Direct Testimony and Schedules

Dylan W. D'Ascendis

Before the Minnesota Public Utilities Commission

State of Minnesota

In the Matter of the Application of Northern States Power Company

for Authority to Increase Rates for Electric Service in Minnesota

Docket No. E002/GR-21-630

Exhibit___(DWD-1)

**Rate of Return**

October 25, 2021

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## Schedules

# I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. My name is Dylan W. D'Ascendis. I am employed by ScottMadden, Inc. as Partner. My business address is 3000 Atrium Way, Suite 200, Mount Laurel, NJ 08054.

Q. ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?

A. I am submitting this direct testimony (referred to throughout as my Direct Testimony) before the Minnesota Public Utilities Commission (Commission) on behalf of Northern States Power, a Minnesota corporation (NSP or the Company).

Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.

A. I have offered expert testimony on behalf of investor-owned utilities before 30 state regulatory commissions in the United States, the Federal Energy Regulatory Commission (FERC), the Alberta Utility Commission, and one American Arbitration Association panel on issues including, but not limited to, common equity cost rate, rate of return, valuation, capital structure, class cost of service, and rate design.

On behalf of the American Gas Association (AGA), I calculate the AGA Gas Index, which serves as the benchmark against which the performance of the American Gas Index Fund (AGIF) is measured on a monthly basis. The AGA Gas Index and AGIF are a market capitalization weighted index and mutual

fund, respectively, comprised of the common stocks of the publicly traded corporate members of the AGA.

I am a member of the Society of Utility and Regulatory Financial Analysts (SURFA). In 2011, I was awarded the professional designation "Certified Rate of Return Analyst" by SURFA, which is based on education, experience, and the successful completion of a comprehensive written examination.

I am also a member of the National Association of Certified Valuation Analysts (NACVA) and was awarded the professional designation "Certified Valuation Analyst" by NACVA in 2015.

I am a graduate of the University of Pennsylvania, where I received a Bachelor of Arts degree in Economic History. I have also received a Master of Business Administration with high honors and concentrations in Finance and International Business from Rutgers University.

The details of my educational background and expert witness appearances are shown in Appendix A.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?

A. The purpose of my testimony is to present evidence on behalf of the Company and recommend an appropriate return on common equity (ROE) on the Company's Minnesota jurisdictional rate base.

Q. HAVE YOU PREPARED AN EXHIBIT IN SUPPORT OF YOUR RECOMMENDATION?

A. Yes. I have prepared Exhibit__(DWD-1), which contains Schedules 1 through 12, and was prepared by me or under my direction.

## II. SUMMARY

Q. PLEASE SUMMARIZE YOUR RECOMMENDED ROE.

A. My recommended ROE of 10.20% is summarized on Exhibit___(DWD-1), Schedule 1. In determining my recommendation, I assessed the market-based common equity cost rates of companies of relatively similar, but not necessarily identical, risk to the Company. Using companies of relatively comparable risk as proxies is consistent with the principles of fair rate of return established in the *Hope*[1] and *Bluefield*[2] decisions, which I discuss further in Section III, below. Of course, no proxy group can be identical in risk to any single company. Consequently, there must be an evaluation of relative risk between the Company and the proxy group to determine if it is appropriate to adjust the proxy group's indicated rate of return.

My recommendation results from applying and considering several cost of common equity models, specifically the Constant Growth Discounted Cash Flow (DCF) model, the Risk Premium Model (RPM), and the Capital Asset Pricing Model (CAPM), to the market data of the Utility Proxy Group whose selection criteria will be discussed below. In addition, I applied these same

1 *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) (*Hope*).
2 *Bluefield Water Works Improvement Co. v. Public Serv. Comm'n*, 262 U.S. 679 (1922) (*Bluefield*).

models to a Non-Price Regulated Proxy Group. The results derived from these analyses are as follows:

**Table 1**

**Summary of Common Equity Cost Rates[3]**

| | |
|---|---|
| Discounted Cash Flow Model | 8.78% |
| Risk Premium Model | 10.95% |
| Capital Asset Pricing Model | 12.53% |
| Cost of Equity Models Applied to Comparable Risk, Non-Price Regulated Companies | 12.24% |
| Indicated Range of Common Equity Cost Rates Before Adjustments | 9.65% - 11.65% |
| Business Risk Adjustment | 0.05% |
| Credit Risk Adjustment | -0.13% |
| Flotation Cost Adjustment | 0.12% |
| Indicated Range of Common Equity Cost Rates after Adjustment | 9.69% - 11.69% |
| Recommended Cost of Common Equity | 10.20% |

The indicated range of common equity cost rates applicable to the Utility Proxy Group is between 9.65% and 11.65% before any Company-specific adjustments.[4] I then adjusted the indicated common equity cost rate upward by 0.05% to reflect the Company's greater relative business risk and downward by 0.13% to account for a less risky bond rating, as compared to the Utility Proxy

3 *See,* Section VII for a detailed discussion regarding the application of my cost of common equity models.

4 The indicated range is equal to 100 basis points above and below the midpoint of my four model results.

Group. I also adjusted the indicated common equity cost rate upward by 0.12% to account for flotation costs.[5] These adjustments resulted in a Company-specific indicated range of common equity cost rates between 9.69% and 11.69%. I recommend an ROE for the Company toward the lower end of my Company-specific range, specifically 10.20%.

Q. PLEASE SUMMARIZE THE COMPANY'S PROPOSED CAPITAL STRUCTURE.

A. The Company is proposing a capital structure including 52.50% common equity, 46.89% long-term debt, and 0.61% short-term debt. That capital structure is consistent with the Company's historical capital structures, the capital structures of the Utility Proxy Group, and the operating subsidiary companies of the Utility Proxy Group.

Q. HOW IS THE REMAINDER OF YOUR DIRECT TESTIMONY ORGANIZED?

A. The remainder of my Direct Testimony is organized as follows:

- *Section III* – Provides a summary of financial theory and regulatory principles pertinent to the development of the Cost of Capital;
- *Section IV* – Explains my selection of the Utility Proxy Group used to develop my analytical results;
- *Section V* – Explains the proposed capital structure;
- *Section VI* – Discusses the reasonability of the Company's proposed long-term debt cost rate;
- *Section VII* – Describes the analyses on which my recommendation is based;

5 *See,* Section IX for a detailed discussion of my cost of common equity adjustments.

- *Section VIII* – Summarizes my common equity cost rate before adjustments to reflect Company-specific factors;
- *Section IX* – Explains my adjustments to my common equity cost rate to reflect the Company-specific factors; and
- *Section X* – Presents my conclusions.

## III. GENERAL PRINCIPLES

Q. WHAT PRINCIPLES HAVE YOU CONSIDERED IN ARRIVING AT YOUR RECOMMENDATIONS?

A. In unregulated industries, marketplace competition is the principal determinant of the price of products or services. For regulated public utilities, regulation must act as a substitute for marketplace competition. Assuring that the utility can fulfill its obligations to the public, while providing safe and reliable service at all times, requires a level of earnings sufficient to maintain the integrity of presently invested capital. Sufficient earnings also permit the attraction of needed new capital at a reasonable cost, for which the utility must compete with other firms of comparable risk, consistent with the fair rate of return standards established by the U.S. Supreme Court in the previously cited *Hope* and *Bluefield* cases.

The U.S. Supreme Court affirmed the fair rate of return standards in *Hope*, when it stated:

> The rate-making process under the Act, *i.e.,* the fixing of 'just and reasonable' rates, involves a balancing of the investor and the consumer

interests. Thus we stated in the Natural Gas Pipeline Co. case that 'regulation does not insure that the business shall produce net revenues.' 315 U.S. at page 590, 62 S.Ct. at page 745. But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. Cf. Chicago & Grand Trunk R. Co. v. Wellman, 143 U.S. 339, 345, 346 12 S.Ct. 400,402. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.[6]

In summary, the U.S. Supreme Court has found a return that is adequate to attract capital at reasonable terms enables the utility to provide service while maintaining its financial integrity. As discussed above, and in keeping with established regulatory standards, that return should be commensurate with the returns expected elsewhere for investments of equivalent risk. The Commission's decision in this proceeding, therefore, should provide the Company with the opportunity to earn a return that is: (1) adequate to attract capital at reasonable cost and terms; (2) sufficient to ensure its financial integrity;

6 *Hope*, 320 U.S. 591 (1944), at 603.

and (3) commensurate with returns on investments in enterprises having corresponding risks.

Lastly, the required return for a regulated public utility is established on a stand-alone basis, i.e., for the utility operating company at issue in a rate case. Parent entities, like other investors, have capital constraints and must look at the attractiveness of the expected risk-adjusted return of each investment alternative in their capital budgeting process. That is, utility holding companies that own many utility operating companies have choices as to where they will invest their capital within the holding company family. Therefore, the opportunity cost concept applies regardless of whether the funding source is public or corporate.

When funding is provided by a parent entity, the return still must be sufficient to provide an incentive to allocate equity capital to the subsidiary or business unit rather than other internal or external investment opportunities. That is, the regulated subsidiary must compete for capital with all the parent company's affiliates, and with other similar risk companies, which may include non-utilities. In that regard, investors value corporate entities on a sum-of-the-parts basis and expect each division within the parent company to provide an appropriate risk-adjusted return.

It therefore is important that the authorized ROE for the Company reflects the risks and prospects of its operations and supports its financial integrity from a stand-alone perspective.

Q. WITHIN THAT BROAD FRAMEWORK, HOW IS THE COST OF CAPITAL ESTIMATED IN REGULATORY PROCEEDINGS?

A. Regulated utilities primarily use common stock and long-term debt to finance their permanent property, plant, and equipment (*i.e.*, rate base). The fair rate of return for a regulated utility is based on its weighted average cost of capital (WACC), in which the costs of the individual sources of capital are weighted by their respective book values.

The cost of capital is the return investors require to make an investment in a firm. Investors will provide funds to a firm only if the return that they *expect* is equal to, or greater than, the return that they *require* to accept the risk of providing funds to the firm.

The cost of capital (that is, the combination of the costs of debt and equity) is based on the economic principle of "opportunity costs." The principle of opportunity costs recognizes that investing in any asset (whether debt or equity securities) represents a forgone opportunity to invest in alternative assets. For any investment to be sensible, its expected return must be at least equal to the return expected on alternative investment opportunities with comparable risks. Because investments with like risks should offer similar returns, the opportunity cost of an investment should equal the return available on an investment of comparable risk.

The cost of debt is contractually defined and can be directly observed as the interest rate or yield on debt securities. However, the cost of equity must be

estimated based on market data and various financial models. Because the cost of equity is premised on opportunity costs, the models used to determine it are typically applied to a group of "comparable" or "proxy" companies.

In the end, the estimated cost of capital should reflect the return that investors require in light of the subject company's business and financial risks, and the returns available on comparable investments.

