ	3.29	4.30	4.44	7.73	244,148	0.01089	0.0842
Visa Inc.	V	13.84	0.59	0.67	14.51	428,015	0.01910	0.2771
Vornado R'lty Trust	VNO	17.33	4.62	5.42	22.75	8,789	0.00039	0.0089
Vulcan Materials	VMC	13.65	0.88	1.00	14.65	22,383	0.00100	0.0146
Wabtec Corp.	WAB	7.30	0.62	0.67	7.97	14,746	0.00066	0.0052
Walgreens Boots	WBA	3.63	3.37	3.49	7.12	48,016	0.00214	0.0153
Walmart Inc.	WMT	6.29	1.57	1.67	7.96	395,774	0.01766	0.1405
Waste Management	WM	11.17	1.74	1.93	13.10	55,955	0.00250	0.0327
WEC Energy Group	WEC	6.10	2.95	3.13	9.23	29,468	0.00131	0.0121
Welltower Inc.	WELL	13.00	3.30	3.73	16.73	31,389	0.00140	0.0234
Western Union	WU	9.25	3.56	3.89	13.14	10,386	0.00046	0.0061
Weyerhaeuser Co.	WY	5.00	1.85	1.94	6.94	27,526	0.00123	0.0085
Whirlpool Corp.	WHR	3.00	2.17	2.24	5.24	14,283	0.00064	0.0033

**ROE/ROR for NSPM
CAPM Analysis
Market Return**

Company Name	Ticker	EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Williams Cos.	WMB	5.00	6.80	7.14	12.14	29,258	0.00131	0.0158
Willis Towers Wat. plc	WLTW	5.66	1.19	1.26	6.92	30,672	0.00137	0.0095
Xcel Energy Inc.	XEL	6.30	2.69	2.86	9.16	36,573	0.00163	0.0149
Xylem Inc.	XYL	18.16	1.06	1.25	19.41	19,112	0.00085	0.0166
Yum! Brands	YUM	12.61	1.75	1.97	14.58	34,215	0.00153	0.0223
Zimmer Biomet Hldgs.	ZBH	11.29	0.61	0.68	11.97	33,738	0.00151	0.0180
Zoetis Inc.	ZTS	11.43	0.63	0.70	12.13	75,043	0.00335	0.0406
						22,413,222	1.00	12.63
								Weighted Rate of Return on Equity (%)

ROE and ROR for NSPM
 CAPM Analysis
 Adjusting EPS growth rates

Multistage DCF Analysis for S&P 500

Growth rate for companies with 5-year EPS \geq 20% after blending with long-term growth rate

A: IBES, April 3, 2021

C: $2/3 * A + 1/3 * B$

B: Weighted Social Security Administration and Energy Information
 Administration Long-Term Growth Rates. See MFG-17, Sch 2.

*-Company returned to subsequent analysis because blended growth does not exceed 20%

	A	B	C
Company Name	5-Year EPS Growth Rate (%)	Long-Term Growth Rate = 4.23%	Blended Growth Rate (%)

Companies with EPS > 20% (see MFG-17, Sch 4)

Albemarle Corp.*	ALB	25.61	4.23	18.48
Applied Materials*	AMAT	21.28	4.23	15.60
Berkley (W.R.)*	WRB	23.47	4.23	17.06
Cabot Oil & Gas 'A'	COG	43.75	4.23	30.58
Celanese Corp.*	CE	21.06	4.23	15.45
Chubb Ltd.*	CB	22.88	4.23	16.66
Darden Restaurants	DRI	36.64	4.23	25.84
Deere & Co.	DE	34.00	4.23	24.08
Dentsply Sirona*	XRAY	24.08	4.23	17.46
Devon Energy*	DVN	25.00	4.23	18.08
Diamondback Energy	FANG	49.13	4.23	34.16
Digital Realty Trust	DLR	30.98	4.23	22.06
DuPont de Nemours	DD	29.80	4.23	21.28
EOG Resources	EOG	58.35	4.23	40.31
Equinix, Inc.	EQIX	28.95	4.23	20.71

**ROE and ROR for NSPM
CAPM Analysis
Adjusting EPS growth rates**

Company Name		5-Year EPS Growth Rate (%)	Long-Term Growth Rate = 4.23%	Blended Growth Rate (%)
Everest Re Group Ltd.	RE	62.70	4.23	43.21
FedEx Corp.	FDX	29.41	4.23	21.02
Freep't-McMoRan Inc.	FCX	41.83	4.23	29.30
Gen'l Electric	GE	322.80	4.23	216.61
Hunt (J.B.)*	JBHT	20.73	4.23	15.23
Int'l Paper*	IP	25.83	4.23	18.63
Lam Research*	LRCX	22.97	4.23	16.72
Lauder (Estee)*	EL	21.10	4.23	15.48
Lincoln Nat'l Corp.*	LNC	24.92	4.23	18.02
Monolithic Power Sys.*	MPWR	25.00	4.23	18.08
News Corp. 'A'	NWSA	49.01	4.23	34.08
NIKE, Inc. 'B'	NKE	34.55	4.23	24.44
NortonLifeLock Inc.*	NLOK	21.90	4.23	16.01
NVIDIA Corp.*	NVDA	25.19	4.23	18.20
PACCAR Inc.*	PCAR	22.24	4.23	16.24
Pioneer Natural Res.	PXD	91.92	4.23	62.69
Qualcomm Inc.*	QCOM	24.48	4.23	17.73
Raytheon Technologies*	RTX	23.66	4.23	17.18
ResMed Inc.*	RMD	22.10	4.23	16.14
SBA Communications	SBAC	104.68	4.23	71.20
Schlumberger Ltd.	SLB	41.84	4.23	29.30
Starbucks Corp.	SBUX	50.81	4.23	35.28
Sysco Corp.*	SYO	23.41	4.23	17.02
Textron, Inc.*	TXT	23.76	4.23	17.25
TJX Companies	TJX	63.31	4.23	43.62
Wells Fargo	WFC	112.99	4.23	76.74
West Pharmac. Svcs.*	WST	22.60	4.23	16.48
WestRock Co.*	WRK	24.38	4.23	17.66

ROE and ROR for NSPM
CAPM Analysis
Market Return

Multistage DCF Analysis for S&P 500

Companies not paying dividends, with non-positive EPS growth rate, or EPS growth rate greater than 20 percent excluded

A: IBES, April 13, 2021

B and E: Value Line Analyzer, April 13, 2021

$C = B * (1 + A)$

$D = A + C$

$F = E / (\text{Sum of } E)$

$G = D * F$

Companies Excluded

Companies not paying dividends

Companies with EPS \leq 0%

Companies with EPS $>$ 20%

5-Year EPS Market Return

% 13.17

Blended market return %

$(2/3 * 13.17 + 1/3 * 4.23)$ 10.19

	A	B	C	D	E	F	G
Company Name	5-Year EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)

Companies not paying dividends

ABIOMED Inc.	ABMD	17.10	0.00	0.00	17.10	13,778	0.00060	0.0102
Adobe Inc.	ADBE	17.80	0.00	0.00	17.80	216,034	0.00933	0.1661
Advanced Micro Dev.	AMD	26.31	0.00	0.00	26.31	100,065	0.00432	0.1137
Akamai Technologies	AKAM	10.44	0.00	0.00	10.44	16,313	0.00070	0.0074
Alaska Air Group	ALK	(18.50)	0.00	0.00	-18.50	9,052	0.00039	-0.0072
Alexion Pharmac.	ALXN	8.78	0.00	0.00	8.78	33,634	0.00145	0.0128
Align Techn.	ALGN	24.14	0.00	0.00	24.14	42,579	0.00184	0.0444
Alphabet Inc.	GOOG	16.95	0.00	0.00	16.95	1,411,943	0.06099	1.0338
Alphabet Inc. 'A'	GOOGL	16.95	0.00	0.00	16.95	1,418,440	0.06127	1.0386
Amazon.com	AMZN	37.20	0.00	0.00	37.20	1,577,272	0.06813	2.5346
Amer. Airlines	AAL	(45.70)	0.00	0.00	-45.70	15,636	0.00068	-0.0309
ANSYS, Inc.	ANSS	8.00	0.00	0.00	8.00	28,192	0.00122	0.0097
Aptiv PLC	APTIV	43.37	0.00	0.00	43.37	41,376	0.00179	0.0775
Arista Networks	ANET	6.60	0.00	0.00	6.60	22,039	0.00095	0.0063
Autodesk, Inc.	ADSK	31.04	0.00	0.00	31.04	59,943	0.00259	0.0804

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

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Company Name		5-Year EPS Growth Rate	Dividend Yield	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
AutoZone Inc.	AZO	6.70	0.00	0.00	6.70	29,504	0.00127	0.0085
Berkshire Hathaway 'B'	BRK/B	23.30	0.00	0.00	23.30	-	-	0.0000
Bio-Rad Labs. 'A'	BIO	17.80	0.00	0.00	17.80	16,905	0.00073	0.0130
Biogen	BIIB	(10.08)	0.00	0.00	-10.08	40,653	0.00176	-0.0177
Boeing	BA	12.33	0.00	0.00	12.33	153,494	0.00663	0.0818
Booking Holdings	BKNG	135.59	0.00	0.00	135.59	100,820	0.00436	0.5905
Boston Scientific	BSX	6.55	0.00	0.00	6.55	55,671	0.00240	0.0158
Cadence Design Sys.	CDNS	11.10	0.00	0.00	11.10	35,840	0.00155	0.0172
CarMax, Inc.	KMX	6.34	0.00	0.00	6.34	21,529	0.00093	0.0059
Carnival Corp.	CCL	(72.42)	0.00	0.00	-72.42	24,012	0.00104	-0.0751
Catalent, Inc.	CTLT	15.97	0.00	0.00	15.97	18,041	0.00078	0.0124
CBRE Group	CBRE	11.00	0.00	0.00	11.00	26,617	0.00115	0.0126
Centene Corp.	CNC	10.53	0.00	0.00	10.53	35,988	0.00155	0.0164
Charter Communic.	CHTR	33.74	0.00	0.00	33.74	124,348	0.00537	0.1812
Chipotle Mex. Grill	CMG	52.56	0.00	0.00	52.56	41,370	0.00179	0.0939
Copart, Inc.	CPRT	22.30	0.00	0.00	22.30	26,119	0.00113	0.0252
DaVita Inc.	DVA	13.83	0.00	0.00	13.83	11,843	0.00051	0.0071
Delta Air Lines	DAL	(26.15)	0.00	0.00	-26.15	32,167	0.00139	-0.0363
DexCom Inc.	DXCM	23.60	0.00	0.00	23.60	33,763	0.00146	0.0344
Discovery Communic. 'C'	DISCK	12.90	0.00	0.00	12.90	32,775	0.00142	0.0183
Discovery, Inc.	DISCA	6.75	0.00	0.00	6.75	36,739	0.00159	0.0107
Dish Network 'A'	DISH	(23.01)	0.00	0.00	-23.01	20,504	0.00089	-0.0204
Disney (Walt)	DIS	48.53	0.00	0.00	48.53	347,722	0.01502	0.7290
Dollar Tree, Inc.	DLTR	9.78	0.00	0.00	9.78	25,331	0.00109	0.0107
DXC Technology	DXC	(8.82)	0.00	0.00	-8.82	7,291	0.00031	-0.0028
Edwards Lifesciences	EW	12.99	0.00	0.00	12.99	50,181	0.00217	0.0282
Enphase Energy	ENPH	37.70	0.00	0.00	37.70	20,686	0.00089	0.0337
Etsy, Inc.	ETSY	36.60	0.00	0.00	36.60	27,449	0.00119	0.0434
Expedia Group	EXPE	(15.06)	0.00	0.00	-15.06	26,203	0.00113	-0.0170

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Company Name		5-Year EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
F5 Networks	FFIV	6.04	0.00	0.00	6.04	12,411	0.00054	0.0032
Facebook Inc.	FB	21.50	0.00	0.00	21.50	809,145	0.03495	0.7515
Fiserv Inc.	FISV	18.81	0.00	0.00	18.81	82,802	0.00358	0.0673
FleetCor Technologies	FLT	12.04	0.00	0.00	12.04	23,789	0.00103	0.0124
Ford Motor	F	27.66	0.00	0.00	27.66	49,587	0.00214	0.0592
Fortinet Inc.	FTNT	16.38	0.00	0.00	16.38	29,646	0.00128	0.0210
Gap (The), Inc.	GPS	4.90	0.00	0.00	4.90	11,845	0.00051	0.0025
Gartner Inc.	IT	9.95	0.00	0.00	9.95	16,496	0.00071	0.0071
Gen'l Motors	GM	11.84	0.00	0.00	11.84	85,950	0.00371	0.0440
Generac Holdings	GNRC	8.00	0.00	0.00	8.00	22,793	0.00098	0.0079
Hilton Worldwide Hldgs.	HLT	(6.25)	0.00	0.00	-6.25	35,272	0.00152	-0.0095
Hologic, Inc.	HOLX	10.47	0.00	0.00	10.47	18,452	0.00080	0.0083
Host Hotels & Resorts	HST	28.40	0.00	0.00	28.40	13,141	0.00057	0.0161
Howmet Aerospace	HWM	27.53	0.00	0.00	27.53	13,945	0.00060	0.0166
IDEXX Labs.	IDXX	16.09	0.00	0.00	16.09	43,068	0.00186	0.0299
Illumina Inc.	ILMN	19.80	0.00	0.00	19.80	61,338	0.00265	0.0525
Incyte Corp.	INCY	20.89	0.00	0.00	20.89	17,631	0.00076	0.0159
Ingersoll Rand Inc.	IR	16.07	0.00	0.00	16.07	20,839	0.00090	0.0145
Intuitive Surgical	ISRG	9.14	0.00	0.00	9.14	85,145	0.00368	0.0336
IPG Photonics	IPGP	45.60	0.00	0.00	45.60	11,582	0.00050	0.0228
IQVIA Holdings	IQV	14.85	0.00	0.00	14.85	36,367	0.00157	0.0233
Keysight Technologies	KEYS	12.41	0.00	0.00	12.41	25,588	0.00111	0.0137
Laboratory Corp.	LH	10.93	0.00	0.00	10.93	23,255	0.00100	0.0110
Las Vegas Sands	LVS	(6.25)	0.00	0.00	-6.25	50,360	0.00218	-0.0136
Live Nation Entertain.	LYV	80.30	0.00	0.00	80.30	18,822	0.00081	0.0653
LKQ Corp.	LKQ	33.50	0.00	0.00	33.50	13,318	0.00058	0.0193
Marriott Int'l	MAR	(8.90)	0.00	0.00	-8.90	50,580	0.00218	-0.0194
Maxim Integrated	MXIM	18.44	0.00	0.00	18.44	24,423	0.00106	0.0195
Mettler-Toledo Int'l	MTD	13.80	0.00	0.00	13.80	25,632	0.00111	0.0153