### A. Business Risk

Q. PLEASE DEFINE BUSINESS RISK AND EXPLAIN WHY IT IS IMPORTANT FOR DETERMINING A FAIR RATE OF RETURN.

A. The investor-required return on common equity reflects investors' assessment of the total investment risk of the subject firm. Total investment risk is often discussed in the context of business and financial risk.

Business risk reflects the uncertainty associated with owning a company's common stock without the company's use of debt and/or preferred stock financing. One way of considering the distinction between business and financial risk is to view the former as the uncertainty of the expected earned return on common equity, assuming the firm is financed with no debt.

Examples of business risks generally faced by utilities include, but are not limited to, the regulatory environment, mandatory environmental compliance requirements, customer mix and concentration of customers, service territory economic growth, market demand, operations, capital intensity, size, the degree of operating leverage, emerging technologies including distributed energy

resources, the vagaries of weather, and the like, all of which have a direct bearing on earnings.

Although analysts, including rating agencies, may categorize business risks individually, as a practical matter, such risks are interrelated and not wholly distinct from one another. When determining an appropriate return on common equity, the relevant issue is where investors see the subject company in relation to other similarly situated utility companies (i.e., the Utility Proxy Group). To the extent investors view a company as being exposed to higher risk, the required return will increase, and vice versa.

For regulated utilities, business risks are both long-term and near-term in nature. Whereas near-term business risks are reflected in year-to-year variability in earnings and cash flow brought about by economic or regulatory factors, long-term business risks reflect the prospect of an impaired ability of investors to obtain both a fair rate of return on, and return of, their capital. Moreover, because utilities accept the obligation to provide safe, adequate, and reliable service at all times (in exchange for a reasonable opportunity to earn a fair return on their investment), they generally do not have the option to delay, defer, or reject capital investments. Because those investments are capital-intensive, utilities generally do not have the option to avoid raising external funds. The obligation to serve and the corresponding need to access capital is even more acute during periods of capital market distress.

Because utilities invest in long-lived assets, long-term business risks are of paramount concern to equity investors. That is, the risk of not recovering the return on their investment extends far into the future. The timing and nature of events that may lead to losses, however, also are uncertain and, consequently, those risks and their implications for the required return on equity tend to be difficult to quantify. Regulatory commissions (like investors who commit their capital) must review a variety of quantitative and qualitative data and apply their reasoned judgment to determine how long-term risks weigh in their assessment of the market-required return on common equity.

### B. Financial Risk

Q. PLEASE DEFINE FINANCIAL RISK AND EXPLAIN WHY IT IS IMPORTANT IN DETERMINING A FAIR RATE OF RETURN.

A. Financial risk is the additional risk created by the introduction of debt and preferred stock into the capital structure. The higher the proportion of debt and preferred stock in the capital structure, the higher the financial risk to common equity owners (*i.e.,* failure to receive dividends due to default or other covenants). Therefore, consistent with the basic financial principle of risk and return, common equity investors require higher returns as compensation for bearing higher financial risk.

Q. CAN BOND AND CREDIT RATINGS BE A PROXY FOR A FIRM'S COMBINED BUSINESS AND FINANCIAL RISKS TO EQUITY OWNERS (I.E., TOTAL INVESTMENT RISK)?

A. Yes, similar bond ratings/issuer credit ratings reflect, and are representative of, similar combined business and financial risks (*i.e.*, total investment risk) faced

by bond investors.[7] Although specific business or financial risks may differ between companies, the same bond/credit rating indicates that the combined risks are roughly similar from a debtholder perspective. The caveat is that these debtholder risk measures do not translate directly to risks for common equity.

## IV. NSP AND THE UTILITY PROXY GROUP

Q. WHY IS IT NECESSARY TO DEVELOP A PROXY GROUP WHEN ESTIMATING THE ROE FOR THE COMPANY?

A. Because the Company is not publicly traded and does not have publicly traded equity securities, it is necessary to develop groups of publicly traded, comparable companies to serve as "proxies" for the Company. In addition to the analytical necessity of doing so, the use of proxy companies is consistent with the *Hope* and *Bluefield* comparable risk standards, as discussed above. I have selected two proxy groups that, in my view, are fundamentally risk-comparable to the Company: A Utility Proxy Group and a Non-Price Regulated Proxy Group, which is comparable in total risk to the Utility Proxy Group.[8]

Even when proxy groups are carefully selected, it is common for analytical results to vary from company to company. Despite the care taken to ensure comparability, because no two companies are identical, market expectations

7 Risk distinctions within Standard and Poor's (S&P) bond rating categories are recognized by a plus or minus, e.g., within the A category, an S&P rating can be an A+, A, or A-. Similarly, risk distinction for Moody's ratings are distinguished by numerical rating gradations, e.g., within the A category, a Moody's rating can be A1, A2 and A3.

8 The development of the Non-Price Regulated Proxy Group is explained in more detail in Section VII.

regarding future risks and prospects will vary within the proxy group. It therefore is common for analytical results to reflect a seemingly wide range, even for a group of similarly situated companies. At issue is how to estimate the ROE from within that range. That determination will be best informed by employing a variety of sound analyses and necessarily must consider the sort of quantitative and qualitative information discussed throughout my Direct Testimony. Additionally, a relative risk analysis between the Company and the Utility Proxy Group must be made to determine whether or not explicit Company-specific adjustments need to be made to the Utility Proxy Group indicated results.

My analyses are based on the Utility Proxy Group, containing U.S. electric utilities. As discussed earlier, utilities must compete for capital with other companies with commensurate risk (including non-utilities) and, to do so, must be provided the opportunity to earn a fair and reasonable return. Consequently, it is appropriate to consider the Utility Proxy Group's market data in determining the Company's ROE.

Q. PLEASE SUMMARIZE THE COMPANY'S OPERATIONS.

A. NSP is a vertically integrated electric and natural gas utility that provides electric generation, transmission, and distribution service, as well as natural gas distribution service to approximately 1,500,000 retail electric customers and 600,000 natural gas customers in North Dakota, Minnesota, and South Dakota.[9] The operations that are subject to the Commission's jurisdiction provides

9 Xcel Energy, SEC Form 10-K at 9 (Dec. 31, 2021).

electric distribution service to approximately 1.3 million retail customers in Minnesota.[10] The Company has long-term issuer ratings of A2 from Moody's Investor Services (Moody's) and A- from Standard & Poor's (S&P).[11] The Company is not publicly-traded as it is an operating subsidiary of Xcel Energy Inc. (XEI or the Parent). XEI is publicly-traded under ticker symbol XEL.

Page 1 of Exhibit___(DWD-1), Schedule 2 contains comparative capitalization and financial statistics for the Company for the years 2016 to 2020.[12] During the five-year period ending 2020, the historically achieved average earnings rate on book common equity for the Company averaged 9.15%. The average common equity ratio based on total capital (including short-term debt) was 52.36%, and the average dividend payout ratio was 86.42%.

Total debt to earnings before interest, taxes, depreciation, and amortization for the years 2016 to 2020 ranges between 3.09 and 3.69 times, with an average of 3.38 times. Funds from operations to total debt range from 15.52% to 31.94%, with an average of 22.67%.[13]

Q. PLEASE EXPLAIN HOW YOU CHOSE THE COMPANIES IN THE UTILITY PROXY GROUP.

A. Because the Cost of Equity is a comparative exercise, my objective in developing a proxy group was to select companies that are comparable to the

10 Company provided data.
11 Source: S&P Global Market Intelligence.
12 Source: Company audited financial statements per the as-filed Form 10-Ks.
13 Source: Company audited financial statements per the as filed Form 10-Ks.

Company. Because the Company is a 100% rate regulated vertically integrated electric utility, I applied the following criteria to select my Utility Proxy Group:

(i) They were included in the Eastern, Central, or Western Electric Utility Group of *Value Line Investment Survey* (Standard Edition)(*Value Line*);

(ii) They have 70% or greater of fiscal year 2020 total operating income derived from, and 70% or greater of fiscal year 2020 total assets attributable to, regulated electric distribution operations;

(iii) They are vertically integrated (i.e., utilities that own and operate regulated generation, transmission, and distribution assets);

(iv) At the time of preparation of this testimony, they had not publicly announced that they were involved in any major merger or acquisition activity (i.e., one publicly-traded utility merging with or acquiring another) or any other major development;

(v) They have not cut or omitted their common dividends during the five years ending 2020 or through the time of preparation of this testimony;

(vi) They have *Value Line* and Bloomberg Professional Services (Bloomberg) adjusted Betas;

(vii) They have positive *Value Line* five-year dividends per share (DPS) growth rate projections; and

(viii) They have *Value Line*, Zacks, or Yahoo! Finance consensus five-year earnings per share (EPS) growth rate projections.

The following thirteen companies met these criteria:

**Table 2**

**Utility Proxy Group Companies**

| Company Name | Ticker Symbol |
|---|---|
| Alliant Energy Corporation | LNT |
| Ameren Corporation | AEE |
| Duke Energy Corporation | DUK |
| Edison International | EIX |
| Entergy Corporation | ETR |
| Evergy, Inc. | EVRG |
| IDACORP, Inc. | IDA |
| NorthWestern Corporation | NWE |
| OGE Energy Corporation | OGE |
| Otter Tail Corporation | OTTR |
| Pinnacle West Capital Corporation | PNW |
| Portland General Electric Co. | POR |
| Xcel Energy, Inc. | XEL |

Q. PLEASE SUMMARIZE THE UTILITY PROXY GROUP'S HISTORICAL CAPITALIZATION AND FINANCIAL STATISTICS.

A. Page 1 of Exhibit___(DWD-1), Schedule 3 contains comparative capitalization and financial statistics for the Utility Proxy Group for the years 2016 to 2020.

During the five-year period ending 2020, the historically achieved average earnings rate on book common equity for the group averaged 8.81%, the average common equity ratio based on total capital (including short-term debt) was 46.38% , and the average dividend payout ratio was 59.81%.

Total debt to earnings before interest, taxes, depreciation, and amortization for the years 2016 to 2020 ranges between 4.08 and 5.85 times, with an average of 4.96 times. Funds from operations to total debt range from 13.09% to 18.73%, with an average of 16.63%. Given that those capitalization and financial statistics are generally consistent with the Company's, I conclude the Utility Proxy Group is comparable in risk to the Company.

## V. CAPITAL STRUCTURE

Q. PLEASE SUMMARIZE THE COMPONENTS OF THE COMPANY'S RECOMMENDED CAPITAL STRUCTURE AND WACC.

A. The Company's proposed 2022 test year capital structure includes long-term debt, short-term debt, and common equity. The Company's proposed revenue requirement for the test year reflects a WACC of 7.31%.[14]

Q. DOES THE COMPANY HAVE A SEPARATE CAPITAL STRUCTURE THAT IS RECOGNIZED BY INVESTORS?

A. Yes. The Company is a separate corporate entity that has its own capital structure and issues its own debt with the Securities and Exchange Commission. That being said, the Minnesota jurisdictional operations' capital structure is an allocated portion of the Company's capital structure.

14 See, Direct Testimony of Paul A. Johnson.

Q. WHY IS IT IMPORTANT THAT THE COMPANY'S RECOMMENDED CAPITAL STRUCTURE BE AUTHORIZED IN THIS PROCEEDING?

A. As a preliminary matter, the Company's recommended capital structure is comparable to its historical capital structure, and is within a reasonable range from the perspective of the Utility Proxy Group companies.[15] The use of an operating subsidiary's capital structure is consistent with the FERC's precedent, under which they use the applicant's capital structure, where possible.[16] In particular, the FERC will use the utility operating company's capital structure if it meets three criteria: (1) it issues its own debt without guarantees; (2) it has its own bond rating; and (3) it has a capital structure within the range of capital structures approved by the commission.[17] The Company meets all of these criteria.

Importantly, in order to provide safe, reliable, and affordable service to its customers, the Company must meet the needs and serve the interests of its various stakeholders, including customers, shareholders, and bondholders. The interests of these stakeholder groups are aligned when the Company maintains a healthy balance sheet, strong credit ratings, and a supportive regulatory environment, ensuring it has access to capital on reasonable terms in order to make necessary investments.

Safe and reliable service cannot be maintained at a reasonable cost if utilities do not have the financial flexibility and strength to access competitive financing

15 Exhibit__(DWD-1), Schedule 3.
16 *See, Transcontinental Gas Pipe Line Corp,* 80 FERC ¶ 61,157, 61,657 (1997) (Opinion No. 414).
17 148 FERC ¶ 61,049 Docket No. EL14-12-000, at 190.

markets on reasonable terms. The authorization of a capital structure that understates the Company's actual common equity will weaken the financial condition of its operations and adversely impact the Company's ability to address expenses and investment, to the detriment of customers and shareholders. Safe and reliable service for customers cannot be sustained over the long term if the interests of shareholders and bondholders are minimized such that the public interest is not optimized.

Consequently, the Company's recommended capital structure should be used to set rates in this proceeding.

Q. HOW DOES THE COMPANY'S REQUESTED TEST YEAR CAPITAL STRUCTURE COMPARE WITH ITS RECENT CAPITAL STRUCTURES?

A. The requested test year capital structure is highly consistent with NSP's historical capital structures. As shown on Exhibit__(DWD-1), Schedule 2, page 1, the common equity ratios for years 2016 through 2020 range from 52.08% to 52.67%, averaging 52.36%.

Q. HOW DOES NSP'S RECOMMENDED COMMON EQUITY RATIO OF 52.50% COMPARE WITH THE COMMON EQUITY RATIOS MAINTAINED BY THE UTILITY PROXY GROUP?

A. The Company's requested ratemaking common equity ratio of 52.50% is reasonable and consistent with the range of common equity ratios maintained by the Utility Proxy Group. In order to assess the reasonableness of the Company's requested ratemaking common equity ratio, I reviewed the actual

common equity ratios maintained by the companies within the Utility Proxy Group.[18] As shown on pages 2 and 3 of Exhibit___(DWD-1), Schedule 3, common equity ratios of the utilities range from 31.06% to 56.14% for fiscal year 2020. The Company's recommended equity ratio of 52.50% falls within this range and demonstrates both the reasonableness of using it to set rates and the Company's relative financial health. Setting the WACC as requested by the Company will continue to support the long-term financial health of the Company for the benefit of all of its stakeholders, including Minnesota customers.

I also considered *Value Line's* projected capital structures for the Utility Proxy Group for 2024-2026. That analysis shows a range of projected common equity ratios between 33.50% and 60.00%.[19]

In addition to comparing the Company's ratemaking common equity ratio with common equity ratios currently and expected to be maintained by the Utility Proxy Group (*i.e.*, at the holding company level), I also compared the Company's ratemaking common equity ratio with the equity ratios maintained by the operating subsidiaries of the Utility Proxy Group companies. As shown on page 4 of Exhibit___(DWD-1), Schedule 3, common equity ratios of the operating utility subsidiaries of the Utility Proxy Group range from 41.41% to 54.98% for fiscal year 2020.

18 The development of the Utility Proxy Group is described more fully in Section VI.
19 Exhibit__(DWD-1), Schedule 5, at 3-15.

Q. IS THE COMPANY'S PROPOSED EQUITY RATIO OF 52.50% APPROPRIATE FOR RATEMAKING PURPOSES GIVEN THE RANGE OF THE UTILITY PROXY GROUP?

A. Yes, it is. The Company's proposed equity ratio of 52.50% is appropriate for ratemaking purposes in the current proceeding because it aligns with its historical capital structure and it is well within industry norms.

## VI. COST OF LONG-TERM DEBT

Q. HOW IS THE COMPANY PROPOSING TO SET ITS COST OF LONG-TERM DEBT?

A. The Company is proposing to use its expected cost of long-term debt for the test year.

Q. HOW WAS THE PROPOSED COST OF LONG-TERM DEBT DETERMINED?

A. As shown on Exhibit___(DWD-1), Schedule 4, page 1, the overall 4.13% cost of long-term debt for the test year includes the actual and forecasted coupon rate on all bonds expected to be outstanding for each month of the test year.[20] In addition to the interest expense, the cost of long-term debt also includes actual amortization expense for debt issuance costs, discounts or premiums, losses on reacquired debt, gains and losses from hedging transactions, and the annual amortization of the upfront fees associated with the Company's multi-year credit agreement.

20 The 4.13% cost of long-term debt includes forecasted interest rates for the 2022 planned issuances.

Q. HAVE YOU ANALYZED THE COMPANY'S COST OF LONG-TERM DEBT FOR REASONABLENESS?

A. Yes, I have. To test the reasonableness of the Company's proposed long-term debt cost, I reviewed the yield on equivalent debt at the time of issuance. As shown in Exhibit___(DWD-1), Schedule 4, page 1, I compared the cost of each individual issuance to the Bloomberg Fair Value Curves for A-rated and BBB-rated utility debt at the time of the issuance. The expected cost of long-term debt based on the Bloomberg Fair Value Curves for A-rated and BBB-rated utility debt ranges from 4.20% to 4.58%, respectively, indicating that its 4.13% proposed cost of long-term debt is reasonable.

## VII. COMMON EQUITY COST RATE MODELS

Q. IS IT IMPORTANT THAT COST OF COMMON EQUITY MODELS BE MARKET-BASED?

A. Yes. As discussed previously, regulated public utilities, like the Company, must compete for equity in capital markets along with all other companies with commensurate risk, including non-utilities. The cost of common equity is thus determined based on equity market expectations for the returns of those companies. If an individual investor is choosing to invest their capital among companies with comparable risk, they will choose the company providing a higher return over a company providing a lower return.

Q. ARE THE COST OF COMMON EQUITY MODELS YOU USE MARKET-BASED MODELS?

A. Yes. The DCF model is market-based in that market prices are used in developing the dividend yield component of the model. The RPM and CAPM

are also market-based in that the bond/issuer ratings and expected bond yields/risk-free rate used in the application of the RPM and CAPM reflect the market's assessment of bond/credit risk. In addition, the use of the Beta coefficient to determine the equity risk premium also reflects the market's assessment of market/systematic risk, as Beta coefficients are derived from regression analyses of market prices. Moreover, market prices are used in the development of the monthly returns and equity risk premiums used in the Predictive Risk Premium Model (PRPM). Selection criteria for the Non-Price Regulated Proxy Group are based on regression analyses of market prices and reflect the market's assessment of total risk.

Q. WHAT ANALYTICAL APPROACHES DID YOU USE TO DETERMINE THE COMPANY'S ROE?

A. As discussed earlier, I have relied on the DCF model, the RPM, and the CAPM, which I apply to the Utility Proxy Group described above. I also applied these same models to a Non-Price Regulated Proxy Group described later in this section.

I rely on multiple models because reasonable investors use a variety of tools and do not rely exclusively on a single source of information or single model. Moreover, the specific models on which I rely focus on different aspects of return requirements, and provide different insights into investors' views of risk and return. The DCF model, for example, estimates the investor-required return assuming a constant expected dividend yield and growth rate in perpetuity, while Risk Premium-based methods (*i.e.,* the RPM and CAPM

approaches) provide the ability to reflect investors' views of risk, future market returns, and the relationship between interest rates and the Cost of Equity. Just as the use of market data for the Utility Proxy Group adds the reliability necessary to inform expert judgment in arriving at a recommended common equity cost rate, the use of multiple generally accepted common equity cost rate models also adds reliability and accuracy when arriving at a recommended common equity cost rate.

### A. Discounted Cash Flow Model

Q. PLEASE DESCRIBE THE DCF MODEL GENERALLY.

A. The theory underlying the DCF model is that the present value of an expected future stream of net cash flows during the investment holding period can be determined by discounting those cash flows at the cost of capital, or the investors' capitalization rate. DCF theory indicates that an investor buys a stock for an expected total return rate, which is derived from the cash flows received from dividends and market price appreciation. Mathematically, the expected dividend yield on market price plus a growth rate equals the capitalization rate; *i.e.*, the total common equity return rate expected by investors, as shown in Equation [1] below:

$K_e = (D_0 (1+g))/P + g$

where:

$K_e$ = the required Return on Equity;

$D_0$ = the annualized Dividend Per Share;

$P$ = the current stock price; and

$g$ = the growth rate.

Q. WHICH VERSION OF THE DCF MODEL DID YOU USE?

A. I used the single-stage constant growth DCF model and the two growth DCF model in my analyses.

Q. PLEASE DESCRIBE THE DIVIDEND YIELD YOU USED IN APPLYING THE CONSTANT GROWTH DCF MODEL.

A. The unadjusted dividend yields are based on the proxy companies' dividends as of August 31, 2021 divided by the average closing market price for the 60 trading days ended August 31, 2021.[21]

Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO THE DIVIDEND YIELD.

A. Because dividends are paid periodically (*e.g.* quarterly), as opposed to continuously (daily), an adjustment must be made to the dividend yield. This is often referred to as the discrete, or the Gordon Periodic, version of the DCF model.

21 *See,* Column 1, page 1 of Exhibit___(DWD-1), Schedule 5.

DCF theory calls for using the full growth rate, or $D_1$, in calculating the model's dividend yield component. Since the companies in the Utility Proxy Group increase their quarterly dividends at various times during the year, a conservative assumption is to reflect one-half the annual dividend growth rate rather than the full growth rate in the dividend yield component, or $D_{1/2}$. Because the dividend should be representative of the next 12-month period, this adjustment is a conservative approach that does not overstate the dividend yield. Therefore, the actual average dividend yields in Column 1, page 1 of Exhibit___(DWD-1), Schedule 5 have been adjusted upward to reflect one-half the average projected growth rate shown in Column 5.