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Company Name		5-Year EPS Growth Rate	Dividend Yield	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Micron Technology	MU	37.73	0.00	0.00	37.73	105,847	0.00457	0.1725
Mohawk Inds.	MHK	4.00	0.00	0.00	4.00	13,067	0.00056	0.0023
Molson Coors Beverage	TAP	2.74	0.00	0.00	2.74	10,545	0.00046	0.0012
Monster Beverage	MNST	15.35	0.00	0.00	15.35	46,771	0.00202	0.0310
Netflix, Inc.	NFLX	44.43	0.00	0.00	44.43	231,695	0.01001	0.4447
Norwegian Cruise Line	NCLH	(24.13)	0.00	0.00	-24.13	8,406	0.00036	-0.0088
NOV Inc.	NOV	18.90	0.00	0.00	18.90	6,107	0.00026	0.0050
NVR, Inc.	NVR	4.80	0.00	0.00	4.80	17,232	0.00074	0.0036
O'Reilly Automotive	ORLY	9.97	0.00	0.00	9.97	35,389	0.00153	0.0152
Paycom Software	PAYC	19.10	0.00	0.00	19.10	22,161	0.00096	0.0183
PayPal Holdings	PYPL	22.24	0.00	0.00	22.24	294,723	0.01273	0.2831
Penn National Gaming	PENN	141.92	0.00	0.00	141.92	19,334	0.00084	0.1185
PVH Corp.	PVH	(5.85)	0.00	0.00	-5.85	7,465	0.00032	-0.0019
Qorvo Inc.	QRVO	16.50	0.00	0.00	16.50	20,908	0.00090	0.0149
Ralph Lauren	RL	4.97	0.00	0.00	4.97	8,850	0.00038	0.0019
Regeneron Pharmac.	REGN	11.11	0.00	0.00	11.11	52,131	0.00225	0.0250
Ross Stores	ROST	46.74	0.00	0.00	46.74	44,086	0.00190	0.0890
Royal Caribbean	RCL	58.70	0.00	0.00	58.70	19,635	0.00085	0.0498
salesforce.com	CRM	12.92	0.00	0.00	12.92	194,792	0.00841	0.1087
Schein (Henry)	HSIC	14.43	0.00	0.00	14.43	9,656	0.00042	0.0060
ServiceNow, Inc.	NOW	24.37	0.00	0.00	24.37	94,599	0.00409	0.0996
Southwest Airlines	LUV	(21.00)	0.00	0.00	-21.00	36,474	0.00158	-0.0331
SVB Fin'l Group	SIVB	8.00	0.00	0.00	8.00	28,206	0.00122	0.0097
Synopsys, Inc.	SNPS	11.50	0.00	0.00	11.50	35,898	0.00155	0.0178
T-Mobile US	TMUS	38.46	0.00	0.00	38.46	158,082	0.00683	0.2626
Take-Two Interactive	TTWO	17.21	0.00	0.00	17.21	19,439	0.00084	0.0145
Tapestry Inc.	TPR	48.12	0.00	0.00	48.12	12,526	0.00054	0.0260
Teledyne Technologies	TDY	12.80	0.00	0.00	12.80	14,482	0.00063	0.0080
Tesla, Inc.	TSLA	32.10	0.00	0.00	32.10	665,316	0.02874	0.9226

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Company Name		5-Year EPS Growth Rate	Dividend Yield	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
TransDigm Group	TDG	15.48	0.00	0.00	15.48	33,364	0.00144	0.0223
Trimble Inc.	TRMB	10.00	0.00	0.00	10.00	19,234	0.00083	0.0083
Twitter Inc.	TWTR	0.43	0.00	0.00	0.43	55,770	0.00241	0.0010
Tyler Technologies	TYL	10.00	0.00	0.00	10.00	20,384	0.00088	0.0088
Ulta Beauty	ULTA	41.80	0.00	0.00	41.80	17,970	0.00078	0.0324
Under Armour 'A'	UAA	(4.50)	0.00	0.00	-4.50	10,453	0.00045	-0.0020
Under Armour 'C'	UA	21.80	0.00	0.00	21.80	8,752	0.00038	0.0082
United Airlines Hldgs.	UAL	(30.20)	0.00	0.00	-30.20	18,172	0.00079	-0.0237
United Rentals	URI	8.60	0.00	0.00	8.60	23,240	0.00100	0.0086
Varian Medical Sys.	VAR	9.90	0.00	0.00	9.90	15,991	0.00069	0.0068
VeriSign Inc.	VRSN	8.00	0.00	0.00	8.00	21,643	0.00093	0.0075
Vertex Pharmac.	VRTX	18.33	0.00	0.00	18.33	56,479	0.00244	0.0447
Viatis Inc.	VTRS	(3.65)	0.00	0.00	-3.65	-	-	0.0000
Vontier Corp.	VNT	3.08	0.00	0.00	3.08	-	-	0.0000
Waters Corp.	WAT	7.17	0.00	0.00	7.17	16,630	0.00072	0.0052
Western Digital	WDC	(22.00)	0.00	0.00	-22.00	21,818	0.00094	-0.0207
Wynn Resorts	WYNN	(1.10)	0.00	0.00	-1.10	15,102	0.00065	-0.0007
Xilinx Inc.	XLNX	9.00	0.00	0.00	9.00	31,678	0.00137	0.0123
Zebra Techn. 'A'	ZBRA	10.00	0.00	0.00	10.00	25,303	0.00109	0.0109

Companies with EPS ≤ 0%

AMETEK, Inc.	AME	(1.20)	0.66	0.65	-0.55	28,056	0.00121	-0.0007
APA Corp.	APA	(24.00)	0.48	0.36	-23.64	7,919	0.00034	-0.0081
Caterpillar Inc.	CAT	(1.11)	1.76	1.74	0.63	126,921	0.00548	0.0035
CenterPoint Energy	CNP	(5.88)	2.92	2.75	-3.13	12,279	0.00053	-0.0017
CF Industries	CF	(5.21)	2.60	2.46	-2.75	10,720	0.00046	-0.0013
Chevron Corp.	CVX	(4.90)	4.78	4.55	-0.35	207,978	0.00898	-0.0032

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Company Name		5-Year EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Citizens Fin'l Group	CFG	(2.76)	3.49	3.39	0.63	19,082	0.00082	0.0005
Comerica Inc.	CMA	(10.70)	3.94	3.52	-7.18	9,607	0.00041	-0.0030
ConocoPhillips	COP	(8.50)	3.03	2.77	-5.73	60,964	0.00263	-0.0151
Dow Inc.	DOW	(5.43)	4.55	4.30	-1.13	49,058	0.00212	-0.0024
Edison Int'l	EIX	(0.50)	4.50	4.48	3.98	22,560	0.00097	0.0039
Exelon Corp.	EXC	(0.34)	3.56	3.55	3.21	41,939	0.00181	0.0058
Fifth Third Bancorp	FITB	(2.98)	2.80	2.72	-0.26	27,482	0.00119	-0.0003
FirstEnergy Corp.	FE	(1.97)	4.43	4.34	2.37	19,118	0.00083	0.0020
Hess Corp.	HES	(23.40)	1.41	1.08	-22.32	21,756	0.00094	-0.0210
HollyFrontier Corp.	HFC	(10.70)	3.83	3.42	-7.28	6,259	0.00027	-0.0020
Huntington Bancshs.	HBAN	(2.15)	3.73	3.65	1.50	16,379	0.00071	0.0011
Kraft Heinz Co.	KHC	(2.88)	4.09	3.97	1.09	47,795	0.00206	0.0023
LyondellBasell Inds.	LYB	(4.07)	3.86	3.70	-0.37	36,304	0.00157	-0.0006
Marathon Oil Corp.	MRO	(19.63)	1.03	0.83	-18.80	9,211	0.00040	-0.0075
Marathon Petroleum	MPC	(6.76)	4.13	3.85	-2.91	36,593	0.00158	-0.0046
MGM Resorts Int'l	MGM	(39.13)	0.02	0.01	-39.12	20,339	0.00088	-0.0344
Newmont Corp.	NEM	(1.24)	3.49	3.45	2.21	50,376	0.00218	0.0048
News Corp. 'B'	NWS		0.80	0.80	0.80	14,529	0.00063	0.0005
NRG Energy	NRG	(12.70)	3.59	3.13	-9.57	8,833	0.00038	-0.0037
Occidental Petroleum	OXY	(5.15)	0.28	0.27	-4.88	27,047	0.00117	-0.0057
ONEOK Inc.	OKE	(1.60)	7.65	7.53	5.93	22,362	0.00097	0.0057
Phillips 66	PSX	(7.75)	4.33	3.99	-3.76	37,329	0.00161	-0.0061
PNC Financial Serv.	PNC	(1.62)	2.58	2.54	0.92	75,654	0.00327	0.0030
PPL Corp.	PPL	(16.20)	5.96	4.99	-11.21	21,545	0.00093	-0.0104
Progressive Corp.	PGR	(4.01)	0.44	0.42	-3.59	53,348	0.00230	-0.0083
Prologis	PLD	(6.05)	2.47	2.32	-3.73	75,491	0.00326	-0.0122
Regions Financial	RF	(21.60)	2.93	2.30	-19.30	20,348	0.00088	-0.0170
SL Green Realty	SLG	(10.84)	4.97	4.43	-6.41	6,059	0.00026	-0.0017
Smucker (J.M.)	SJM	(0.42)	2.95	2.94	2.52	13,627	0.00059	0.0015

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Company Name		5-Year EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Truist Fin'l	TFC	(9.10)	3.07	2.79	-6.31	78,973	0.00341	-0.0215
UDR, Inc.	UDR	(34.21)	3.32	2.18	-32.03	13,407	0.00058	-0.0185
Valero Energy	VLO	(13.00)	4.95	4.31	-8.69	32,321	0.00140	-0.0121
Ventas, Inc.	VTR	(0.50)	3.15	3.13	2.63	21,405	0.00092	0.0024
ViacomCBS Inc.	VIAC	(4.20)	1.04	1.00	-3.20	56,881	0.00246	-0.0079
Xerox Holdings	XRX	(17.00)	3.84	3.19	-13.81	5,169	0.00022	-0.0031
Zions Bancorp.	ZION	(32.40)	2.40	1.62	-30.78	9,312	0.00040	-0.0124

Companies with EPS > 20% after blended rate adjustment

Cabot Oil & Gas 'A'	COG	43.75	2.59	3.72	47.47	7,391	0.00032	0.0152
Darden Restaurants	DRI	36.64	1.05	1.43	38.07	18,409	0.00080	0.0303
Deere & Co.	DE	34.00	0.95	1.27	35.27	118,875	0.00514	0.1811
Diamondback Energy	FANG	49.63	1.97	2.95	52.58	12,851	0.00056	0.0292
Digital Realty Trust	DLR	30.98	3.47	4.55	35.53	37,749	0.00163	0.0579
DuPont de Nemours	DD	29.80	1.63	2.12	31.92	57,547	0.00249	0.0793
EOG Resources	EOG	58.35	2.25	3.56	61.91	42,695	0.00184	0.1142
Equinix, Inc.	EQIX	28.95	1.76	2.27	31.22	58,512	0.00253	0.0789
Everest Re Group Ltd.	RE	61.76	2.47	4.00	65.76	10,043	0.00043	0.0285
FedEx Corp.	FDX	29.41	0.98	1.27	30.68	70,466	0.00304	0.0934
Freep't-McMoRan Inc.	FCX	40.07	0.83	1.16	41.23	52,648	0.00227	0.0938
Gen'l Electric	GE	322.50	0.29	1.23	323.73	119,222	0.00515	1.6672
News Corp. 'A'	NWSA	49.01	0.76	1.13	50.14	15,565	0.00067	0.0337
NIKE, Inc. 'B'	NKE	34.55	0.76	1.02	35.57	228,092	0.00985	0.3505

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Company Name		5-Year EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Pioneer Natural Res.	PXD	86.00	1.33	2.47	88.47	27,828	0.00120	0.1064
SBA Communications	SBAC	41.62	0.87	1.23	42.85	29,836	0.00129	0.0552
Schlumberger Ltd.	SLB	41.84	1.77	2.51	44.35	39,417	0.00170	0.0755
Starbucks Corp.	SBUX	50.81	1.72	2.59	53.40	130,034	0.00562	0.3000
TJX Companies	TJX	63.31	1.54	2.51	65.82	80,850	0.00349	0.2299
Wells Fargo	WFC	113.00	1.00	2.13	115.13	164,639	0.00711	0.8188

Qualifying companies--Blended rate moves EPS from > 20% to less than 20% (see MFG-18 Schedule 5)

Albemarle Corp.	ALB	25.61	1.09	1.37	26.98	15,353	0.00066	0.0179
Applied Materials	AMAT	21.28	0.69	0.84	22.12	127,683	0.00552	0.1220
Berkley (W.R.)	WRB	23.47	0.61	0.75	24.22	13,973	0.00060	0.0146
Celanese Corp.	CE	21.06	1.80	2.18	23.24	17,702	0.00076	0.0178
Chubb Ltd.	CB	22.88	1.94	2.38	25.26	72,545	0.00313	0.0792
Dentsply Sirona	XRAY	24.08	0.63	0.78	24.86	13,971	0.00060	0.0150
Devon Energy	DVN	25.00	1.95	2.44	27.44	8,625	0.00037	0.0102
Hunt (J.B.)	JBHT	20.73	0.72	0.87	21.60	16,898	0.00073	0.0158
Int'l Paper	IP	25.83	3.79	4.77	30.60	21,290	0.00092	0.0281
Lam Research	LRCX	22.97	1.00	1.23	24.20	79,194	0.00342	0.0828
Lauder (Estee)	EL	21.10	0.76	0.92	22.02	105,432	0.00455	0.1003
Lincoln Nat'l Corp.	LNC	24.92	2.72	3.40	28.32	12,109	0.00052	0.0148
Monolithic Power Sys.	MPWR	25.00	0.68	0.85	25.85	15,943	0.00069	0.0178
NortonLifeLock Inc.	NLOK	21.90	2.34	2.85	24.75	12,562	0.00054	0.0134
NVIDIA Corp.	NVDA	25.19	0.12	0.15	25.34	330,863	0.01429	0.3622
PACCAR Inc.	PCAR	22.24	3.43	4.19	26.43	33,333	0.00144	0.0381
Qualcomm Inc.	QCOM	24.48	2.03	2.53	27.01	152,133	0.00657	0.1775
Raytheon Technologies	RTX	23.66	2.41	2.98	26.64	120,886	0.00522	0.1391
ResMed Inc.	RMD	22.10	0.81	0.99	23.09	27,860	0.00120	0.0278

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Company Name		5-Year EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Sysco Corp.	SY Y	22.94	2.23	2.74	25.68	41,187	0.00178	0.0457
Textron, Inc.	TXT	23.76	0.14	0.17	23.93	12,682	0.00055	0.0131
West Pharmac. Svcs.	WST	22.60	0.25	0.31	22.91	20,292	0.00088	0.0201
WestRock Co.	WRK	24.38	1.54	1.92	26.30	13,705	0.00059	0.0156

Qualifying companies--original set (see MFG-18 Schedule 4)

3M Company	MMM	8.10	3.14	3.39	11.49	108,615	0.00469	0.0539
Abbott Labs.	ABT	15.58	1.53	1.77	17.35	208,465	0.00901	0.1562
AbbVie Inc.	ABBV	4.10	4.95	5.15	9.25	185,410	0.00801	0.0741
Accenture Plc	ACN	9.75	1.39	1.53	11.28	167,586	0.00724	0.0816
Activision Blizzard	ATVI	17.83	0.51	0.60	18.43	71,570	0.00309	0.0570
Advance Auto Parts	AAP	13.96	0.55	0.63	14.59	12,454	0.00054	0.0078
AES Corp.	AES	8.15	2.23	2.41	10.56	17,859	0.00077	0.0081
Aflac Inc.	AFL	6.11	2.61	2.77	8.88	35,779	0.00155	0.0137
Agilent Technologies	A	10.80	0.64	0.71	11.51	37,369	0.00161	0.0186
Air Products & Chem.	APD	9.01	2.22	2.42	11.43	59,893	0.00259	0.0296
Albemarle Corp.	ALB	15.00	1.00	1.15	16.15	16,598	0.00072	0.0116
Alexandria Real Estate	ARE	0.10	2.58	2.58	2.68	18,730	0.00081	0.0022
Allegion plc	ALLE	1.70	1.17	1.19	2.89	11,179	0.00048	0.0014
Alliant Energy	LNT	5.70	3.11	3.29	8.99	12,921	0.00056	0.0050
Allstate Corp.	ALL	2.59	2.80	2.87	5.46	35,215	0.00152	0.0083
Altria Group	MO	4.42	6.91	7.22	11.64	92,512	0.00400	0.0465
Amcors plc	AMCR	7.64	4.04	4.35	11.99	18,845	0.00081	0.0098
Amer. Elec. Power	AEP	6.15	3.70	3.93	10.08	40,781	0.00176	0.0178
Amer. Express	AXP	15.60	1.24	1.43	17.03	116,467	0.00503	0.0857
Amer. Int'l Group	AIG	16.74	2.68	3.13	19.87	41,065	0.00177	0.0352

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Company Name		5-Year EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Amer. Tower 'A'	AMT	17.31	2.42	2.84	20.15	99,130	0.00428	0.0863
Amer. Water Works	AWK	8.60	1.69	1.84	10.44	25,269	0.00109	0.0114
Ameren Corp.	AEE	7.50	2.87	3.09	10.59	19,785	0.00085	0.0090
Ameriprise Fin'l	AMP	10.11	1.85	2.04	12.15	26,750	0.00116	0.0140
AmerisourceBergen	ABC	9.20	1.54	1.68	10.88	23,282	0.00101	0.0109
Amgen	AMGN	7.01	2.96	3.17	10.18	141,261	0.00610	0.0621
Amphenol Corp.	APH	11.20	0.89	0.99	12.19	39,071	0.00169	0.0206
Analog Devices	ADI	11.78	1.79	2.00	13.78	56,869	0.00246	0.0339
Anthem, Inc.	ANTM	13.42	1.32	1.50	14.92	83,908	0.00362	0.0541
Aon plc	AON	10.63	0.82	0.91	11.54	51,751	0.00224	0.0258
Apple Inc.	AAPL	14.69	0.70	0.80	15.49	2,098,870	0.09067	1.4047
Archer Daniels Midl'd	ADM	4.30	2.63	2.74	7.04	32,081	0.00139	0.0098
Assurant Inc.	AIZ	19.40	1.90	2.27	21.67	8,037	0.00035	0.0075
AT&T Inc.	T	1.89	6.90	7.03	8.92	214,820	0.00928	0.0828
Atmos Energy	ATO	7.00	2.81	3.01	10.01	11,845	0.00051	0.0051
Automatic Data Proc.	ADP	10.26	2.06	2.27	12.53	80,431	0.00347	0.0435
AvalonBay Communities	AVB	2.54	3.46	3.55	6.09	26,471	0.00114	0.0070
Avery Dennison	AVY	7.84	1.37	1.48	9.32	15,115	0.00065	0.0061
Baker Hughes	BKR	3.25	3.00	3.10	6.35	16,426	0.00071	0.0045
Ball Corp.	BLL	13.60	0.72	0.82	14.42	27,360	0.00118	0.0170
Bank of America	BAC	1.11	1.90	1.92	3.03	328,705	0.01420	0.0430
Bank of New York Mellon	BK	12.85	2.67	3.01	15.86	41,214	0.00178	0.0282
Baxter Int'l Inc.	BAX	9.00	1.23	1.34	10.34	40,705	0.00176	0.0182
Becton, Dickinson	BDX	12.00	1.40	1.57	13.57	69,548	0.00300	0.0408
Best Buy Co.	BBY	9.63	2.49	2.73	12.36	28,961	0.00125	0.0155
BlackRock, Inc.	BLK	12.68	2.27	2.56	15.24	111,051	0.00480	0.0731
BorgWarner	BWA	19.41	1.37	1.64	21.05	12,143	0.00052	0.0110
Boston Properties	BXP	7.00	3.69	3.95	10.95	16,425	0.00071	0.0078
Bristol-Myers Squibb	BMJ	9.70	3.15	3.46	13.16	139,532	0.00603	0.0793

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Company Name		5-Year EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Broadcom Inc.	AVGO	8.60	2.98	3.24	11.84	196,682	0.00850	0.1006
Broadridge Fin'l	BR	10.00	1.57	1.73	11.73	16,994	0.00073	0.0086
Brown-Forman 'B'	BF/B	7.53	1.00	1.08	8.61	34,343	0.00148	0.0128
C.H. Robinson	CHRW	9.94	2.18	2.40	12.34	12,935	0.00056	0.0069
Campbell Soup	CPB	8.64	3.02	3.28	11.92	14,835	0.00064	0.0076
Capital One Fin'l	COF	4.19	1.22	1.27	5.46	60,216	0.00260	0.0142
Cardinal Health	CAH	7.57	3.38	3.64	11.21	17,034	0.00074	0.0082
Carrier Global	CARR	5.53	1.22	1.29	6.82	34,149	0.00148	0.0101
Cboe Global Markets	CBOE	1.80	1.62	1.65	3.45	11,137	0.00048	0.0017
CDW Corp.	CDW	11.59	1.00	1.12	12.71	22,761	0.00098	0.0125
Cerner Corp.	CERN	11.51	1.22	1.36	12.87	22,149	0.00096	0.0123
Chubb Ltd.	CB	17.18	1.80	2.11	19.29	78,291	0.00338	0.0652
Church & Dwight	CHD	8.71	1.23	1.34	10.05	20,159	0.00087	0.0087
Cigna Corp.	CI	10.35	1.65	1.82	12.17	88,827	0.00384	0.0467
Cincinnati Financial	CINF	7.02	2.37	2.54	9.56	17,093	0.00074	0.0071
Cintas Corp.	CTAS	12.85	0.87	0.98	13.83	36,033	0.00156	0.0215
Cisco Systems	CSCO	6.60	2.99	3.19	9.79	208,602	0.00901	0.0882
Citigroup Inc.	C	1.28	2.77	2.81	4.09	153,232	0.00662	0.0270
Citrix Sys.	CTXS	10.70	1.11	1.23	11.93	16,413	0.00071	0.0085
Clorox Co.	CLX	5.07	2.34	2.46	7.53	23,836	0.00103	0.0078
CME Group	CME	4.60	1.74	1.82	6.42	73,979	0.00320	0.0205
CMS Energy Corp.	CMS	7.19	3.06	3.28	10.47	16,721	0.00072	0.0076
Coca-Cola	KO	6.14	3.28	3.48	9.62	220,434	0.00952	0.0916
Cognizant Technology	CTSH	3.40	1.23	1.27	4.67	42,058	0.00182	0.0085
Colgate-Palmolive	CL	7.46	2.38	2.56	10.02	64,422	0.00278	0.0279
Comcast Corp.	CMCSA	14.57	1.74	1.99	16.56	263,388	0.01138	0.1885
Conagra Brands	CAG	6.60	3.05	3.25	9.85	18,102	0.00078	0.0077
Consol. Edison	ED	2.95	4.32	4.45	7.40	24,574	0.00106	0.0079
Constellation Brands	STZ	8.83	1.37	1.49	10.32	45,036	0.00195	0.0201

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Cooper Cos.	COO	10.00	0.02	0.02	10.02	18,448	0.00080	0.0080
Corning Inc.	GLW	4.00	2.32	2.41	6.41	31,602	0.00137	0.0088
Corteva, Inc.	CTVA	18.25	1.27	1.50	19.75	35,136	0.00152	0.0300
Costco Wholesale	COST	8.64	0.90	0.98	9.62	145,717	0.00629	0.0605
Crown Castle Int'l	CCI	19.60	3.38	4.04	23.64	71,098	0.00307	0.0726
CSX Corp.	CSX	15.38	1.22	1.41	16.79	70,259	0.00304	0.0510
Cummins Inc.	CMI	14.98	2.00	2.30	17.28	39,934	0.00173	0.0298
CVS Health	CVS	3.77	2.70	2.80	6.57	96,879	0.00418	0.0275
Danaher Corp.	DHR	12.19	0.39	0.44	12.63	152,254	0.00658	0.0831
Discover Fin'l Svcs.	DFS	6.27	1.78	1.89	8.16	30,368	0.00131	0.0107
Dollar General	DG	13.57	0.77	0.87	14.44	45,940	0.00198	0.0287
Dominion Energy	D	2.78	3.44	3.54	6.32	58,975	0.00255	0.0161
Domino's Pizza	DPZ	10.43	1.03	1.14	11.57	14,119	0.00061	0.0071
Dover Corp.	DOV	9.50	1.45	1.59	11.09	19,731	0.00085	0.0095
DTE Energy	DTE	6.05	3.45	3.66	9.71	25,099	0.00108	0.0105
Duke Energy	DUK	4.99	4.25	4.46	9.45	67,602	0.00292	0.0276
Duke Realty Corp.	DRE	6.00	2.52	2.67	8.67	15,204	0.00066	0.0057
Eastman Chemical	EMN	3.83	2.45	2.54	6.37	15,237	0.00066	0.0042
Eaton Corp. plc	ETN	15.69	2.20	2.55	18.24	55,007	0.00238	0.0433
eBay Inc.	EBAY	18.79	1.22	1.45	20.24	40,356	0.00174	0.0353
Ecolab Inc.	ECL	17.07	0.92	1.08	18.15	59,709	0.00258	0.0468
Electronic Arts	EA	14.52	0.52	0.60	15.12	37,671	0.00163	0.0246
Emerson Electric	EMR	9.63	2.24	2.46	12.09	54,294	0.00235	0.0283
Entergy Corp.	ETR	5.50	3.96	4.18	9.68	19,812	0.00086	0.0083
Equifax, Inc.	EFX	10.63	0.91	1.01	11.64	20,914	0.00090	0.0105
Equity Residential	EQR	6.10	3.26	3.46	9.56	27,459	0.00119	0.0113
Essex Property Trust	ESS	7.90	2.98	3.22	11.12	18,908	0.00082	0.0091
Evergy, Inc.	EVRG	5.65	3.77	3.98	9.63	13,243	0.00057	0.0055
Eversource Energy	ES	7.05	2.94	3.15	10.20	28,102	0.00121	0.0124