Q. PLEASE EXPLAIN THE BASIS FOR THE GROWTH RATES YOU APPLY IN YOUR CONSTANT GROWTH DCF MODEL.

A. Investors with more limited resources than institutional investors are likely to rely on widely available financial information services, such as *Value Line*, Zacks, and Yahoo! Finance. Investors realize that analysts have significant insight into the dynamics of the industries and individual companies they analyze, as well as companies' abilities to effectively manage the effects of changing laws and regulations, and ever-changing economic and market conditions. For these reasons, I used analysts' five-year forecasts of EPS growth in my DCF analysis.

Over the long run, there can be no growth in DPS without growth in EPS. Security analysts' earnings expectations have a more significant influence on market prices than dividend expectations. Thus, using projected earnings growth rates in a DCF analysis provides a better match between investors'

market price appreciation expectations and the growth rate component of the DCF.

Q. PLEASE SUMMARIZE THE CONSTANT GROWTH DCF MODEL RESULTS.

A. As shown on page 1 of Exhibit___(DWD-1), Schedule 5, the application of the Constant Growth DCF model to the Utility Proxy Group results in a wide range of indicated ROEs from 6.39% to 11.73%. The mean of those results is 8.77%, the median result is 8.89%, and the average of the mean and median results is 8.83%. In arriving at a conclusion of the indicated common equity cost rate for the Utility Proxy Group implied by the Constant Growth DCF model, I relied on an average of the mean and the median results (*i.e.*, 8.83%) of the DCF. By doing so, I have considered the DCF results for each company without giving undue weight to outliers on either the high or the low side.

Q. DID YOU CONSIDER ANY OTHER CONSTANT GROWTH DCF MODEL RESULTS?

A. No, I did not. However, consistent with the Department's past practice of considering proxy groups which exclude companies whose DCF results do not pass the test of reasonableness,[22] I calculated the average and median result of the constant growth DCF model excluding proxy companies with results below 7.00%, which is 9.05%.[23] Because I did not include the DCF results excluding proxy company results below 7.00% in my calculation of the indicated common

22 See, for example, Docket No. E017/GR-15-1033, In the Matter of the Application of Otter Tail Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota, August 16, 2016, at 11.

23 *See,* Column 7, page 1 of Exhibit___(DWD-1), Schedule 5.

equity cost rate for the Utility Proxy Group, the 8.83% indicated DCF model results noted above represents a conservative measure of the Company's ROE.

Q. PLEASE DESCRIBE YOUR USE OF THE TWO GROWTH DCF APPROACH IN YOUR ANALYSES.

A. I also considered the results of the two growth DCF approach, which moderates the effects of substantially high or low growth rate estimates that may be influenced by near-term events and may not reflect the subject company's expected long-term growth rate. The two growth DCF approach therefore may be applied when the mean growth rate of a particular company is considered unusually high or low relative to the proxy group. Whereas the constant growth DCF method assumes a single, constant growth rate in perpetuity, the two growth DCF approach allows for a near-term growth estimate (the first stage) followed by a long-term "terminal" period growth estimate. This approach is consistent with the method adopted by the Commission in several prior proceedings. In this case, I applied the two growth DCF approach to two Utility Proxy Group companies with mean growth rates greater than one standard deviation from the overall Utility Proxy Group mean growth rate.

Q. PLEASE EXPLAIN THE BASIS OF THE GROWTH RATES YOU APPLY IN YOUR TWO GROWTH DCF MODEL.

A. If the proxy group company's growth rate fell within the one standard deviation of the mean growth rate of the Utility Proxy Group, that company would have the same growth rate and same indicated ROE in both the constant growth and two growth DCF models. If the company's growth rate fell outside of one

standard deviation of the Utility Proxy Group mean growth rate, I applied those growth rates only to the first five years of the two growth DCF analysis. For the second stage (that is, the terminal period of the two growth DCF analysis), I used the mean growth rate of all Utility Proxy Group companies with growth rates within one standard deviation of the overall mean growth rate.

Q. PLEASE SUMMARIZE THE TWO GROWTH DCF MODEL RESULTS.

A. As shown on page 2 of Exhibit___(DWD-1), Schedule 5, for the Utility Proxy Group, the mean result of applying the two growth DCF model is 8.66%, the median result is 8.77%, and the average of the two is 8.72%. In arriving at a conclusion for the two growth DCF-indicated common equity cost rate for the Utility Proxy Group, I relied on an average of the mean and the median results of the DCF.

### B. The Risk Premium Model

Q. PLEASE DESCRIBE THE THEORETICAL BASIS OF THE RPM.

A. The RPM is based on the fundamental financial principle of risk and return; namely, that investors require greater returns for bearing greater risk. The RPM recognizes that common equity capital has greater investment risk than debt capital, as common equity shareholders are behind debt holders in any claim on a company's assets and earnings. As a result, investors require higher returns from common stocks than from bonds to compensate them for bearing the additional risk.

While it is possible to directly observe bond returns and yields, investors' required common equity returns cannot be directly determined or observed. According to RPM theory, one can estimate a common equity risk premium over bonds (either historically or prospectively), and use that premium to derive a cost rate of common equity. The cost of common equity equals the expected cost rate for long-term debt capital, plus a risk premium over that cost rate, to compensate common shareholders for the added risk of being unsecured and last-in-line for any claim on the corporation's assets and earnings upon liquidation.

Q. PLEASE EXPLAIN HOW YOU DERIVED YOUR INDICATED COST OF COMMON EQUITY BASED ON THE RPM.

A. To derive my indicated cost of common equity under the RPM, I used two risk premium methods. The first method was the PRPM and the second method was a risk premium model using a total market approach. The PRPM estimates the risk-return relationship directly, while the total market approach indirectly derives a risk premium by using known metrics as a proxy for risk.

*1. Predictive Risk Premium Model*

Q. PLEASE EXPLAIN THE PRPM.

A. The PRPM, published in the *Journal of Regulatory Economics,*[24] was developed from the work of Robert F. Engle, who shared the Nobel Prize in Economics in 2003 "for methods of analyzing economic time series with time-varying volatility" or

24 Pauline M. Ahern, Frank J. Hanley and Richard A. Michelfelder, Ph.D. *A New Approach for Estimating the Equity Risk Premium for Public Utilities*, The Journal of Regulatory Economics (December 2011), 40:261-278.

ARCH.[25] Engle found that volatility changes over time and is related from one period to the next, especially in financial markets. Engle discovered that volatility of prices and returns clusters over time and is therefore highly predictable and can be used to predict future levels of risk and risk premiums. That is, historical volatility can be used to predict future volatility, which then can be translated to a predicted equity risk premium.

The PRPM estimates the risk-return relationship directly, as the predicted equity risk premium is generated by predicting volatility or risk. The PRPM is not based on an estimate of investor behavior, but rather on an evaluation of the results of that behavior (*i.e.*, the variance of historical equity risk premiums).

The inputs to the model are the historical returns on the common shares of each Utility Proxy Group company minus the historical monthly yield on long-term U.S. Treasury securities through August 2021. Using a generalized form of ARCH, known as GARCH, I calculated each Utility Proxy Group company's projected equity risk premium using Eviews© statistical software. When the GARCH model is applied to the historical return data, it produces a predicted GARCH variance series[26] and a GARCH coefficient.[27] Multiplying the predicted monthly variance by the GARCH coefficient and then annualizing it[28] produces the predicted annual equity risk premium. I then added the forecasted 30-year U.S. Treasury bond yield of 2.70%[29] to each company's PRPM-derived

25 Autoregressive conditional heteroscedasticity; *See also,* www.nobelprize.org.
26 Illustrated on Columns 1 and 2, page 2 of Exhibit___(DWD-1), Schedule 6.
27 Illustrated on Column 4, page 2 of Exhibit___(DWD-1), Schedule 6.
28 Annualized Return = (1 + Monthly Return) ^12 - 1
29 *See,* Column 6, page 2 of Exhibit___(DWD-1), Schedule 6.

equity risk premium to arrive at an indicated cost of common equity. The 30-year U.S. Treasury bond yield is a consensus forecast derived from *Blue Chip Financial Services (Blue Chip).*[30] The mean PRPM indicated common equity cost rate for the Utility Proxy Group is 11.34%, the median is 10.98%, and the average of the two is 11.16%. Consistent with my reliance on the average of the median and mean results of the DCF models, I relied on the average of the mean and median results of the Utility Proxy Group PRPM to calculate a cost of common equity rate of 11.16%.

Q. PLEASE DESCRIBE YOUR SELECTION OF A RISK-FREE RATE OF RETURN.

A. As shown in Exhibit___(DWD-1), Schedules 6 and 7, the risk-free rate adopted for applications of the RPM and CAPM is 2.70%. This risk-free rate is based on the average of the *Blue Chip* consensus forecast of the expected yields on 30-year U.S. Treasury bonds for the six quarters ending with the fourth calendar quarter of 2022, and long-term projections for the years 2023 to 2027 and 2028 to 2032.

Q. WHY DO YOU USE THE PROJECTED 30-YEAR TREASURY YIELD IN YOUR ANALYSES?

A. The yield on long-term U.S. Treasury bonds is almost risk-free and its term is consistent with the long-term cost of capital to public utilities measured by the yields on Moody's A-rated public utility bonds; the long-term investment horizon inherent in utilities' common stocks; and the long-term life of the jurisdictional rate base to which the allowed fair rate of return (*i.e.*, cost of

30 *Blue Chip Financial Forecasts (Blue Chip)*, June 1, 2021 at 14, and September 1, 2021 at 2.

capital) will be applied. In contrast, short-term U.S. Treasury yields are more volatile and largely a function of Federal Reserve monetary policy.

More specifically, the term of the risk-free rate used for cost of capital purposes should match the life (or duration) of the underlying investment (*i.e.,* perpetuity). As noted by Morningstar:

> The traditional thinking regarding the time horizon of the chosen Treasury security is that it should match the time horizon of whatever is being valued. When valuing a business that is being treated as a going concern, the appropriate Treasury yield should be that of a long-term Treasury bond. Note that the horizon is a function of the investment, not the investor. If an investor plans to hold stock in a company for only five years, the yield on a five-year Treasury note would not be appropriate since the company will continue to exist beyond those five years.[31]

Morin also confirms this when he states:

> [b]ecause common stock is a long-term investment and because the cash flows to investors in the form of dividends last indefinitely, the yield on very long-term government bonds, namely, the yield on 30-year Treasury bonds, is the best measure of the risk-free rate for use in the CAPM (footnote

31 Morningstar, Inc., 2013 Ibbotson Stocks, Bonds, Bills and Inflation Valuation Yearbook, at 44.

> omitted)… The expected common stock return is based on long-term cash flows, regardless of an individual's holding time period.[32]

Pratt and Grabowski recommend a similar approach to selecting the risk-free rate: "[i]n theory, when determining the risk-free rate and the matching ERP you should be matching the risk-free security and the ERP with the period in which the investment cash flows are expected."[33]

As a practical matter, equity securities represent a perpetual claim on cash flows; 30-year Treasury bonds are the longest-maturity securities available to approximate that perpetual claim. Thus, the use of a 30-year Treasury bond yield is a more appropriate risk-free rate as it more accurately reflects the life of the assets it finances.

*2. Total Market Approach Risk Premium Model*

Q. PLEASE EXPLAIN THE TOTAL MARKET APPROACH RPM.

A. The total market approach RPM adds a prospective public utility bond yield to an average of: 1) an equity risk premium that is derived from a Beta-adjusted total market equity risk premium, 2) an equity risk premium based on the S&P Utilities Index, and 3) an equity risk premium based on authorized ROEs for electric utilities.

32 Roger A. Morin, New Regulatory Finance, 2006, at 151. (Morin)

33 Shannon Pratt and Roger Grabowski, Cost of Capital: Applications and Examples, 3rd Ed. (Hoboken, NJ: John Wiley & Sons, Inc., 2008), at 92. "ERP" is the Equity Risk Premium.

Q. PLEASE EXPLAIN HOW YOU DETERMINED THE EXPECTED BOND YIELD, APPLICABLE TO THE UTILITY PROXY GROUP.

A. The first step in the total market approach RPM analysis is to determine the expected bond yield. Because both ratemaking and the cost of capital, including the common equity cost rate, are prospective in nature, a prospective yield on similarly-rated long-term debt is essential. Because I am unaware of any publication that provides forecasted public utility bond yields, I relied on a consensus forecast of about 50 economists of the expected yield on Aaa-rated corporate bonds for the six calendar quarters ending with the fourth calendar quarter of 2022, and *Blue Chip's* long-term projections for 2023 to 2027, and 2028 to 2032. As shown on line 1, page 3 of Exhibit___(DWD-1), Schedule 6, the average expected yield on Moody's Aaa-rated corporate bonds is 3.41%.

Because that 3.41% estimate represents a corporate bond yield and not a utility specific bond yield, I adjusted the expected Aaa-rated corporate bond yield to an equivalent A2-rated public utility bond yield. That resulted in an upward adjustment of 0.38%, which represents a recent spread between Aaa-rated corporate bonds and A2-rated public utility bonds.[34] Adding that recent 0.38% spread to the expected Aaa-rated corporate bond yield of 3.41% results in an expected A2-rated public utility bond yield of 3.79%.

I then reviewed the average credit rating for the Utility Proxy Group from Moody's to determine if an adjustment to the estimated A2-rated public utility bond was necessary. Since the Utility Proxy Group's average Moody's long-

34 As shown on line 2 and explained in note 2, page 3 of Exhibit___(DWD-1), Schedule 6.

term issuer rating is A3/Baa1, another adjustment to the expected A2-rated public utility bond is needed to reflect the difference in bond ratings. An upward adjustment of 0.13%, which represents one-half of a recent spread between A2-rated and Baa2-rated public utility bond yields, is necessary to make the A2 prospective bond yield applicable to an A2/A3-rated public utility bond.[35] Adding the 0.13% to the 3.79% prospective A2-rated public utility bond yield results in a 3.92% expected bond yield applicable to the Utility Proxy Group.

**Table 3**

**Summary of the Calculation of the Utility Proxy Group**

**Projected Bond Yield[36]**

| | |
|---|---|
| Prospective Yield on Moody's Aaa-Rated Corporate Bonds (*Blue Chip)* | 3.41% |
| Adjustment to Reflect Yield Spread Between Moody's Aaa-Rated Corporate Bonds and Moody's A2-Rated Utility Bonds | 0.38% |
| Adjustment to Reflect the Utility Proxy Group's Average Moody's Bond Rating of A3/Baa1 | 0.13% |
| Prospective Bond Yield Applicable to the Utility Proxy Group | 3.92% |

35 As shown on line 4 and explained in note 3, page 3 of Exhibit___(DWD-1), Schedule 6. Moody's does not provide public utility bond yields for Baa1 or A3-rated bonds. As such, it was necessary to estimate the difference between A2-rated and A3/Baa1-rated public utility bonds. Because there are three steps between Baa2 and A2 (Baa2 to Baa1, Baa1 to A3, and A3 to A2) I assumed an adjustment of one-half of the difference between the A2-rated and Baa2-rated public utility bond yield was appropriate.

36 As shown on page 3 of Exhibit___(DWD-1), Schedule 6.

To develop the total market approach RPM estimate of the appropriate return on equity, this prospective bond yield is then added to the average of the three different equity risk premiums, which I now discuss, in turn.

### a. Beta Coefficient Derived Equity Risk Premium

Q. PLEASE EXPLAIN HOW THE BETA-DERIVED EQUITY RISK PREMIUM IS DETERMINED.

A. The components of the Beta-derived risk premium model are: 1) an expected market equity risk premium over corporate bonds, and 2) the Beta coefficient. The derivation of the Beta-derived equity risk premium that I applied to the Utility Proxy Group is shown on lines 1 through 9, page 8 of Exhibit___(DWD-1), Schedule 6. The total Beta-derived equity risk premium I applied is based on an average of three historical market data-based equity risk premiums, two *Value Line*-based equity risk premiums and a Bloomberg-based equity risk premium. Each of these is described below.

Q. HOW DID YOU DERIVE A MARKET EQUITY RISK PREMIUM BASED ON LONG-TERM HISTORICAL DATA?

A. To derive a historical market equity risk premium, I used the most recent holding period returns for the large company common stocks from the Stocks, Bonds, Bills, and Inflation (SBBI) Yearbook 2021 (SBBI - 2021)[37] less the average historical yield on Moody's Aaa/Aa-rated corporate bonds for the period 1928 to 2020. Using holding period returns over a very long time is appropriate because it is consistent with the long-term investment horizon

37 *See,* SBBI-2021 Appendix A Tables: Morningstar Stocks, Bonds, Bills, & Inflation 1926-2020.

presumed by investing in a going concern, *i.e.*, a company expected to operate in perpetuity.

SBBI's long-term arithmetic mean monthly total return rate on large company common stocks was 11.94% and the long-term arithmetic mean monthly yield on Moody's Aaa/Aa-rated corporate bonds was 6.02%.[38] As shown on line 1, page 8 of Exhibit___(DWD-1), Schedule 6, subtracting the mean monthly bond yield from the total return on large company stocks results in a long-term historical equity risk premium of 5.92%.

I used the arithmetic mean monthly total return rates for the large company stocks and yields (income returns) for the Moody's Aaa/Aa corporate bonds, because they are appropriate for the purpose of estimating the cost of capital as noted in SBBI-2021.[39] Using the arithmetic mean return rates and yields is appropriate because historical total returns and equity risk premiums provide insight into the variance and standard deviation of returns needed by investors in estimating future risk when making a current investment. If investors relied on the geometric mean of historical equity risk premiums, they would have no insight into the potential variance of future returns, because the geometric mean relates the change over many periods to a constant rate of change, thereby obviating the year-to-year fluctuations, or variance, which is critical to risk analysis.

38 As explained in note 1, page 9 of Exhibit___(DWD-1), Schedule 6.
39 *See,* SBBI-2021, at page 10-22, 10-23.

Q. PLEASE EXPLAIN THE DERIVATION OF THE REGRESSION-BASED MARKET EQUITY RISK PREMIUM.

A. To derive the regression-based market equity risk premium of 8.87% shown on line 2, page 8 of Exhibit___(DWD-1), Schedule 6, I used the same monthly annualized total returns on large company common stocks relative to the monthly annualized yields on Moody's Aaa/Aa-rated corporate bonds as mentioned above. I modeled the relationship between interest rates and the market equity risk premium using the observed monthly market equity risk premium as the dependent variable, and the monthly yield on Moody's Aaa/Aa-rated corporate bonds as the independent variable. I then used a linear Ordinary Least Squares (OLS) regression, in which the market equity risk premium is expressed as a function of the Moody's Aaa/Aa-rated corporate bond yield:

$$RP = \alpha + \beta\ (R_{Aaa/Aa})$$

Q. PLEASE EXPLAIN THE DERIVATION OF THE PRPM EQUITY RISK PREMIUM.

A. I used the same PRPM approach described above to the PRPM equity risk premium. The inputs to the model are the historical monthly returns on large company common stocks minus the monthly yields on Moody's Aaa/Aa-rated corporate bonds during the period from January 1928 through August 2021.[40] Using the previously discussed generalized form of ARCH, known as GARCH, the projected equity risk premium is determined using Eviews© statistical

40 Data from January 1926 to December 2020 is from SBBI - 2021. Data from January 2021 to August 2021 is from Bloomberg.

software. The resulting PRPM predicted a market equity risk premium of 7.88%.[41]

Q. PLEASE EXPLAIN THE DERIVATION OF A PROJECTED EQUITY RISK PREMIUM BASED ON *VALUE LINE* DATA FOR YOUR RPM ANALYSIS.

A. As noted above, because both ratemaking and the cost of capital are prospective, a prospective market equity risk premium is needed. The derivation of the forecasted or prospective market equity risk premium can be found in note 4, page 9 of Exhibit___(DWD-1), Schedule 6. Consistent with my calculation of the dividend yield component in my DCF analysis, this prospective market equity risk premium is derived from an average of the three- to five-year median market price appreciation potential by *Value Line* for the 13 weeks ended September 3, 2021, plus an average of the median estimated dividend yield for the common stocks of the 1,700 firms covered in *Value Line* (Standard Edition).[42]

The average median expected price appreciation is 32%, which translates to a 7.19% annual appreciation, and, when added to the average of *Value Line's* median expected dividend yields of 1.75%, equates to a forecasted annual total return rate on the market of 8.94%. The forecasted Moody's Aaa-rated corporate bond yield of 3.41% is deducted from the total market return of 8.94%, resulting in an equity risk premium of 5.53%, as shown on line 4, page 8 of Exhibit___(DWD-1), Schedule 6.

41 Shown on line 3, page 8 of Exhibit___(DWD-1), Schedule 6.
42 As explained in detail in note 1, page 2 of Exhibit___(DWD-1), Schedule 7.

Q. PLEASE EXPLAIN THE DERIVATION OF AN EQUITY RISK PREMIUM BASED ON THE S&P 500 COMPANIES.

A. Using data from *Value Line*, I calculated an expected total return on the S&P 500 companies using expected dividend yields and long-term growth estimates as a proxy for capital appreciation. The expected total return for the S&P 500 is 15.05%. Subtracting the prospective yield on Moody's Aaa-rated corporate bonds of 3.41% results in a 11.64% projected equity risk premium.

Q. PLEASE EXPLAIN THE DERIVATION OF AN EQUITY RISK PREMIUM BASED ON BLOOMBERG DATA.

A. Using data from Bloomberg, I calculated an expected total return on the S&P 500 using expected dividend yields and long-term growth estimates as a proxy for capital appreciation, identical to the method described above. The expected total return for the S&P 500 is 18.17%. Subtracting the prospective yield on Moody's Aaa-rated corporate bonds of 3.41% results in a 14.76% projected equity risk premium.