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Expeditors Int'l	EXPD	4.20	1.01	1.05	5.25	17,355	0.00075	0.0039
Extra Space Storage	EXR	6.00	3.05	3.23	9.23	17,013	0.00073	0.0068
Exxon Mobil Corp.	XOM	10.59	5.86	6.48	17.07	251,313	0.01086	0.1853
Fastenal Co.	FAST	8.04	2.31	2.50	10.54	27,795	0.00120	0.0127
Federal Rlty. Inv. Trust	FRT	6.70	4.07	4.34	11.04	8,035	0.00035	0.0038
Fidelity Nat'l Info.	FIS	13.97	1.08	1.23	15.20	89,850	0.00388	0.0590
First Republic Bank	FRC	10.99	0.49	0.54	11.53	29,279	0.00126	0.0146
FLIR Systems	FLIR	6.40	1.23	1.31	7.71	7,241	0.00031	0.0024
FlowsERVE Corp.	FLS	7.53	1.98	2.13	9.66	5,246	0.00023	0.0022
FMC Corp.	FMC	9.00	1.79	1.95	10.95	14,147	0.00061	0.0067
Fortive Corp.	FTV	7.05	0.41	0.44	7.49	22,754	0.00098	0.0074
Fortune Brands Home	FBHS	9.25	1.14	1.25	10.50	12,667	0.00055	0.0057
Fox Corp. 'A'	FOXA	3.55	1.07	1.11	4.66	25,388	0.00110	0.0051
Fox Corp. 'B'	FOX	9.20	1.14	1.24	10.44	-	-	0.0000
Franklin Resources	BEN	4.88	3.70	3.88	8.76	15,296	0.00066	0.0058
Gallagher (Arthur J.)	AJG	9.58	1.50	1.64	11.22	24,877	0.00107	0.0121
Garmin Ltd.	GRMN	6.37	2.12	2.26	8.63	24,108	0.00104	0.0090
Gen'l Dynamics	GD	4.83	2.68	2.81	7.64	50,818	0.00220	0.0168
Gen'l Mills	GIS	4.16	3.50	3.65	7.81	36,311	0.00157	0.0122
Genuine Parts	GPC	4.60	2.84	2.97	7.57	16,539	0.00071	0.0054
Gilead Sciences	GILD	3.26	4.41	4.55	7.81	80,783	0.00349	0.0273
Global Payments	GPN	9.73	0.37	0.41	10.14	63,590	0.00275	0.0278
Globe Life Inc.	GL	7.37	0.75	0.81	8.18	10,559	0.00046	0.0037
Goldman Sachs	GS	16.53	1.45	1.69	18.22	118,687	0.00513	0.0934
Grainger (W.W.)	GWV	12.65	1.55	1.75	14.40	21,012	0.00091	0.0131
Halliburton Co.	HAL	15.50	0.77	0.89	16.39	20,665	0.00089	0.0146
Hanesbrands, Inc.	HBI	4.66	2.97	3.11	7.77	7,042	0.00030	0.0024
Hartford Fin'l Svcs.	HIG	4.42	2.44	2.55	6.97	20,566	0.00089	0.0062
Hasbro, Inc.	HAS	17.50	2.86	3.36	20.86	13,014	0.00056	0.0117

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Company Name		5-Year EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
HCA Healthcare	HCA	12.25	1.03	1.16	13.41	62,768	0.00271	0.0363
Healthpeak Properties	PEAK	2.50	3.69	3.78	6.28	16,415	0.00071	0.0045
Henry (Jack) & Assoc.	JKHY	10.02	1.22	1.34	11.36	11,467	0.00050	0.0056
Hershey Co.	HSY	7.60	2.08	2.24	9.84	32,184	0.00139	0.0137
Hewlett Packard Ent.	HPE	12.51	2.99	3.36	15.87	20,847	0.00090	0.0143
Home Depot	HD	8.37	2.36	2.56	10.93	301,312	0.01302	0.1422
Honeywell Int'l	HON	8.81	1.75	1.90	10.71	148,439	0.00641	0.0687
Hormel Foods	HRL	3.70	2.04	2.12	5.82	25,893	0.00112	0.0065
Horton D.R.	DHI	17.90	0.93	1.10	19.00	31,634	0.00137	0.0260
HP Inc.	HPQ	15.07	2.54	2.92	17.99	38,517	0.00166	0.0299
Humana Inc.	HUM	12.28	0.69	0.77	13.05	53,263	0.00230	0.0300
Huntington Ingalls	HII	0.38	2.30	2.31	2.69	8,017	0.00035	0.0009
IDEX Corp.	IEX	11.50	1.01	1.13	12.63	14,922	0.00064	0.0081
IHS Markit	INFO	11.45	0.83	0.93	12.38	37,993	0.00164	0.0203
Illinois Tool Works	ITW	7.15	2.07	2.22	9.37	69,598	0.00301	0.0282
Int'l Business Mach.	IBM	6.09	5.05	5.36	11.45	115,179	0.00498	0.0570
Int'l Flavors & Frag.	IFF	10.00	2.26	2.49	12.49	14,741	0.00064	0.0080
Intel Corp.	INTC	5.43	2.11	2.22	7.65	267,198	0.01154	0.0884
Intercontinental Exch.	ICE	10.73	1.16	1.28	12.01	63,786	0.00276	0.0331
Interpublic Group	IPG	5.05	3.61	3.79	8.84	11,664	0.00050	0.0045
Intuit Inc.	INTU	13.05	0.63	0.71	13.76	102,575	0.00443	0.0610
Invesco Ltd.	IVZ	2.70	2.43	2.50	5.20	11,718	0.00051	0.0026
Iron Mountain	IRM	1.70	6.85	6.97	8.67	10,429	0.00045	0.0039
Jacobs Engineering	J	11.88	0.67	0.75	12.63	16,296	0.00070	0.0089
Johnson & Johnson	JNJ	5.60	2.51	2.65	8.25	423,173	0.01828	0.1508
Johnson Ctrls. Int'l plc	JCI	14.31	1.78	2.03	16.34	43,591	0.00188	0.0308
JPMorgan Chase	JPM	1.28	2.32	2.35	3.63	472,746	0.02042	0.0741
Juniper Networks	JNPR	6.65	3.23	3.44	10.09	8,324	0.00036	0.0036
Kansas City South'n	KSU	16.49	0.97	1.13	17.62	20,312	0.00088	0.0155

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Kellogg	K	2.93	3.81	3.92	6.85	20,753	0.00090	0.0061
KeyCorp	KEY	11.40	3.63	4.04	15.44	19,886	0.00086	0.0133
Kimberly-Clark	KMB	3.40	3.44	3.56	6.96	44,898	0.00194	0.0135
Kimco Realty	KIM	4.60	3.51	3.67	8.27	8,382	0.00036	0.0030
Kinder Morgan Inc.	KMI	1.13	6.47	6.54	7.67	36,726	0.00159	0.0122
KLA Corp.	KLAC	15.81	1.18	1.37	17.18	47,079	0.00203	0.0349
Kroger Co.	KR	7.60	2.04	2.20	9.80	27,024	0.00117	0.0114
L Brands	LB	14.02	0.98	1.12	15.14	16,991	0.00073	0.0111
L3Harris Technologies	LHX	12.88	2.12	2.39	15.27	41,653	0.00180	0.0275
Lamb Weston Holdings	LW	9.05	1.18	1.29	10.34	11,820	0.00051	0.0053
Leggett & Platt	LEG	5.20	3.31	3.48	8.68	6,410	0.00028	0.0024
Leidos Hldgs.	LDOS	9.93	1.40	1.54	11.47	13,815	0.00060	0.0068
Lennar Corp.	LEN	10.70	1.01	1.12	11.82	31,567	0.00136	0.0161
Lilly (Eli)	LLY	11.60	1.82	2.03	13.63	178,624	0.00772	0.1052
Linde plc	LIN	11.71	1.61	1.80	13.51	141,475	0.00611	0.0826
Lockheed Martin	LMT	6.08	3.02	3.20	9.28	97,935	0.00423	0.0393
Loews Corp.	L	14.03	0.48	0.55	14.58	14,039	0.00061	0.0088
Lowe's Cos.	LOW	13.74	1.43	1.63	15.37	131,179	0.00567	0.0871
Lumen Technologies	LUMN	3.00	7.07	7.28	10.28	15,510	0.00067	0.0069
M&T Bank Corp.	MTB	13.40	2.88	3.27	16.67	19,610	0.00085	0.0141
MarketAxess Holdings	MKTX	10.47	0.51	0.56	11.03	19,497	0.00084	0.0093
Marsh & McLennan	MMC	8.94	1.59	1.73	10.67	60,012	0.00259	0.0277
Martin Marietta	MLM	8.85	0.68	0.74	9.59	21,182	0.00092	0.0088
Masco Corp.	MAS	10.25	1.65	1.82	12.07	14,723	0.00064	0.0077
MasterCard Inc.	MA	14.91	0.47	0.54	15.45	376,787	0.01628	0.2515
McCormick & Co.	MKC	6.00	1.57	1.66	7.66	23,120	0.00100	0.0077
McDonald's Corp.	MCD	18.20	2.33	2.75	20.95	167,052	0.00722	0.1512
McKesson Corp.	MCK	10.36	0.90	0.99	11.35	29,766	0.00129	0.0146
Medtronic plc	MDT	9.08	2.02	2.20	11.28	159,528	0.00689	0.0778

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Merck & Co.	MRK	8.70	3.36	3.65	12.35	195,586	0.00845	0.1044
MetLife Inc.	MET	4.20	3.06	3.19	7.39	54,470	0.00235	0.0174
Microchip Technology	MCHP	11.80	1.02	1.14	12.94	41,417	0.00179	0.0232
Microsoft Corp.	MSFT	16.70	0.94	1.10	17.80	1,788,704	0.07727	1.3751
Mid-America Apartment	MAA	7.00	2.82	3.02	10.02	16,619	0.00072	0.0072
Mondelez Int'l	MDLZ	9.45	2.28	2.50	11.95	82,817	0.00358	0.0427
Moody's Corp.	MCO	9.94	0.85	0.93	10.87	55,057	0.00238	0.0259
Morgan Stanley	MS	4.03	1.67	1.74	5.77	132,201	0.00571	0.0329
Mosaic Company	MOS	7.00	0.74	0.79	7.79	12,844	0.00055	0.0043
Motorola Solutions	MSI	5.88	1.57	1.66	7.54	30,719	0.00133	0.0100
MSCI Inc.	MSCI	14.37	0.83	0.95	15.32	34,310	0.00148	0.0227
Nasdaq, Inc.	NDAQ	6.46	1.36	1.45	7.91	23,754	0.00103	0.0081
NetApp, Inc.	NTAP	7.66	2.92	3.14	10.80	15,869	0.00069	0.0074
Newell Brands	NWL	2.03	3.56	3.63	5.66	10,983	0.00047	0.0027
NextEra Energy	NEE	8.58	2.11	2.29	10.87	143,002	0.00618	0.0672
Nielsen Hldgs. plc	NLSN	5.30	0.90	0.95	6.25	9,500	0.00041	0.0026
NiSource Inc.	NI	4.37	3.75	3.91	8.28	8,984	0.00039	0.0032
Norfolk Southern	NSC	14.30	1.53	1.75	16.05	65,081	0.00281	0.0451
Northern Trust Corp.	NTRS	6.83	2.68	2.86	9.69	21,765	0.00094	0.0091
Northrop Grumman	NOC	5.44	1.87	1.97	7.41	51,777	0.00224	0.0166
Nucor Corp.	NUE	7.65	2.31	2.49	10.14	21,207	0.00092	0.0093
NXP Semiconductors	NXPI	16.76	1.08	1.26	18.02	58,434	0.00252	0.0455
Old Dominion Freight	ODFL	15.89	0.36	0.42	16.31	26,742	0.00116	0.0188
Omnicom Group	OMC	9.80	3.64	4.00	13.80	16,540	0.00071	0.0099
Oracle Corp.	ORCL	12.20	1.93	2.17	14.37	191,707	0.00828	0.1190
Otis Worldwide	OTIS	8.99	1.17	1.28	10.27	29,723	0.00128	0.0132
Packaging Corp.	PKG	5.97	2.97	3.15	9.12	12,791	0.00055	0.0050
Parker-Hannifin	PH	13.73	1.12	1.27	15.00	40,618	0.00175	0.0263
Paychex, Inc.	PAYX	4.50	2.69	2.81	7.31	35,335	0.00153	0.0112

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

**Docket No. PU-20-441
Attach. ___ MFG-18 Sch 6
Page 17 of 19**

Company Name		5-Year EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Pentair plc	PNR	7.90	1.30	1.40	9.30	10,188	0.00044	0.0041
People's United Fin'l	PBCT	13.73	4.03	4.58	18.31	7,593	0.00033	0.0060
PepsiCo, Inc.	PEP	9.20	3.06	3.34	12.54	184,796	0.00798	0.1001
PerkinElmer Inc.	PKI	17.20	0.22	0.26	17.46	14,140	0.00061	0.0107
Perrigo Co. plc	PRGO	10.00	2.41	2.65	12.65	5,520	0.00024	0.0030
Pfizer, Inc.	PFE	10.07	4.36	4.80	14.87	199,243	0.00861	0.1280
Philip Morris Int'l	PM	11.42	5.38	5.99	17.41	138,918	0.00600	0.1045
Pinnacle West Capital	PNW	3.50	4.32	4.47	7.97	8,931	0.00039	0.0031
Pool Corp.	POOL	17.00	0.68	0.80	17.80	13,620	0.00059	0.0105
PPG Inds.	PPG	8.56	1.47	1.60	10.16	34,618	0.00150	0.0152
Price (T. Rowe) Group	TROW	13.05	2.47	2.79	15.84	39,552	0.00171	0.0271
Principal Fin'l Group	PFG	9.77	3.72	4.08	13.85	16,544	0.00071	0.0099
Procter & Gamble	PG	9.13	2.46	2.68	11.81	316,231	0.01366	0.1614
Prudential Fin'l	PRU	6.34	4.94	5.25	11.59	36,846	0.00159	0.0185
Public Serv. Enterprise	PEG	2.55	3.49	3.58	6.13	29,479	0.00127	0.0078
Public Storage	PSA	17.00	3.31	3.87	20.87	42,150	0.00182	0.0380
PulteGroup, Inc.	PHM	13.80	1.12	1.27	15.07	13,587	0.00059	0.0088
Quanta Services	PWR	14.96	0.27	0.31	15.27	12,161	0.00053	0.0080
Quest Diagnostics	DGX	9.22	2.01	2.20	11.42	16,375	0.00071	0.0081
Raymond James Fin'l	RJF	11.26	1.30	1.45	12.71	16,524	0.00071	0.0091
Realty Income Corp.	O	5.45	4.51	4.76	10.21	21,312	0.00092	0.0094
Regency Centers Corp.	REG	9.10	4.09	4.46	13.56	9,744	0.00042	0.0057
Republic Services	RSG	7.70	1.86	2.00	9.70	33,395	0.00144	0.0140
Robert Half Int'l	RHI	2.70	2.01	2.06	4.76	8,640	0.00037	0.0018
Rockwell Automation	ROK	10.60	1.66	1.84	12.44	30,344	0.00131	0.0163
Rollins, Inc.	ROL	8.20	0.98	1.06	9.26	16,061	0.00069	0.0064
Roper Tech.	ROP	9.70	0.57	0.63	10.33	41,283	0.00178	0.0184
S&P Global	SPGI	11.83	0.88	0.98	12.81	84,256	0.00364	0.0466
Schwab (Charles)	SCHW	9.36	1.14	1.25	10.61	118,347	0.00511	0.0542