Q. WHAT IS YOUR CONCLUSION OF A BETA-DERIVED EQUITY RISK PREMIUM FOR USE IN YOUR RPM ANALYSIS?

A. I gave equal weight to all six equity risk premiums based on each source - historical, *Value Line*, and Bloomberg - in arriving at an 9.10% equity risk premium.

**Table 4**

**Summary of the Calculation of the Equity Risk Premium**

**Using Total Market Returns**[43]

| | |
|---|---|
| Historical Spread Between Total Returns of Large Stocks and Aaa and Aa-Rated Corporate Bond Yields (1928 – 2020) | 5.92% |
| Regression Analysis on Historical Data | 8.87% |
| PRPM Analysis on Historical Data | 7.88% |
| Prospective Equity Risk Premium using Total Market Returns from *Value Line* Summary & Index less Projected Aaa Corporate Bond Yields | 5.53% |
| Prospective Equity Risk Premium using Measures of Capital Appreciation and Income Returns from *Value Line* for the S&P 500 less Projected Aaa Corporate Bond Yields | 11.64% |
| Prospective Equity Risk Premium using Measures of Capital Appreciation and Income Returns from Bloomberg Professional Services for the S&P 500 less Projected Aaa Corporate Bond Yields | 14.76% |
| **Average** | 9.10% |

After calculating the average market equity risk premium of 9.10%, I adjusted it by the Beta coefficient to account for the risk of the Utility Proxy Group. As discussed below, the Beta coefficient is a meaningful measure of prospective relative risk to the market as a whole, and is a logical way to allocate a company's, or proxy group's, share of the market's total equity risk premium relative to corporate bond yields. As shown on page 1 of Exhibit___(DWD-1), Schedule

43 As shown on page 8 of Exhibit___(DWD-1), Schedule 6.

6, the average of the mean and median Beta coefficient for the Utility Proxy Group is 0.99. Multiplying the 0.99 average Beta coefficient by the market equity risk premium of 9.10% results in a Beta-adjusted equity risk premium for the Utility Proxy Group of 9.01%.

### b. S&P Utility Index Derived Equity Risk Premium

Q. HOW DID YOU DERIVE THE EQUITY RISK PREMIUM BASED ON THE S&P UTILITY INDEX AND MOODY'S A-RATED PUBLIC UTILITY BONDS?

A. I estimated three equity risk premiums based on S&P Utility Index holding period returns, and two equity risk premiums based on the expected returns of the S&P Utilities Index, using *Value Line* and Bloomberg data, respectively. Turning first to the S&P Utility Index holding period returns, I derived a long-term monthly arithmetic mean equity risk premium between the S&P Utility Index total returns of 10.65% and monthly Moody's A-rated public utility bond yields of 6.49% from 1928 to 2020 to arrive at an equity risk premium of 4.16%.[44] I then used the same historical data to derive an equity risk premium of 6.51% based on a regression of the monthly equity risk premiums. The final S&P Utility Index holding period equity risk premium involved applying the PRPM using the historical monthly equity risk premiums from January 1928 to August 2021 to arrive at a PRPM-derived equity risk premium of 4.94% for the S&P Utility Index.

I then derived expected total returns on the S&P Utilities Index of 10.94% and 9.11% using data from *Value Line* and Bloomberg, respectively, and subtracted

44 As shown on line 1, page 12 of Exhibit___(DWD-1), Schedule 6.

the prospective Moody's A2-rated public utility bond yield of 3.79%[45], which resulted in equity risk premiums of 7.15% and 5.32%, respectively. As with the market equity risk premiums, I averaged each risk premium based on each source (*i.e.*, historical, *Value Line*, and Bloomberg) to arrive at my utility-specific equity risk premium of 5.62%.

**Table 5**

**Summary of the Calculation of the Equity Risk Premium**

**Using S&P Utility Index Holding Returns[46]**

| | |
|---|---|
| Historical Spread Between Total Returns of the S&P Utilities Index and A2-Rated Utility Bond Yields (1928 – 2020) | 4.16% |
| Regression Analysis on Historical Data | 6.51% |
| PRPM Analysis on Historical Data | 4.94% |
| Prospective Equity Risk Premium using Measures of Capital Appreciation and Income Returns from *Value Line* for the S&P Utilities Index Less Projected A2 Utility Bond Yields | 7.15% |
| Prospective Equity Risk Premium using Measures of Capital Appreciation and Income Returns from Bloomberg Professional Services for the S&P Utilities Index Less Projected A2 Utility Bond Yields | 5.32% |
| **Average** | 5.62% |

45 Derived on line 3, page 3 of Exhibit___(DWD-1), Schedule 6.
46 As shown on page 12 of Exhibit___(DWD-1), Schedule 6.

### c. Authorized Return Derived Equity Risk Premium

Q. HOW DO YOU DERIVE AN EQUITY RISK PREMIUM OF 5.64% BASED ON AUTHORIZED ROEs FOR ELECTRIC UTILITIES?

A. The equity risk premium of 5.81% shown on line 3, page 7 of Exhibit___(DWD-1), Schedule 6 is the result of a regression analysis based on regulatory awarded ROEs related to the yields on Moody's A-rated public utility bonds. That analysis is shown on page 13 of Exhibit___(DWD-1), Schedule 6. Page 13 of Exhibit___(DWD-1), Schedule 6 contains the graphical results of a regression analysis of 1,183 rate cases for electric utilities which were fully litigated during the period from January 1, 1980 through August 31, 2021. It shows the implicit equity risk premium relative to the yields on A2-rated public utility bonds immediately prior to the issuance of each regulatory decision. That is, the analysis considers the relationship between authorized returns and prevailing public utility bond yields at the time of the decision.

It is readily discernible that there is an inverse relationship between the yield on A2-rated public utility bonds and equity risk premiums. In other words, as interest rates decline, the equity risk premium rises and vice versa, a result consistent with financial literature on the subject.[47] I used the regression results to estimate the equity risk premium applicable to the projected yield on Moody's A2-rated public utility bonds. Given the expected A2-rated utility bond yield of 3.79%, it can be calculated that the indicated equity risk premium applicable

47 *See*, *e.g.*, Robert S. Harris and Felicia C. Marston, *The Market Risk Premium: Expectational Estimates Using Analysts' Forecasts*, Journal of Applied Finance, Vol. 11, No. 1, 2001, at 11-12; Eugene F. Brigham, Dilip K. Shome, and Steve R. Vinson, *The Risk Premium Approach to Measuring a Utility's Cost of Equity*, Financial Management, Spring 1985, at 33-45.

to that bond yield is 5.81%, which is shown on line 3, page 7 of Exhibit___(DWD-1), Schedule 6.

Q. WHAT IS YOUR CONCLUSION OF AN EQUITY RISK PREMIUM FOR USE IN YOUR TOTAL MARKET APPROACH RPM ANALYSIS?

A. The equity risk premium I apply to the Utility Proxy Group is 6.81%, which is the average of the Beta-adjusted equity risk premium for the Utility Proxy Group, the S&P Utilities Index, and the authorized return utility equity risk premiums of 9.01%, 5.62%, and 5.81%, respectively.[48]

Q. WHAT IS THE INDICATED RPM COMMON EQUITY COST RATE BASED ON THE TOTAL MARKET APPROACH?

A. As shown on line 7, page 3 of Exhibit___(DWD-1), Schedule 6 and shown on Table 6, below, I calculated a common equity cost rate of 10.73% for the Utility Proxy Group based on the total market approach RPM.

**Table 6**

**Summary of the Total Market Return Risk Premium Model**[49]

| | |
|---|---|
| Prospective Moody's A3-Rated Utility Bond Applicable to the Utility Proxy Group | 3.92% |
| Prospective Equity Risk Premium | 6.81% |
| Indicated Cost of Common Equity | 10.73% |

48 As shown on page 7 of Exhibit___(DWD-1), Schedule 6.
49 As shown on page 3 of Exhibit___(DWD-1), Schedule 6.

Q. WHAT ARE THE RESULTS OF YOUR APPLICATION OF THE PRPM AND THE TOTAL MARKET APPROACH RPM?

A. As shown on page 1 of Exhibit___(DWD-1), Schedule 6, the indicated RPM-derived common equity cost rate is 10.95%, which gives equal weight to the PRPM (11.16%) and the adjusted-market approach results (10.73%).

### C. The Capital Asset Pricing Model

Q. PLEASE EXPLAIN THE THEORETICAL BASIS OF THE CAPM.

A. CAPM theory defines risk as the co-variability of a security's returns with the market's returns as measured by the Beta coefficient (β). A Beta coefficient less than 1.0 indicates lower variability than the market as a whole, while a Beta coefficient greater than 1.0 indicates greater variability than the market.

The CAPM assumes that all non-market or unsystematic risk can be eliminated through diversification. The risk that cannot be eliminated through diversification is called market, or systematic, risk. In addition, the CAPM presumes that investors only require compensation for systematic risk, which is the result of macroeconomic and other events that affect the returns on all assets. The model is applied by adding a risk-free rate of return to a market risk premium, which is adjusted proportionately to reflect the systematic risk of the individual security relative to the total market as measured by the Beta coefficient. The traditional CAPM model is expressed as:

$$R_s = R_f + \beta (R_m - R_f)$$

Where: $R_s$ = Return rate on the common stock

$R_f$ = Risk-free rate of return

$R_m$ = Return rate on the market as a whole

$\beta$ = Adjusted Beta coefficient (volatility of the security relative to the market as a whole)

Numerous tests of the traditional CAPM have measured the extent to which security returns and Beta coefficients are related as predicted by the CAPM, confirming its validity. The empirical CAPM (ECAPM) reflects the reality that while the results of these tests support the notion that the Beta coefficient is related to security returns, the empirical Security Market Line (SML) described by the CAPM formula is not as steeply sloped as the predicted SML.[50]

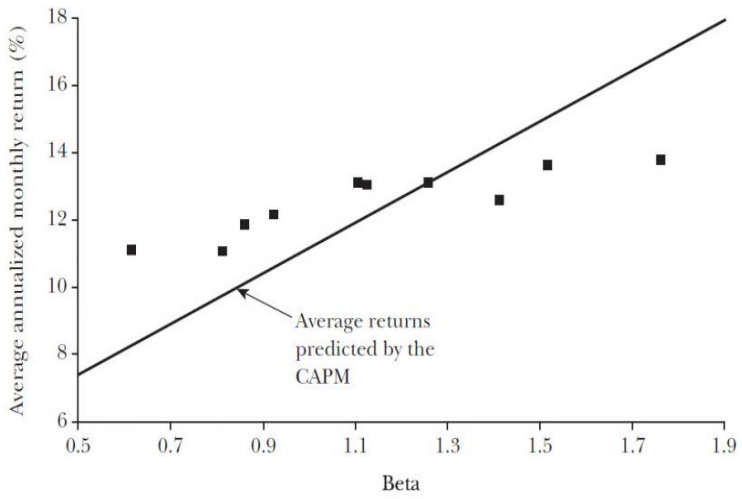
In their work on the CAPM, Fama and French clearly state regarding Figure 2, below, that "[t]he returns on the low beta portfolios are too high, and the returns on the high beta portfolios are too low."[51]

50 Morin, at 175.

51 Eugene F. Fama and Kenneth R. French, *The Capital Asset Pricing Model: Theory and Evidence*, Journal of Economic Perspectives, Vol. 18, No. 3, Summer 2004 at 33 (Fama & French).

*Figure 2* http://pubs.aeaweb.org/doi/pdfplus/10.1257/0895330042162430

**Average Annualized Monthly Return versus Beta for Value Weight Portfolios Formed on Prior Beta, 1928–2003**




In addition, Morin observes that while the results of these tests support the notion that Beta is related to security returns, the empirical SML described by the CAPM formula is not as steeply sloped as the predicted SML. Morin states:

> With few exceptions, the empirical studies agree that … low-beta securities earn returns somewhat higher than the CAPM would predict, and high-beta securities earn less than predicted.[52]

* * *

52 Morin, at 175.

Therefore, the empirical evidence suggests that the expected return on a security is related to its risk by the following approximation:

$$K = R_F + x (R_M - R_F) + (1-x) \beta(R_M - R_F)$$

where x is a fraction to be determined empirically. The value of x that best explains the observed relationship [is] Return = 0.0829 + 0.0520 β is between 0.25 and 0.30. If x = 0.25, the equation becomes:

$$K = R_F + 0.25(R_M - R_F) + 0.75 \beta(R_M - R_F)$$[53]

Fama and French provide similar support for the ECAPM when they state:

> The early tests firmly reject the Sharpe-Lintner version of the CAPM. There is a positive relation between beta and average return, but it is too 'flat.'… The regressions consistently find that the intercept is greater than the average risk-free rate… and the coefficient on beta is less than the average excess market return… This is true in the early tests… as well as in more recent cross-section regressions tests, like Fama and French (1992).[54]

Finally, Fama and French further note:

53 *Ibid.*, at 190.
54 Fama & French, at 32.

> Confirming earlier evidence, the relation between beta and average return for the ten portfolios is much flatter than the Sharpe-Linter CAPM predicts. The returns on low beta portfolios are too high, and the returns on the high beta portfolios are too low. For example, the predicted return on the portfolio with the lowest beta is 8.3 percent per year; the actual return as 11.1 percent. The predicted return on the portfolio with the t beta is 16.8 percent per year; the actual is 13.7 percent.[55]

Clearly, the justification from Morin, Fama, and French, along with their reviews of other academic research on the CAPM, validate the use of the ECAPM. In view of theory and practical research, I have applied both the traditional CAPM and the ECAPM to the companies in the Utility Proxy Group and averaged the results.

Q. WHAT BETA COEFFICIENTS DID YOU USE IN YOUR CAPM ANALYSIS?

A. For the Beta coefficients in my CAPM analysis, I considered two sources: *Value Line* and Bloomberg Professional Services. While both of those services adjust their calculated (or "raw") Beta coefficients to reflect the tendency of the Beta coefficient to regress to the market mean of 1.00, *Value Line* calculates the Beta coefficient over a five-year period, while Bloomberg calculates it over a two-year period.

55 *Ibid.,* at 33.

Q. PLEASE DESCRIBE YOUR SELECTION OF A RISK-FREE RATE OF RETURN.

A. As discussed previously, the risk-free rate adopted for both applications of the CAPM is 2.70%. This risk-free rate is based on the average of the *Blue Chip* consensus forecast of the expected yields on 30-year U.S. Treasury bonds for the six quarters ending with the fourth calendar quarter of 2022, and long-term projections for the years 2023 to 2027 and 2028 to 2032.

Q. PLEASE EXPLAIN THE ESTIMATION OF THE EXPECTED RISK PREMIUM FOR THE MARKET USED IN YOUR CAPM ANALYSES.

A. The basis of the market risk premium is explained in detail in note 1 on Exhibit___(DWD-1), Schedule 7. As discussed above, the market risk premium is derived from an average of three historical data-based market risk premiums, two *Value Line* data-based market risk premiums, and one Bloomberg data-based market risk premium.

The long-term income return on U.S. Government securities of 5.05% was deducted from the SBBI – 2021 monthly historical total market return of 12.20%, which results in an historical market equity risk premium of 7.15%.[56] I applied a linear OLS regression to the monthly annualized historical returns on the S&P 500 relative to historical yields on long-term U.S. Government securities from SBBI - 2021. That regression analysis yielded a market equity risk premium of 9.57%. The PRPM market equity risk premium is 8.77%, and is derived using the PRPM relative to the yields on long-term U.S. Treasury securities from January 1926 through August 2021.

56 SBBI - 2020, at Appendix A-1 (1) through A-1 (3) and Appendix A-7 (19) through A-7 (21).

The *Value Line*-derived forecasted total market equity risk premium is derived by deducting the forecasted risk-free rate of 2.70%, discussed above, from the *Value Line* projected total annual market return of 8.94%, resulting in a forecasted total market equity risk premium of 6.24%. The S&P 500 projected market equity risk premium using *Value Line* data is derived by subtracting the projected risk-free rate of 2.70% from the projected total return of the S&P 500 of 15.05%. The resulting market equity risk premium is 12.35%.

The S&P 500 projected market equity risk premium using Bloomberg data is derived by subtracting the projected risk-free rate of 2.70% from the projected total return of the S&P 500 of 18.17%. The resulting market equity risk premium is 15.47%. These six measures, when averaged, result in an average total market equity risk premium of 9.93%.

**Table 7**

**Summary of the Calculation of the**

**Market Risk Premium for Use in the CAPM[57]**

| | |
|---|---|
| Historical Spread Between Total Returns of Large Stocks and Long-Term Government Bond Yields (1926 – 2019) | 7.15% |
| Regression Analysis on Historical Data | 9.57% |
| PRPM Analysis on Historical Data | 8.77% |
| Prospective Equity Risk Premium using Total Market Returns from *Value Line* Summary & Index less Projected 30-Year Treasury Bond Yields | 6.24% |
| Prospective Equity Risk Premium using Measures of Capital Appreciation and Income Returns from *Value Line* for the S&P 500 less Projected 30-Year Treasury Bond Yields | 12.35% |
| Prospective Equity Risk Premium using Measures of Capital Appreciation and Income Returns from Bloomberg Professional Services for the S&P 500 less Projected 30-Year Treasury Bond Yields | 15.47% |
| **Average** | 9.93% |

Q. WHAT ARE THE RESULTS OF YOUR APPLICATION OF THE TRADITIONAL AND EMPIRICAL CAPM TO THE UTILITY PROXY GROUP?

A. As shown on page 1 of Exhibit___(DWD-1), Schedule 7, the mean result of my CAPM/ECAPM analyses is 12.60%, the median is 12.45%, and the average of the two is 12.53%. Consistent with my reliance on the average of mean and median DCF results discussed above, the indicated common equity cost rate using the CAPM/ECAPM is 12.53%.

57 As shown on page 2 of Exhibit___(DWD-1), Schedule 7.

## D. Common Equity Cost Rates for a Proxy Group of Domestic, Non-Price Regulated Companies Based on the DCF, RPM, and CAPM

Q. WHY DO YOU ALSO CONSIDER A PROXY GROUP OF DOMESTIC, NON-PRICE REGULATED COMPANIES?

A. Although I am not an attorney, my interpretation of the *Hope* and *Bluefield* cases is that they did not specify that comparable risk companies had to be utilities. Since the purpose of rate regulation is to be a substitute for marketplace competition, non-price regulated firms operating in the competitive marketplace make an excellent proxy if they are comparable in total risk to the Utility Proxy Group being used to estimate the cost of common equity. The selection of such domestic, non-price regulated competitive firms theoretically and empirically results in a proxy group which is comparable in total risk to the Utility Proxy Group, since all of these companies compete for capital in the exact same markets.

Q. HOW DID YOU SELECT NON-PRICE REGULATED COMPANIES THAT ARE COMPARABLE IN TOTAL RISK TO THE UTILITY PROXY GROUP?

A. In order to select a proxy group of domestic, non-price regulated companies similar in total risk to the Utility Proxy Group, I relied on the Beta coefficients and related statistics derived from *Value Line* regression analyses of weekly market prices over the most recent 260 weeks (*i.e.*, five years). These selection criteria resulted in a proxy group of 50 domestic, non-price regulated firms comparable in total risk to the Utility Proxy Group. Total risk is the sum of non-diversifiable market risk and diversifiable company-specific risks. The criteria used in selecting the domestic, non-price regulated firms was:

(i) They must be covered by *Value Line* (Standard Edition);

(ii) They must be domestic, non-price regulated companies, *i.e.*, not utilities;

(iii) Their Beta coefficients must lie within plus or minus two standard deviations of the average unadjusted Beta coefficients of the Utility Proxy Group; and

(iv) The residual standard errors of the *Value Line* regressions which gave rise to the unadjusted Beta coefficients must lie within plus or minus two standard deviations of the average residual standard error of the Utility Proxy Group.

Beta coefficients measure market, or systematic, risk, which is not diversifiable. The residual standard errors of the regressions measure each firm's company-specific, diversifiable risk. Companies that have similar Beta coefficients and similar residual standard errors resulting from the same regression analyses have similar total investment risk.

Q. HAVE YOU PREPARED A SCHEDULE WHICH SHOWS THE DATA FROM WHICH YOU SELECTED THE 50 DOMESTIC, NON-PRICE REGULATED COMPANIES THAT ARE COMPARABLE IN TOTAL RISK TO THE UTILITY PROXY GROUP?

A. Yes, the basis of my selection and both proxy groups' regression statistics are shown in Exhibit___(DWD-1), Schedule 8.

Q. DID YOU CALCULATE COMMON EQUITY COST RATES USING THE DCF MODEL, RPM, AND CAPM FOR THE NON-PRICE REGULATED PROXY GROUP?

A. Yes. Because the DCF model, RPM, and CAPM have been applied in an identical manner as described above, I will not repeat the details of the rationale and application of each model. One exception is in the application of the RPM,

where I did not use public utility-specific equity risk premiums, nor did I apply the PRPM to the individual non-price regulated companies.

Page 2 of Exhibit___(DWD-1), Schedule 9 derives the Constant Growth DCF model common equity cost rate, and page 3 of Exhibit___(DWD-1), Schedule 9 derives the two growth DCF model common equity cost rate. As shown, the indicated common equity cost rate, using an average of the constant growth DCF and the two growth DCF for the Non-Price Regulated Proxy Group comparable in total risk to the Utility Proxy Group, is 12.19%.