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

**Docket No. PU-20-441
Attach. ____ MFG-18 Sch 6
Page 18 of 19**

Company Name		5-Year EPS Growth Rate	Dividend Yield	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Seagate Technology	STX	6.74	3.44	3.67	10.41	18,696	0.00081	0.0084
Sealed Air	SEE	7.60	1.40	1.51	9.11	7,061	0.00031	0.0028
Sempra Energy	SRE	6.10	3.47	3.68	9.78	37,354	0.00161	0.0158
Sherwin-Williams	SHW	10.13	0.97	1.07	11.20	63,798	0.00276	0.0309
Simon Property Group	SPG	8.60	4.40	4.78	13.38	36,283	0.00157	0.0210
Skyworks Solutions	SWKS	11.95	1.09	1.22	13.17	30,145	0.00130	0.0172
Smith (A.O.)	AOS	8.00	1.56	1.68	9.68	10,793	0.00047	0.0045
Snap-on Inc.	SNA	7.95	2.21	2.39	10.34	12,054	0.00052	0.0054
Southern Co.	SO	6.49	4.32	4.60	11.09	64,127	0.00277	0.0307
Stanley Black & Decker	SWK	9.92	1.46	1.60	11.52	34,484	0.00149	0.0172
State Street Corp.	STT	15.22	2.45	2.82	18.04	29,934	0.00129	0.0233
STERIS plc	STE	10.00	0.86	0.95	10.95	15,959	0.00069	0.0075
Stryker Corp.	SYK	12.39	1.07	1.20	13.59	88,756	0.00383	0.0521
Synchrony Financial	SYF	3.05	2.04	2.10	5.15	25,184	0.00109	0.0056
Target Corp.	TGT	9.94	1.52	1.67	11.61	89,335	0.00386	0.0448
TE Connectivity	TEL	11.00	1.50	1.67	12.67	44,297	0.00191	0.0242
Teleflex Inc.	TFX	11.00	0.33	0.37	11.37	19,393	0.00084	0.0095
Teradyne Inc.	TER	12.76	0.34	0.38	13.14	19,505	0.00084	0.0111
Texas Instruments	TXN	10.00	2.28	2.51	12.51	164,886	0.00712	0.0891
Thermo Fisher Sci.	TMO	4.12	0.23	0.24	4.36	175,422	0.00758	0.0330
Tractor Supply	TSCO	11.08	1.24	1.38	12.46	19,575	0.00085	0.0105
Trane Technologies plc	TT	12.56	1.42	1.60	14.16	39,633	0.00171	0.0242
Travelers Cos.	TRV	5.22	2.15	2.26	7.48	39,859	0.00172	0.0129
Tyson Foods 'A'	TSN	4.45	2.33	2.43	6.88	27,879	0.00120	0.0083
U.S. Bancorp	USB	6.00	3.08	3.26	9.26	82,083	0.00355	0.0329
Union Pacific	UNP	12.91	1.83	2.07	14.98	142,528	0.00616	0.0922
United Parcel Serv.	UPS	10.06	2.61	2.87	12.93	138,737	0.00599	0.0775
UnitedHealth Group	UNH	12.41	1.42	1.60	14.01	334,219	0.01444	0.2022
Universal Health 'B'	UHS	6.03	0.58	0.61	6.64	11,796	0.00051	0.0034

**ROE and ROR for NSPM
CAPM Analysis
Market Return**

**Docket No. PU-20-441
Attach. _____ MFG-18 Sch 6
Page 19 of 19**

Company Name		5-Year EPS Growth Rate (%)	Dividend Yield (%)	Expected Dividend Yield (%)	Rate of Return on Equity (%)	Market Cap \$ (Mil)	Market Cap Weight Factor	Rate of Return on Equity (%)
Unum Group	UNM	1.37	4.03	4.09	5.46	5,753	0.00025	0.0014
V.F. Corp.	VFC	9.89	2.50	2.75	12.64	30,634	0.00132	0.0167
Verisk Analytics	VRSK	10.32	0.68	0.75	11.07	27,983	0.00121	0.0134
Verizon Communic.	VZ	3.29	4.56	4.71	8.00	230,699	0.00997	0.0797
Visa Inc.	V	13.84	0.58	0.66	14.50	435,335	0.01881	0.2727
Vornado R'lty Trust	VNO	17.33	4.38	5.14	22.47	9,261	0.00040	0.0090
Vulcan Materials	VMC	13.65	0.88	1.00	14.65	22,346	0.00097	0.0141
Wabtec Corp.	WAB	7.30	0.62	0.67	7.97	14,507	0.00063	0.0050
Walgreens Boots	WBA	3.63	3.46	3.59	7.22	46,737	0.00202	0.0146
Walmart Inc.	WMT	6.29	1.66	1.76	8.05	374,485	0.01618	0.1303
Waste Management	WM	11.17	1.93	2.15	13.32	50,284	0.00217	0.0289
WEC Energy Group	WEC	6.10	3.16	3.35	9.45	27,585	0.00119	0.0113
Welltower Inc.	WELL	13.00	3.31	3.74	16.74	30,232	0.00131	0.0219
Western Union	WU	9.25	3.62	3.95	13.20	10,222	0.00044	0.0058
Weyerhaeuser Co.	WY	5.00	1.88	1.97	6.97	27,018	0.00117	0.0081
Whirlpool Corp.	WHR	3.00	2.31	2.38	5.38	13,409	0.00058	0.0031
Williams Cos.	WMB	5.00	7.01	7.36	12.36	28,360	0.00123	0.0151
Willis Towers Wat. plc	WLTW	5.66	1.28	1.35	7.01	28,589	0.00123	0.0087
Xcel Energy Inc.	XEL	6.30	2.92	3.10	9.40	33,692	0.00146	0.0137
Xylem Inc.	XYL	18.16	1.07	1.26	19.42	18,797	0.00081	0.0158
Yum! Brands	YUM	12.61	1.80	2.03	14.64	33,306	0.00144	0.0211
Zimmer Biomet Hldgs.	ZBH	11.29	0.62	0.69	11.98	33,276	0.00144	0.0172
Zoetis Inc.	ZTS	11.43	0.64	0.71	12.14	74,230	0.00321	0.0389

23,149,319 1.00 13.17

**Weighted Rate of Return
on Equity (%)**

ROE and ROR Analysis for NSPM

CAPM Analysis

Size Premia

Duff & Phelps 2020 Cost of Capital Navigator

2020 CRSP Deciles Size Study -- Supplementary Data Exhibits

Docket No. PU-20-441

Attachment ____ MFG-18, Schedule 7

Decile	2019	
	Minimum Market Cap (millions)	Size Premium
1	\$ 31,090.379	-0.28%
2	\$ 13,142.606	0.50%
3	\$ 6,618.604	0.73%
4	\$ 4,312.546	0.79%
5	\$ 2,688.889	1.10%
6	\$ 1,669.856	1.34%
7	\$ 993.855	1.47%
8	\$ 515.621	1.59%
9	\$ 230.024	2.22%
10	\$ 1.973	4.99%

ROE and ROR Analysis for NSPM

CAPM Analysis

Moody's 10-Year Baa Corporate Bonds Index March 15-April 9, 2021

Downloaded April 15, 2021

Docket No. PU-20-441

Attachment ____ MFG-18, Schedule 8

S&P Global

Market Intelligence

Chart Builder

Entities: Moodys Bond Yield Avg - BAA Rated Corporates

Metrics: Index Value

SERIES NAME	CATEGORY	AVERAGE
Moodys Bond Yield Avg - 10-Year BAA Rated Corporates Market Data		3.75

Pricing Date	Moodys Bond Yield Avg - BAA Rated Corporates-Index Value (Daily)
4/8/2021	3.62
4/7/2021	3.64
4/6/2021	3.62
4/5/2021	3.66
4/1/2021	3.67
3/31/2021	3.77
3/30/2021	3.81
3/29/2021	3.81
3/26/2021	3.74
3/25/2021	3.74
3/24/2021	3.72
3/23/2021	3.74
3/22/2021	3.77
3/19/2021	3.84
3/18/2021	3.88
3/17/2021	3.86
3/16/2021	3.81
3/15/2021	3.80
	3.75

ROE and ROR Analysis for NSPM

CAPM ROE Analysis

Constant-Growth Market Return for Comparison Group

Docket No. PU-20-441

Attachment ___ MFG-18, Schedule 9

	A	B	C	D	E	F	G	H	I	J
	Market Return	Rf	MRP	Beta	RP	Unadjusted ROE	Market Cap (millions)	Size Adj.	Adjusted ROE	Filtered Results
Alliant Energy Corporation	12.63%	2.37%	10.26%	0.85	8.72%	11.09%	13,590	0.50%	11.59%	11.59%
Ameren Corporation	12.63%	2.37%	10.26%	0.80	8.21%	10.58%	20,593	0.50%	11.08%	11.08%
American Electric Power Co.	12.63%	2.37%	10.26%	0.75	7.70%	10.07%	43,050	-0.28%	9.79%	9.79%
CMS Energy Corporation	12.63%	2.37%	10.26%	0.75	7.70%	10.07%	17,665	0.50%	10.57%	10.57%
Consolidated Edison, Inc.	12.63%	2.37%	10.26%	0.75	7.70%	10.07%	25,778	0.50%	10.57%	10.57%
Dominion Energy	12.63%	2.37%	10.26%	0.80	8.21%	10.58%	61,433	-0.28%	10.30%	10.30%
Duke Energy	12.63%	2.37%	10.26%	0.85	8.72%	11.09%	75,224	-0.28%	10.81%	10.81%
Entergy Corporation	12.63%	2.37%	10.26%	0.95	9.75%	12.12%	20,368	0.50%	12.62%	12.62%
Evergy, Inc.	12.63%	2.37%	10.26%	0.95	9.75%	12.12%	13,895	0.50%	12.62%	12.62%
Eversource Energy	12.63%	2.37%	10.26%	0.90	9.23%	11.60%	30,043	0.50%	12.10%	12.10%
NextEra Energy	12.63%	2.37%	10.26%	0.90	9.23%	11.60%	151,724	-0.28%	11.32%	11.32%
OGE Energy Corp.	12.63%	2.37%	10.26%	1.05	10.77%	13.14%	6,601	0.79%	13.93%	13.93%
Pinnacle West Capital Corp.	12.63%	2.37%	10.26%	0.90	9.23%	11.60%	9,276	0.73%	12.33%	12.33%
Portland General Electric Co.	12.63%	2.37%	10.26%	0.90	9.23%	11.60%	4,344	0.79%	12.39%	12.39%
Southern Co.	12.63%	2.37%	10.26%	0.95	9.75%	12.12%	66,346	-0.28%	11.84%	11.84%
WEC Energy Group, Inc.	12.63%	2.37%	10.26%	0.80	8.21%	10.58%	29,467	0.50%	11.08%	11.08%
			Mean	0.867		Mean			Mean	w/ Flot.
						11.25%			11.56%	11.71%
					Median	11.35%		Median	11.46%	11.61%

A: MFG-18, Sch 4

B: MFG-18, Sch 1

C: A - B

D: MFG-18, Sch 2

E: C * D

F: B + E

G: Value Line, Investment Analyzer, April 13, 2021

H: 2019 Duff & Phelps Valuation Handbook, MFG-18, Sch 7

I: F + H

J: Low-end test < Column I < High-end test

Low-End Test:	Moody's 10-Year Baa Corporate Bond Index. See Attachment ___ MFG-18, Schedule 8	3.75%
	CAPM Risk Premium, Column C	10.26%
	20 percent of CAPM risk premium	2.05%
	Moody's 10-Year Baa Public Utilities Bond Index + 20 percent of CAPM risk premium	5.80%
High-End Test:	Proxy Group median, Column J	11.46%
	150 percent of Proxy Group median	17.19%
	200 percent of Proxy Group median	22.92%

ROE and ROR Analysis for NSPM
 CAPM ROE Analysis
 Multistage Market Return for Comparison Group

Docket No. PU-20-441
 Attachment ___ MFG-18, Schedule 10

	A	B	C	D	E	F	G	H	I	J
	Market	Rf	MRP	Beta	RP	Unadjusted	Market Cap	Size Adj.	Adjusted	Filtered
	Return					ROE	(millions)		ROE	Results
Alliant Energy Corporation	10.19%	2.37%	7.82%	0.85	6.65%	9.02%	13,590	0.50%	9.52%	9.52%
Ameren Corporation	10.19%	2.37%	7.82%	0.80	6.26%	8.63%	20,593	0.50%	9.13%	9.13%
American Electric Power Co.	10.19%	2.37%	7.82%	0.75	5.87%	8.24%	43,050	-0.28%	7.96%	7.96%
CMS Energy Corporation	10.19%	2.37%	7.82%	0.75	5.87%	8.24%	17,665	0.50%	8.74%	8.74%
Consolidated Edison, Inc.	10.19%	2.37%	7.82%	0.75	5.87%	8.24%	25,778	0.50%	8.74%	8.74%
Dominion Energy	10.19%	2.37%	7.82%	0.80	6.26%	8.63%	61,433	-0.28%	8.35%	8.35%
Duke Energy	10.19%	2.37%	7.82%	0.85	6.65%	9.02%	75,224	-0.28%	8.74%	8.74%
Entergy Corporation	10.19%	2.37%	7.82%	0.95	7.43%	9.80%	20,368	0.50%	10.30%	10.30%
Evergy, Inc.	10.19%	2.37%	7.82%	0.95	7.43%	9.80%	13,895	0.50%	10.30%	10.30%
Eversource Energy	10.19%	2.37%	7.82%	0.90	7.04%	9.41%	30,043	0.50%	9.91%	9.91%
NextEra Energy	10.19%	2.37%	7.82%	0.90	7.04%	9.41%	151,724	-0.28%	9.13%	9.13%
OGE Energy Corp.	10.19%	2.37%	7.82%	1.05	8.21%	10.58%	6,601	0.79%	11.37%	11.37%
Pinnacle West Capital Corp.	10.19%	2.37%	7.82%	0.90	7.04%	9.41%	9,276	0.73%	10.14%	10.14%
Portland General Electric Co.	10.19%	2.37%	7.82%	0.90	7.04%	9.41%	4,344	0.79%	10.20%	10.20%
Southern Co.	10.19%	2.37%	7.82%	0.95	7.43%	9.80%	66,346	-0.28%	9.52%	9.52%
WEC Energy Group, Inc.	10.19%	2.37%	7.82%	0.80	6.26%	8.63%	29,467	0.50%	9.13%	9.13%
			Mean	0.867						w/ Flot.
					Mean	9.14%		Mean	9.45%	9.60%
					Median	9.21%		Median	9.32%	9.47%

A: MFG-18, Sch 6
 B: MFG-18, Sch 1
 C: A - B
 D: MFG-18, Sch 2
 E: C * D

F: B + E
 G: Value Line, Investment Analyzer, April 13, 2021
 H: 2019 Duff & Phelps Valuation Handbook, MFG-18, Sch 7
 I: F + H
 J: Low-end test < Column I < High-end test

Low-End Test:	Moody's 10-Year Baa Corporate Bond Index. See Attachment ___ MFG-18, Schedule 8	3.75%
	CAPM Risk Premium, Column C	7.82%
	20 percent of CAPM risk premium	1.56%
	Moody's 10-Year Baa Corporate Bond Index + 20 percent of CAPM risk premium	5.31%
High-End Test:	Proxy Group median, Column J	9.32%
	150 percent of Proxy Group median	13.98%
	200 percent of Proxy Group median	18.65%

ROE and ROR Analysis for NSPM								Docket No. PU-20-441	
Summary of Authorized ROEs in Fully Litigated Electric Rate Cases								Attachment (MFG-19)	
January 1, 2019-March 31, 2021									
Source: SNL Regulatory Research Associates Past Rate Cases: https://platform.mi.spglobal.com/web/client?auth=inherit#industry/pastRateCases?Type=1									
State	Company	Docket	Rate Case Service Type	Case Type	Date Filed	Date of Decision	Decision Type	Return on Equity (%)	Common Equity to Total Capital
2021									
Kentucky	Kentucky Power Co.	C-2020-00174	Electric	Distribution	6/29/2020	1/13/2021	Fully Litigated	9.30	43.25
							Mean	9.30	43.25
							Median	9.30	43.25
							Range	9.30-9.30	43.25-43.25
								n = 1	n = 1
State	Company	Docket	Rate Case Service Type	Case Type	Date Filed	Date of Decision	Decision Type	Return on Equity (%)	Common Equity to Total Capital
2020									
Mass.	NSTAR Electric Co.	DPU 20-96	Electric	Distribution	9/15/2020	12/30/2020	Fully Litigated	NA	NA
Utah	PacifiCorp	D-20-035-04	Electric	Vertically Integrated	5/8/2020	12/30/2020	Fully Litigated	9.65	52.50
Wisconsin	Wisconsin Power and Light Co	D-6680-UR-122 (Elec)	Electric	Vertically Integrated	5/1/2020	12/23/2020	Fully Litigated	10.00	52.53
Arizona	Tucson Electric Power	D-E-01933A-19-0028	Electric	Vertically Integrated	4/1/2019	12/22/2020	Fully Litigated	9.15	
Oregon	PacifiCorp	D-UE-374	Electric	Vertically Integrated	2/14/2020	12/18/2020	Fully Litigated	9.50	50.00
Michigan	Consumers Energy Co.	C-U-20697	Electric	Vertically Integrated	2/27/2020	12/17/2020	Fully Litigated	9.90	NA
Maryland	Baltimore Gas and Electric	C-9645 (EL)	Electric	Distribution	5/15/2020	12/16/2020	Fully Litigated	9.50	52.00
Illinois	Ameren Illinois	D-20-0381	Electric	Distribution	4/14/2020	12/9/2020	Fully Litigated	8.38	50.00
Illinois	Commonwealth Edison Co.	D-20-0393	Electric	Distribution	4/16/2020	12/9/2020	Fully Litigated	8.38	48.16
Virginia	Appalachian Power Co.	C-PUR-2020-00015	Electric	Vertically Integrated	3/31/2020	11/24/2020	Fully Litigated	9.20	NA

Illinois	Ameren Illinois	D-19-0436	Electric	Distribution	4/18/2019	12/16/2019	Fully Litigated	8.91	12/2018	
Illinois	Commonwealth Edison	D-19-0387	Electric	Distribution	4/8/2019	12/4/2019	Fully Litigated	8.91	12/2018	
Louisiana	Entergy New Orleans LLC	D-UD-18-07 (elec.)	Electric	Vertically Integrated	9/21/2018	11/7/2019	Fully Litigated	9.35	NA	
Mass.	Massachusetts Electric	DPU-18-150	Electric	Distribution	11/15/2018	9/30/2019	Fully Litigated	9.60	12/2017	
California	SD Gas & Electric Co.	A-17-10-007 (Elec)	Electric	Vertically Integrated	10/6/2017	9/26/2019	Fully Litigated	NA	12/2019	
Vermont	Green Mountain	C-19-1932-TF	Electric	Vertically Integrated	6/13/2019	8/29/2019	Fully Litigated	9.06	09/2020	
Maryland	Potomac Electric Power	C-9602	Electric	Distribution	1/15/2019	8/12/2019	Fully Litigated	9.60	01/2019	
California	Southern California	A-16-09-001	Electric	Vertically Integrated	8/19/2018	5/16/2019	Fully Litigated	NA	12/2018	
South Dakota	Otter Tail Power Co.	D-EL18-021	Electric	Vertically Integrated	8/20/2018	5/14/2019	Fully Litigated	8.75	12/2017	
South Carolina	Duke Energy Progress LLC	D-2018-318-E	Electric	Vertically Integrated	8/21/2018	5/8/2019	Fully Litigated	9.50	12/2017	
Michigan	DTE Electric Co.	C-U-20162	Electric	Vertically Integrated	8/22/2018	5/2/2019	Fully Litigated	10.00	04/2020	
South Carolina	Duke Energy Carolinas LLC	D-2018-319-E	Electric	Vertically Integrated	8/23/2018	5/1/2019	Fully Litigated	9.50	12/2017	
Maryland	Potomac Edison Co.	C-9490	Electric	Distribution	8/24/2018	3/22/2019	Fully Litigated	9.65	06/2018	
							Mean	9.61		
							Median	9.60		
							Range	8.75-10.50		
								n = 15		

**ROE and ROR Analysis for NSPM
Summary of ROE Analyses and Recommended ROE**

**Docket No. PU-20-441
Attachment ____ (MFG-20)
Schedule 1**

Analysis	No. of Companies	ROE			Exhibit
		Mean	Median		
Constant-Growth DCF	16	9.83%	9.60%		Attachment ____ (MFG-17) Schedule 1
Multistage DCF	16	9.26%	9.19%		Attachment ____ (MFG-17) Schedule 7
		Mean	Median		
CAPM	16	11.71%	11.61%		Attachment ____ (MFG-18), Sch 9
Multistage CAPM	16	9.60%	9.47%		Attachment ____ (MFG-18), Sch 10
	Year	Mean	Median	Range	
Recently awarded ROEs	2021	9.30	9.30	9.30-9.30	Attachment ____ (MFG-19)
	2020	9.41	9.60	8.25-10.00	
	2019	9.61	9.60	8.75-10.50	
		Mean	Median		
Mean-Median Analysis	DCF	9.83%	9.60%		
	Multistage DCF	9.26%	9.19%		
	CAPM	11.71%	11.61%		
	Multistage CAPM	9.60%	9.47%		
			Mean	Median	
	DCF	9.83%	9.60%		
	DCF	9.26%	9.19%		
	CAPM	9.60%	9.47%		
	Mean	9.56%	9.42%		

Advocacy Staff Recommended ROE for NSPM 9.50%

S&P Global
Market Intelligence

S&P Market Intelligence website, downloaded April 15, 2021
In thousands of dollars

Average Long-Term Debt for each quarter

Company Name	2020Q4	2020Q3	2020Q2	2020Q1	2019Q4	2019Q3	2019Q2	2019Q1	Average 2019-2020
Alliant Energy Corporation	6,678,000	6,573,200	6,203,150	5,690,450	5,548,550	5,501,600	5,415,150	5,311,750	5,865,231
Ameren Corporation	10,625,000	10,171,500	9,774,500	9,161,000	8,812,500	8,465,500	8,250,000	8,054,500	9,164,313
American Electric Power Company, Inc.	29,350,900	28,086,100	26,922,750	26,314,950	25,859,600	25,413,650	24,607,250	22,938,750	26,186,744
Consolidated Edison, Inc.	20,581,500	19,988,500	20,092,500	19,780,000	18,846,500	18,337,000	18,038,500	17,627,000	19,161,438
CMS Energy Corporation	13,525,500	13,408,500	13,048,500	12,340,000	12,112,000	11,761,500	11,301,500	10,962,000	12,307,438
Dominion Energy, Inc.	33,809,000	35,145,500	35,880,500	34,440,500	31,720,000	35,540,500	37,165,500	34,211,500	34,739,125
Duke Energy Corporation	57,196,500	57,474,000	57,622,500	57,071,000	56,345,500	56,059,000	55,506,500	53,146,000	56,302,625
Energy Corporation	20,521,104	18,945,511	18,253,443	17,770,953	17,244,524	17,307,785	17,417,153	16,466,544	17,990,877
Eergy, Inc.	9,292,650	9,278,800	9,137,350	8,944,650	8,893,400	8,079,600	7,272,900	7,005,050	8,488,050
Eversource Energy	15,479,655	14,724,751	14,316,689	14,388,724	14,196,369	13,844,197	13,279,332	12,871,033	14,137,594
NextEra Energy, Inc.	42,701,500	42,730,500	41,891,500	39,606,500	37,120,500	35,045,500	31,915,000	28,434,500	
OGE Energy Corp.	3,515,300	3,493,650	3,344,500	3,215,200	3,238,150	3,241,450	3,093,750	2,921,500	3,257,938
Pinnacle West Capital Corporation	6,675,256	6,503,346	5,608,152	4,884,476	4,960,949	4,988,676	4,939,848	4,789,022	5,418,716
Portland General Electric Company	2,919,500	2,798,000	2,709,500	2,693,000	2,641,500	2,528,500	2,382,500	2,197,000	2,608,688
The Southern Company	46,917,500	46,950,000	46,297,000	44,629,000	43,556,000	42,541,500	41,780,500	41,456,500	44,266,000
WEC Energy Group, Inc.	11,706,500	11,187,050	10,958,150	11,221,350	11,092,050	10,448,600	10,165,750	10,182,200	10,870,206

S&P Global
Market Intelligence

S&P Market Intelligence website, downloaded April 15, 2021
In thousands of dollars

Average Short-Term Debt for each quarter

Company Name	2020Q4	2020Q3	2020Q2	2020Q1	2019Q4	2019Q3	2019Q2	2019Q1	Average 2019-2020
Alliant Energy Corporation	418,500	310,900	410,250	816,650	1,007,000	1,057,850	944,750	739,950	713,231
Ameren Corporation	563,500	553,000	724,500	930,500	888,500	1,115,000	1,242,000	1,159,500	897,063
American Electric Power Company, Inc.	4,704,950	4,997,900	6,129,400	5,768,400	4,428,300	3,975,550	3,749,700	3,670,100	4,678,038
Consolidated Edison, Inc.	3,909,500	3,873,500	3,620,000	3,290,500	3,238,000	3,231,000	3,352,000	3,365,500	3,485,000
CMS Energy Corporation	1,657,000	1,771,500	1,732,500	1,475,000	1,156,000	1,085,000	984,500	987,500	1,356,125
Dominion Energy, Inc.	4,182,000	4,331,500	4,259,500	4,620,500	5,333,000	6,136,000	5,262,000	4,792,500	4,864,625
Duke Energy Corporation	7,691,000	8,317,500	8,325,500	7,297,000	6,130,500	6,240,500	6,208,500	6,264,500	7,059,375
Entergy Corporation	2,655,325	2,799,727	3,161,533	2,988,831	2,653,730	2,175,082	2,002,789	2,375,504	2,601,565
Evergy, Inc.	1,059,000	1,050,450	1,265,250	1,300,850	1,131,900	1,831,300	2,513,650	2,133,450	1,535,731
Eversource Energy	1,771,059	1,209,783	1,237,370	1,253,888	1,445,341	1,591,288	1,950,129	2,070,355	1,566,151
NextEra Energy, Inc.	5,824,500	4,689,500	4,983,500	5,565,000	5,341,500	6,706,500	9,050,000	10,630,000	6,598,813
OGE Energy Corp.	47,500	37,500	225,000	246,600	143,500	188,150	286,950	308,200	185,425
Pinnacle West Capital Corporation	195,387	261,370	800,556	1,076,374	730,492	638,283	651,227	567,943	615,204
Portland General Electric Company	367,500	353,500	241,000	100,000	49,500	57,000	172,000	302,500	205,375
The Southern Company	4,570,500	3,900,000	3,382,500	4,511,000	4,678,500	4,429,000	4,283,000	4,952,500	4,338,375
WEC Energy Group, Inc.	1,966,650	1,736,850	1,814,000	1,524,950	1,455,900	1,708,450	1,774,400	1,660,200	1,705,175

S&P Global
Market Intelligence

S&P Market Intelligence website, downloaded April 15, 2021
In thousands of dollars

Average Common Equity for each quarter

Company Name	2020Q4	2020Q3	2020Q2	2020Q1	2019Q4	2019Q3	2019Q2	2019Q1	Average 2019-2020
Alliant Energy Corporation	5,698,500	5,628,650	5,525,350	5,353,750	5,087,150	4,834,400	4,691,000	4,634,050	5,181,606
Ameren Corporation	8,713,500	8,358,000	8,156,000	8,072,000	8,060,500	7,926,500	7,748,000	7,668,000	8,087,813
American Electric Power Company, Inc.	20,458,400	20,186,650	19,867,900	19,680,300	19,674,300	19,488,000	19,227,950	19,112,350	19,711,981
Consolidated Edison, Inc.	18,670,500	18,359,500	18,243,000	18,141,500	17,990,500	17,834,000	17,539,000	17,047,500	17,978,188
CMS Energy Corporation	5,408,000	5,267,000	5,199,500	5,101,500	4,987,500	4,904,000	4,854,500	4,806,500	5,066,063
Dominion Energy, Inc.	23,839,500	25,216,500	27,411,500	28,973,000	28,648,500	26,895,500	26,505,000	23,508,000	26,374,688
Duke Energy Corporation	45,023,000	43,783,000	44,240,500	44,909,500	44,667,500	44,357,500	44,148,000	43,936,500	44,383,188
Entergy Corporation	10,848,991	10,598,914	10,324,978	10,223,821	10,129,368	9,916,282	9,383,935	8,907,336	10,041,703
Evergy, Inc.	8,767,750	8,674,950	8,538,500	8,550,550	8,595,600	8,751,200	9,153,000	9,725,550	8,844,638
Eversource Energy	14,021,792	13,892,638	13,507,607	12,919,975	12,375,804	12,038,104	11,796,014	11,562,126	12,764,257
NextEra Energy, Inc.	36,900,000	37,180,000	36,738,000	36,704,000	36,798,500	35,751,000	34,568,000	34,185,000	36,103,063
OGE Energy Corp.	3,646,250	3,612,450	3,558,450	3,846,100	4,162,850	4,096,700	3,991,700	3,990,650	3,863,144
Pinnacle West Capital Corporation	5,737,445	5,665,474	5,479,490	5,450,033	5,491,657	5,392,872	5,242,070	5,236,989	5,462,004
Portland General Electric Company	2,604,000	2,620,500	2,642,000	2,614,500	2,577,500	2,553,000	2,545,000	2,527,000	2,585,438
The Southern Company	28,130,500	27,979,500	27,697,500	27,615,000	27,509,000	27,205,500	26,667,500	25,580,000	27,298,063
WEC Energy Group, Inc.	10,460,200	10,417,200	10,363,900	10,228,750	10,082,200	10,033,600	10,000,350	9,886,700	10,184,113

S&P Global
Market Intelligence

S&P Market Intelligence website, downloaded April 15, 2021
In thousands of dollars

Company Name	Average Total Capital 2019-2020	Long-Term Debt %	Short-Term Debt %	Preferred Equity %	Common Equity %	Total %
Alliant Energy Corporation	11,760,069	49.87%	6.06%	0.00%	44.06%	100.00%
Ameren Corporation	18,149,188	50.49%	4.94%	0.00%	44.56%	100.00%
American Electric Power Company, Inc.	50,576,763	51.78%	9.25%	0.00%	38.97%	100.00%
Consolidated Edison, Inc.	40,624,625	47.17%	8.58%	0.00%	44.25%	100.00%
CMS Energy Corporation	18,729,625	65.71%	7.24%	0.00%	27.05%	100.00%
Dominion Energy, Inc.	67,720,125	51.30%	7.18%	2.57%	38.95%	100.00%
Duke Energy Corporation	109,337,563	51.49%	6.46%	1.46%	40.59%	100.00%
Entergy Corporation	30,634,145	58.73%	8.49%	0.00%	32.78%	100.00%
Evergy, Inc.	18,868,419	44.99%	8.14%	0.00%	46.88%	100.00%
Eversource Energy	28,468,002	49.66%	5.50%	0.00%	44.84%	100.00%
NextEra Energy, Inc.	42,701,875	0.00%	15.45%	0.00%	84.55%	100.00%
OGE Energy Corp.	7,306,506	44.59%	2.54%	0.00%	52.87%	100.00%
Pinnacle West Capital Corporation	11,495,923	47.14%	5.35%	0.00%	47.51%	100.00%
Portland General Electric Company	5,399,500	48.31%	3.80%	0.00%	47.88%	100.00%
The Southern Company	75,902,438	58.32%	5.72%	0.00%	35.96%	100.00%
WEC Energy Group, Inc.	22,759,494	47.76%	7.49%	0.00%	44.75%	100.00%
	Average %	47.96%	7.01%	0.25%	44.78%	100.00%
	Excluding CMS, Entergy, Southern Co.	46.45%	7.00%	0.29%	46.27%	100.00%
	Also excluding AEP, Dominion	46.10%	7.02%	0.12%	46.75%	100.00%

**ROE and ROR Analysis for NSPM
 Recommended ROE and ROR
 Based on ROE Inputs from Attachment MFG-20, Schedules 1-2**

**Docket No. PU-20-441
 Attachment ____ (MFG-20)
 Schedule 3**

	Rate of Return NDPSC Staff		
		DCF	
	Ratio	Cost	WACC
Long-Term Debt	50.00%	4.22%	2.110%
Short-Term Debt	0.50%	1.00%	0.005%
Common Equity	49.50%	9.55%	4.727%
Overall Rate of Return	100.00%		6.842%

The recommended common equity cost of 9.55 percent is taken from Attachment ____ MFG-20, Schedule 1. The capital structure is taken from Attachment ____ MFG-20, Schedule 2. The costs of long-term and short-term debt are taken from NSPM Revised A32. Change in Cost of Capital, Page 1 of 1.

	Requested Rate of Return		
		NSPM	
		DCF	
	Ratio	Cost	WACC
Long-Term Debt	46.96%	4.22%	1.982%
Short-Term Debt	0.54%	1.00%	0.005%
Common Equity	52.50%	10.20%	5.355%
Overall Rate of Return	100.00%		7.342%

The recommended common equity cost of 10.20 percent is taken from D'Ascendis Direct Testimony, page 3, lines 16-17. The capital structure is taken from NSPM Revised A32. Change in Cost of Capital, Page 1 of 1. The costs of long-term and short-term debt are taken from the same source. □

□

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Xcel Energy Data Request No. 7-11
Case No.: PU-20-441
Response To: North Dakota Public Service Commission Advocacy Staff
Requestor: Karl Pavlovic
Date Received: February 24, 2021

Question:

Topic: Cost of Capital

Please see the Direct Testimony of Dylan W. D'Ascendis, page 39, line 18-page 40, line 11. Please explain how the following company types were treated in the calculation of the total market return for the 1,700 firms included in the Value Line universe:

- a. Companies not paying dividends.
- b. Companies with price appreciation potential \leq 0 percent.
- c. Companies with price appreciation potential \geq 20 percent

Response:

- a. The total market return of 14.45% noted on page 40, line 9 of Mr. D'Ascendis' Direct Testimony was based on the 13-week average three- to five-year median market price appreciation of all 1,700 stocks in the Value Line universe as reported by Value Line and the 13-week average median estimated dividend yield for all dividend paying stocks as reported by Value Line.
- b. See response to part a.
- c. See response to part a.

Witness: Dylan D'Ascendis
Preparer: Adam Perry
Department: ScottMadden Management Consultants
Telephone: (508) 202-7922
Date: March 5, 2021

- Not Public Document – Not For Public Disclosure
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Xcel Energy Data Request No. 7-12
Case No.: PU-20-441
Response To: North Dakota Public Service Commission Advocacy Staff
Requestor: Karl Pavlovic
Date Received: February 24, 2021

Question:

Topic: Cost of Capital

Please see the Direct Testimony of Dylan W. D'Ascendis, page 40, lines 13-19. Please explain how the following company types were treated in the calculation of the expected total return using data from Value Line for the firms included in the S&P 500:

- a. Companies not paying dividends.
- b. Companies with earnings per share growth rate ≤ 0 percent.
- c. Companies with earnings per share growth rate ≥ 20 percent.

Response:

- a. All companies in the S&P 500 for which data was available were included in the calculation of the market return.
- b. See response to part a.
- c. See response to part a.

Witness: Dylan D'Ascendis
Preparer: Adam Perry
Department: ScottMadden Management Consultants
Telephone: (508) 202-7922
Date: March 5, 2021

- Not Public Document – Not For Public Disclosure
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Xcel Energy

Data Request No. 7-13

Case No.: PU-20-441

Response To: North Dakota Public Service Commission Advocacy Staff

Requestor: Karl Pavlovic

Date Received: February 24, 2021

Question:

Topic: Cost of Capital

Please see the Direct Testimony of Dylan W. D'Ascendis, page 40, lines 13-19. Please explain how the following company types were treated in the calculation of the expected total return using data from Bloomberg for the firms included in the S&P 500:

- a. Companies not paying dividends.
- b. Companies with earnings per share growth rate ≤ 0 percent.
- c. Companies with earnings per share growth rate ≥ 20 percent.

Response:

- a. All companies in the S&P 500 for which data was available were included in the calculation of the market return.
- b. See response to part a.
- c. See response to part a.

Witness: Dylan D'Ascendis
Preparer: Adam Perry
Department: ScottMadden Management Consultants
Telephone: (508) 202-7922
Date: March 5, 2021

Adjustment to operating income after depreciation and amortization (D&A) and EBIT: We reduce D&A related to the securitized debt, which is assumed to equal the principal payments during the period. As a result, the reduction to operating income after D&A is only for the interest portion.

Adjustment to interest expense: We remove the interest expense of the securitized debt from total interest expense.

Operating cash flows:

We reduce operating cash flows for revenues and increase for the assumed interest amount related to the securitized debt. This results in a net decrease to operating cash flows equal to the principal repayment amount.

Infrastructure renewals expenditure

72. In England and Wales, water utilities can report under either IFRS or U.K. GAAP. Those that report under U.K. GAAP are allowed to adopt infrastructure renewals accounting, which enables the companies to capitalize the maintenance spending on their underground assets, called infrastructure renewals expenditure (IRE). Under IFRS, infrastructure renewals accounting is not permitted and maintenance expenditure is charged to earnings in the year incurred. This difference typically results in lower adjusted operating cash flows for those companies that report maintenance expenditure as an operating cash flow under IFRS, than for those that report it as capital expenditure under U.K. GAAP. We therefore make financial adjustments to amounts reported by water issuers that apply U.K. GAAP, with the aim of making ratios more comparable with those issuers that report under IFRS and U.S. GAAP. For example, we deduct IRE from EBITDA and FFO.

73. IRE does not always consist entirely of maintenance expenditure that would be expensed under IFRS. A portion of IRE can relate to costs that would be eligible for capitalization as they meet the recognition criteria for a new fixed asset set out in International Accounting Standard 16 that addresses property, plant, and equipment. In such cases, we may refine our adjustment to U.K. GAAP companies so that we only deduct from FFO the portion of IRE that would not be capitalized under IFRS. However, the information to make such a refinement would need to be of high quality, reliable, and ideally independently verified by a third party, such as the company's auditor. In the absence of this, we assume that the entire amount of IRE would have been expensed under IFRS and we accordingly deduct the full expenditure from FFO.

74. Adjustment procedures:

Data requirements:

U.K. GAAP accounts typically provide little information on the portion of capital spending that relates to renewals accounting, or the related depreciation, which is referred to as the infrastructure renewals charge. The information we use for our adjustments is, however, found in the regulatory cost accounts submitted annually by the water companies to the Water Services Regulation Authority, which regulates all water companies in England and Wales.

Calculations:

EBITDA: Reduced by the value of IRE that was capitalized in the period.

EBIT: Adjusted for the difference between the adjustment to EBITDA and the reduction in the depreciation expense, depending on the degree to which the actual cash spending in the current year matches the planned spending over the five-year regulatory review period.

Cash flow from operations and FFO: Reduced by the value of IRE that was capitalized in the period.

Capital spending: Reduced by the value of infrastructure renewals spending that we reclassify to cash flow from operations.

Free operating cash flow: No impact, as the reduction in operating cash flows is exactly offset by the reduction in capital spending.

E. Cash flow/leverage analysis

75. In assessing the cash flow adequacy of a regulated utility, our analysis uses the same methodology as with other corporate issuers (see "Corporate Methodology (/en_US/web/guest/article/-/view/sourceId/8314109)"). We assess cash flow/leverage on a six-point scale ranging from ('1') minimal to ('6') highly leveraged. These scores are determined by aggregating the assessments of a range of credit ratios, predominantly cash flow-based, which complement each other by focusing attention on the different levels of a company's cash flow waterfall in relation to its obligations.

76. The corporate methodology provides benchmark ranges for various cash flow ratios we associate with different cash flow leverage assessments for standard volatility, medial volatility, and low volatility industries. The tables of benchmark ratios differ for a given ratio and cash flow leverage assessment along two dimensions: the starting point for the ratio

range and the width of the ratio range.

77. If an industry's volatility levels are low, the threshold levels for the applicable ratios to achieve a given cash flow leverage assessment are less stringent, although the width of the ratio range is narrower. Conversely, if an industry has standard levels of volatility, the threshold levels for the applicable ratios to achieve a given cash flow leverage assessment may be elevated, but with a wider range of values.

78. We apply the "low-volatility" table to regulated utilities that qualify under the corporate criteria and with all of the following characteristics:

A vast majority of operating cash flows come from regulated operations that are predominantly at the low end of the utility risk spectrum (e.g., a "network," or distribution/transmission business unexposed to commodity risk and with very low operating risk);

A "strong" regulatory advantage assessment;

An established track record of normally stable credit measures that is expected to continue;

A demonstrated long-term track record of low funding costs (credit spread) for long-term debt that is expected to continue; and

Non-utility activities that are in a separate part of the group (as defined in our group rating methodology) that we consider to have "nonstrategic" group status and are not deemed high risk and/or volatile.

79. We apply the "medial volatility" table to companies that do not qualify under paragraph 78 with:

A majority of operating cash flows from regulated activities with an "adequate" or better regulatory advantage assessment; or

About one-third or more of consolidated operating cash flow comes from regulated utility activities with a "strong" regulatory advantage and where the average of its remaining activities have a competitive position assessment of '3' or better.

80. We apply the "standard-volatility" table to companies that do not qualify under paragraph 79 and with either:

About one-third or less of its operating cash flow comes from regulated utility activities, regardless of its regulatory advantage assessment; or

A regulatory advantage assessment of "adequate/weak" or "weak."

Part III--Rating Modifiers

F. Diversification/portfolio effect

81. In assessing the diversification/portfolio effect on a regulated utility, our analysis uses the same methodology as with other corporate issuers (see "Corporate Methodology ([/en_US/web/guest/article/-/view/sourceld/8314109](#))").

G. Capital structure

82. In assessing the quality of the capital structure of a regulated utility, we use the same methodology as with other corporate issuers (see "Corporate Methodology ([/en_US/web/guest/article/-/view/sourceld/8314109](#))").

H. Liquidity

83. In assessing a utility's liquidity/short-term factors, our analysis is consistent with the methodology that applies to corporate issuers (See "Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers ([/en_US/web/guest/article/-/view/sourceld/6881137](#))", Dec. 16, 2014) except for the standards for "adequate" liquidity set out in paragraph 84 below.

84. The relative certainty of financial performance by utilities operating under relatively predictable regulatory monopoly frameworks make these utilities attractive to investors even in times of economic stress and market turbulence compared to conventional industrials. Also, recognizing the cash flow stability of regulated utilities we allow more discretion when calculating covenant headroom. For this reason, when determining if utilities with business risk profiles of at least "satisfactory" meet our definition of "adequate" liquidity, we use slightly lower thresholds:

A ratio of sources to uses higher than 1.1x, compared with the standard 1.2x;

Positive sources over uses even if forecast EBITDA declines by 10% (compared with a 15% decline for corporate issuers);

120. For companies undergoing a transformational event and with significant or weaker cash flow/leverage assessments, we place greater weight on near-term risk factors. That's because overemphasis on longer-term (inherently less predictable) issues could lead to some distortion when assessing the risk level of a speculative-grade company. We generally analyze a company using the arithmetic mean of the credit ratios expected according to our forecasts for the current year (or pro forma current year) and the subsequent financial year. A common example of this is when a private equity firm acquires a company using additional debt leverage, which makes historical financial ratios meaningless. In this scenario, we weight or focus the majority of our analysis on the next one or two years of projected credit measures.

3. Determining the cash flow/leverage assessment

a) Identifying the benchmark table

121. Tables 17, 18, and 19 provide benchmark ranges for various cash flow ratios we associate with different cash flow/leverage assessments for standard volatility, medial volatility, and low volatility industries. The tables of benchmark ratios differ for a given ratio and cash flow/leverage assessment along two dimensions: the starting point for the ratio range and the width of the ratio range.

122. If an industry exhibits low volatility, the threshold levels for the applicable ratios to achieve a given cash flow/leverage assessment are less stringent than those in the medial or standard volatility tables, although the range of the ratios is narrower. Conversely, if an industry exhibits medial or standard levels of volatility, the threshold for the applicable ratios to achieve a given cash flow/leverage assessment are elevated, albeit with a wider range of values.

123. The relevant benchmark table for a given company is based on our assessment of the company's associated industry and country risk volatility, or the CICRA (see section A, table 1). The low volatility table (table 19) will generally apply when a company's CICRA is 1, unless otherwise indicated in a sector's KCF criteria. The medial volatility table (table 18) will be used under certain circumstances for companies with a CICRA of 1 or 2. Those circumstances are described in the respective sectors' KCF criteria. The standard volatility table (table 17) serves as the relevant benchmark table for companies with a CICRA of 2 or worse, and we will always use it for companies with a CICRA of 1 or 2 and whose competitive position is assessed 5 or 6. Although infrequent, we will use the low volatility table when a company's CICRA is 2 for companies that exhibit or are expected to exhibit low levels of volatility. The choice of volatility tables for companies with a CICRA of 2 is addressed in the respective sector's KCF article.

Table 17

	Cash Flow/Leverage Analysis Ratios--Standard Volatility						
	--Core ratios--		--Supplementary coverage ratios--		--Supplementary payback ratios--		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest(x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	60+	Less than 1.5	More than 13	More than 15	More than 50	40+	25+
Modest	45-60	1.5-2	9-13	10-15	35-50	25-40	15-25
Intermediate	30-45	2-3	6-9	6-10	25-35	15-25	10-15
Significant	20-30	3-4	4-6	3-6	15-25	10-15	5-10
Aggressive	12-20	4-5	2-4	2-3	10-15	5-10	2-5
Highly leveraged	Less than 12	Greater than 5	Less than 2	Less than 2	Less than 10	Less than 5	Less than 2

Table 18

	Cash Flow/Leverage Analysis Ratios--Medial Volatility						
	--Core ratios--		--Supplementary coverage ratios--		--Supplementary payback ratios--		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest(x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	50+	less than 1.75	10.5+	14+	40+	30+	18+
Modest	35-50	1.75-2.5	7.5-10.5	9-14	27.5-40	17.5-30	11-18
Intermediate	23-35	2.5-3.5	5-7.5	5-9	18.5-27.5	9.5-17.5	6.5-11

**ROE and ROR Analysis for NSPM
Non-Price Regulated Companies and Risk
Excerpt: S&P "General: Corporate Methodology"**

**Docket No. PU-20-441
Attachment ____ (MFG-22)
Schedule 2, Page 2 of 2**

Significant	13-23	3.5-4.5	3-5	2.75-5	10.5-18.5	5-9.5	2.5-6.5
Aggressive	9-13	4.5-5.5	1.75-3	1.75-2.75	7-10.5	0-5	(11)-2.5
Highly leveraged	Less than 9	Greater than 5.5	Less than 1.75	Less than 1.75	Less than 7	Less than 0	Less than (11)

Table 19

Cash Flow/Leverage Analysis Ratios--Low Volatility

	--Core ratios--		--Supplementary coverage ratios--		--Supplementary payback ratios--		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest (x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	35+	Less than 2	More than 8	More than 13	More than 30	20+	11+
Modest	23-35	2-3	5-8	7-13	20-30	10-20	7-11
Intermediate	13-23	3-4	3-5	4-7	12-20	4-10	3-7
Significant	9-13	4-5	2-3	2.5-4	8-12	0-4	0-3
Aggressive	6-9	5-6	1.5-2	1.5-2.5	5-8	(10)-0	(20)-0
Highly leveraged	Less than 6	Greater than 6	Less than 1.5	Less than 1.5	Less than 5	Less than (10)	Less than (20)

b) Aggregating the credit ratio assessments

124. To determine the final cash flow/leverage assessment, we make these calculations:

1) First, calculate a time series of standard core and supplemental credit ratios, select the relevant benchmark table, and determine the appropriate time weighting of the credit ratios.

Calculate the two standard core credit ratios and the five standard supplemental credit ratios over a five-year time horizon. Consult the relevant industry KCF article (if applicable), which may identify additional supplemental ratio(s). The relevant benchmark table for a given company is based on our assessment of the company's associated industry and country risk volatility, or the CICRA.

Calculate the appropriate weighted average cash flow/leverage ratios. If the company is undergoing a transformational event, then the core and supplemental ratios will typically be calculated based on S&P Global Ratings' projections for the current and next one or two financial years.

2) Second, we use the core ratios to determine the preliminary cash flow assessment.

Compare the core ratios (FFO to debt and debt to EBITDA) to the ratio ranges in the relevant benchmark table.

If the core ratios result in different cash flow/leverage assessments, we will select the relevant core ratio based on which provides the best indicator of a company's future leverage.

3) Third, we review the supplemental ratio(s).

Determine the importance of standard or KCF supplemental ratios based on company-specific characteristics, namely, leverage, capital intensity, working capital intensity, growth rate, or industry.

4) Fourth, we calculate the adjusted cash flow/leverage assessment.

If the cash flow/leverage assessment(s) indicated by the important supplemental ratio(s) differs from the preliminary cash flow/leverage assessment, we might adjust the preliminary cash flow/leverage assessment by one category in the direction of the cash flow/leverage assessment indicated by the supplemental ratio(s) to derive the adjusted cash flow/leverage assessment. We will make this adjustment if, in our view, the supplemental ratio provides the best indicator of a company's future leverage.

If there is more than one important supplemental ratio and they result in different directional deviations from the preliminary cash flow/leverage assessment, we will select one as the relevant supplemental ratio based on which, in our opinion, provides the best indicator of a company's future leverage. We will then make the adjustment outlined above if the selected supplemental ratio differs from the preliminary cash flow/leverage assessment and the selected supplemental ratio provides the best overall indicator of a company's future leverage.

5) Lastly, we determine the final cash flow/leverage assessment based on the volatility adjustment.

- Not Public Document – Not For Public Disclosure
 Public Document – Not Public Data Has Been Excised
 Public Document

Xcel Energy Data Request No. 7-2
Case No.: PU-20-441
Response To: North Dakota Public Service Commission Advocacy Staff
Requestor: Karl Pavlovic
Date Received: February 24, 2021

Question:

Topic: Cost of Capital

Please see the Direct Testimony of Dylan W. D'Ascendis, page 8, line 30-page 9, line 21.

- a. Please provide all examples where Northern States Power Minnesota (NSPM), or its parent Xcel Energy, withheld capital funding from NSPM's North Dakota operations due to an insufficient return in North Dakota and directed capital funding to another of Xcel Energy's electricity operating subsidiaries. Please identify the operating subsidiary or subsidiaries to which the capital funding was directed.
- b. Please provide evidence of the effect of the actions described in part a on NSP's ability to provide safe, adequate, and reliable service in North Dakota.
- c. Please provide all examples where NSPM, or its parent Xcel Energy, has directed capital funding to NSPM's North Dakota operations due to an attractive return in North Dakota and taken capital funding away from another of Xcel Energy's electricity operating subsidiaries. Please identify the operating subsidiary or subsidiaries from which the capital funding was withheld.
- d. Please provide evidence of the effect of the actions described in part c on NSP's or Xcel's ability to provide safe, adequate, and reliable service in those other operating jurisdictions.

Response:

Every year, Xcel Energy prepares a five-year financial forecast that it uses to anticipate the financial needs of each of its operating utility subsidiaries, including NSPM. Key

components of the five-year financial forecast are the O&M and capital expenditure five-year budgets for each of the operating utility subsidiaries, including NSPM, as well as ongoing monthly total budget reviews and quarterly review of particularly large capital projects included in the five-year budgets.

There are five steps in the budgeting process for O&M and capital expenditures:

1. Financial Planning and Guidance Development;
2. Business Area Budget Development;
3. Financial Council and Operating Company Review and Approval;
4. Xcel Energy and NSPM Boards of Directors Approval; and
5. Ongoing Financial Governance.

At the outset, the Company provides financial guidance to each business area and operating company to set expectations for budgeting in the upcoming cycle. If a particular or business area or operating company's budget comes in above or below the budget guidance, changes may be requested during one of the iterative reviews of the budget unless there is a sound reason for the departure.

With this financial guidance in hand, each business area develops a 5-year budget based on estimated capital and O&M expenses. Each business area completes iterative reviews prior to finalizing the budget that is rolled up with others for review at the operating company and corporate levels. After review and approval by the Financial Council, which is made up of executive leadership of Xcel Energy and the presidents of each operating utility subsidiary, the Boards of Directors of Xcel Energy and each operating utility subsidiary approve the upcoming year's budget and large new capital projects.

The iterative reviews of business area and operating company budgets take into consideration many important factors for prioritizing investment, including:

- Rate and customer impacts;
- Cost pressures;
- Emergent issues;
- Priorities presented by the business areas;
- Areas of strategic and business risk to our stakeholders;
- Regulatory requirements and operational needs at the state level;
- The financial position of the operating company; and
- Key strategic decisions that need to be made in the near future.

Once the budgets are approved and implemented, the Company monitors the performance of the overall Company and each operating utility subsidiary in comparison to the budget on a monthly basis.

Overall, the budgets reflect a reasonable and representative prediction of the costs for each utility operating subsidiary to deliver safe, adequate, and reliable service to its customers. The ongoing monitoring of actual expenditures and analysis of variances to budgeted levels help maintain an appropriate business area focus on expenditures, and facilitate any necessary adjustments to respond to changing circumstances. Return on equity is one factor to consider and theoretically could impact individual investment decisions if all other things were equal, but as a practical matter all other factors are not equal. Moreover, as noted above, continuing to provide safe, adequate, and reliable service is a key goal of Xcel Energy's budgeting process for all its operating companies and within all the jurisdictions in which those companies provides service.

Accordingly, the Company does not have any examples responsive to sub-parts a and c of this Request, nor does it have any evidence responsive to sub-parts b and d.

Witness: Dylan D'Ascendis
Preparer: Courtney Young
Title: Principal Financial Consultant
Department: Capital Asset Accounting
Telephone: 612-330-5897
Date: March 8, 2021