Pages 4 through 6 of Exhibit___(DWD-1), Schedule 9 contain the data and calculations that support the 12.64% RPM common equity cost rate. As shown on line 1, page 4 of Exhibit___(DWD-1), Schedule 9, the consensus prospective yield on Moody's Baa-rated corporate bonds for the six quarters ending in the third quarter of 2022, and for the years 2023 to 2027 and 2028 to 2032, is 4.30%.[58] Since the Non-Price Regulated Proxy Group has an average Moody's long-term issuer rating of Baa1, a downward adjustment of 0.12% to the projected Baa2 rated corporate bond yield is necessary to reflect the difference in ratings which results in a projected Baa1-rated corporate bond yield of 4.18%.

When the Beta-adjusted risk premium of 8.46%[59] relative to the Non-Price Regulated Proxy Group is added to the prospective Baa1-rated corporate bond yield of 4.18%, the indicated RPM common equity cost rate is 12.64%.

58 *Blue Chip Financial Forecasts*, June 1, 2021, at 2, 14.
59 Derived on page 6 of Exhibit___(DWD-1), Schedule 9.

Page 7 of Exhibit___(DWD-1), Schedule 9 contains the inputs and calculations that support my indicated CAPM/ECAPM common equity cost rate of 12.01%.

Q. HOW IS THE COST RATE OF COMMON EQUITY BASED ON THE NON-PRICE REGULATED PROXY GROUP COMPARABLE IN TOTAL RISK TO THE UTILITY PROXY GROUP?

A. As shown on page 1 of Exhibit___(DWD-1), Schedule 9, the results of the common equity models applied to the Non-Price Regulated Proxy Group -- which is comparable in total risk to the Utility Proxy Group -- are as follows: 12.19% (DCF), 12.64% (RPM), and 12.01% (CAPM). The average of the mean and median of these models is 12.24%, which I used as the indicated common equity cost rates for the Non-Price Regulated Proxy Group.

## VIII. CONCLUSION OF COMMON EQUITY COST ANALYTICAL RESULTS BEFORE ADJUSTMENTS

Q. BASED ON YOUR ANALYSES, WHAT IS THE INDICATED COMMON EQUITY COST RATE BEFORE ADJUSTMENTS?

A. By applying multiple cost of common equity models to the Utility Proxy Group and the Non-Price Regulated Proxy Group, the indicated range of common equity cost rates attributable to the Utility Proxy Group before any relative risk adjustments is between 9.65% and 11.65%. I used multiple cost of common equity models as primary tools in arriving at my recommended common equity cost rate, because each of these models is theoretically sound and available to investors and because no single model is so inherently precise that it can be

relied on to the exclusion of other theoretically sound models. Using multiple models adds reliability to the estimated common equity cost rate, with the prudence of using multiple cost of common equity models supported in both the financial literature and regulatory precedent.

Based on these common equity cost results, I conclude that a range of common equity cost rates between 9.65% and 11.65% is reasonable and appropriate before any adjustments for relative risk differences between the Company and the Utility Proxy Group are made.

## IX. ADJUSTMENTS TO THE COMMON EQUITY COST RATE

### A. Business Risk Adjustment

Q. WHAT COMPANY-SPECIFIC BUSINESS RISKS DID YOU CONSIDER IN YOUR RELATIVE RISK ANALYSIS?

A. As detailed below I considered NSP's small size and its high levels of customer growth and capital expenditures relative to the Utility Proxy Group.

Q. PLEASE COMPARE NSP'S SIZE WITH THAT OF THE UTILITY PROXY GROUP.

A. As shown on Table 8, below, NSP is smaller than the median utility in the Utility Proxy Group, as measured by market capitalization.

**Table 8**

**Size as Measured by Market Capitalization for NSPM's Electric Operations and the Utility Proxy Group**

| | Market Capitalization* ($ Millions) | Times Greater than The Company |
|---|---|---|
| NSP MN Jurisdictional | $11,194.007 | |
| Utility Proxy Group | $15,189.501 | 1.4x |
| *From page 1 of Exhibit___(DWD-1), Schedule 10. | | |

The Company's estimated market capitalization for its Minnesota operations was $11,194.007 million as of August 31, 2021, compared with the market capitalization of the average company in the Utility Proxy Group of $15,189.501 million as of August 31, 2021. The average company in the Utility Proxy Group has a market capitalization 1.4 times the size of the Company's estimated Minnesota-based market capitalization.

Q. SINCE NSP IS PART OF A LARGER COMPANY, WHY IS THE SIZE OF XEI NOT MORE APPROPRIATE TO USE WHEN DETERMINING THE SIZE ADJUSTMENT?

A. The return derived in this proceeding will not apply to XEI's operations as a whole, but only to the Company's Minnesota operations. XEI is the sum of its constituent parts, including those constituent parts' ROEs. Potential investors in the Parent are aware that it is a combination of operations in each state, and that each state's operations experience the operating risks specific to their jurisdiction. The market's expectation of XEI's return is commensurate with

the realities of the Company's composite operations in each of the states in which it operates. That said, I recognize that NSP's Minnesota electric operations are a portion of NSP's overall operations.

Q. SHOULD THE COMPANY BE COMPARED WITH OTHER OPERATING ELECTRIC UTILITIES IN MINNESOTA TO DETERMINE ANY ADJUSTMENT TO THE PROXY GROUP-DERIVED ROE?

A. No, it shouldn't. Since the indicated ROE is determined using the market data of the Utility Proxy Group, any type of adjustment to the indicated ROE must reflect relative differences between the Company and the Utility Proxy Group. Since this is the case, the relative size of other Minnesota utilities is not relevant to determining the ROE for the Company.

Q. DOES THE COMPANY'S SMALLER SIZE RELATIVE TO THE UTILITY PROXY GROUP COMPANIES INCREASE ITS BUSINESS RISK?

A. Yes. As a preliminary matter, because I have developed my cost of common equity recommendation for the Company's Minnesota operations based on market data applied to the Utility Proxy Group of risk-comparable companies, in order to assess the Company's risk associated with its relatively smaller size of its Minnesota operations, it is necessary to compare the Company's Minnesota-jurisdictional size relative to the Utility Proxy Group. The Company's smaller size relative to the Utility Proxy Group companies indicates greater relative business risk for the Company because, all else being equal, size has a material bearing on risk.

Size affects business risk because smaller companies generally are less able to cope with significant events that affect sales, revenues, and earnings. For example, smaller companies face more risk exposure to business cycles and economic conditions, both nationally and locally. Additionally, the loss of revenues from a few larger customers would have a greater effect on a small company than on a bigger company with a larger, more diverse, customer base. This is true for utilities, as well as for non-regulated companies.

As further evidence that smaller firms are riskier, investors generally demand greater returns from smaller firms to compensate for less marketability and liquidity of their securities. Duff & Phelps' 2020 Valuation Handbook – U.S. Guide to Cost of Capital (D&P - 2020) discusses the nature of the small-size phenomenon, providing an indication of the magnitude of the size premium based on several measures of size. In discussing "Size as a Predictor of Equity Returns," D&P - 2020 states:

> The size effect is based on the empirical observation that companies of smaller size are associated with greater risk and, therefore, have greater cost of capital [sic]. The "size" of a company is one of the most important risk elements to consider when developing cost of equity capital estimates for use in valuing a business simply because size has been shown to be a *predictor* of equity returns. In other words, there is a significant (negative) relationship between size and historical equity

returns - as size *decreases*, returns tend to *increase*, and vice versa. (footnote omitted) (emphasis in original)[60]

Furthermore, in "The Capital Asset Pricing Model: Theory and Evidence," Fama and French note size is indeed a risk factor which must be reflected when estimating the cost of common equity. On page 37, they note:

> . . . the higher average returns on small stocks and high book-to-market stocks reflect unidentified state variables that produce undiversifiable risks (covariances) in returns not captured in the market return and are priced separately from market betas.[61]

Based on this evidence, Fama and French proposed their three-factor model which includes a size variable in recognition of the effect size has on the cost of common equity.

Also, it is a basic financial principle that the use of funds invested, and not the source of funds, is what gives rise to the risk of any investment.[62] Eugene Brigham, a well-known authority, states:

> A number of researchers have observed that portfolios of small-firms (sic) have earned consistently higher average returns than those of

60 Duff & Phelps Valuation Handbook – U.S. Guide to Cost of Capital, Wiley 2020, at 4-1.
61 Fama & French, at 25-43.
62 Richard A. Brealey and Stewart C. Myers, Principles of Corporate Finance (McGraw-Hill Book Company, 1996), at 204-205, 229.

large-firm stocks; this is called the "small-firm effect." On the surface, it would seem to be advantageous to the small firms to provide average returns in a stock market that are higher than those of larger firms. In reality, it is bad news for the small firm; what the small-firm effect means is that the capital market demands higher returns on stocks of small firms than on otherwise similar stocks of the large firms. (emphasis added)[63]

Consistent with the financial principle of risk and return discussed above, increased relative risk due to small size must be considered in the allowed rate of return on common equity. Therefore, the Commission's authorization of a cost rate of common equity in this proceeding must appropriately reflect the unique risks of the Company, including its small relative size to the Utility Proxy Group, which is justified and supported above by evidence in the financial literature.

Q. EARLIER YOU EXPLAINED THAT CREDIT RATINGS CAN ACT AS A PROXY FOR A FIRM'S COMBINED BUSINESS AND FINANCIAL RISKS TO EQUITY OWNERS. DO RATING AGENCIES ACCOUNT FOR COMPANY SIZE IN THEIR BOND RATINGS?

A. No. Neither S&P nor Moody's have minimum company size requirements for any given rating level. This means, all else equal, a relative size analysis must be conducted for equity investments in companies with similar bond ratings.

63 Eugene F. Brigham, Fundamentals of Financial Management, Fifth Edition (The Dryden Press, 1989), at 623.

Q. PLEASE DESCRIBE THE COMPANY'S HIGH CUSTOMER GROWTH.

A. NSP's total number of retail customers is expected to increase by approximately 57,300 (i.e., 4.3%) over the next five years.[64] The increased customer growth in NSP's service territory necessitates increased capital investment.

Q. PLEASE BRIEFLY SUMMARIZE THE COMPANY'S CAPITAL INVESTMENT PLANS.

A. NSP currently plans to invest approximately $7,507 million of additional capital over the 2021-2024 period,[65] which represents approximately 65% of its 2021 year-end net utility plant.[66] That amount includes investments required to support growth, and to maintain safe, sufficient, and reliable service in both its transmission and distribution facilities. The Company will require continued access to the capital markets, at reasonable terms, to finance its capital spending plan. As the Company moves forward with its capital spending plan, timely recovery of its capital costs is critical to mitigate the delay of capital recovery and execute its capital spending program.

Q. DO SUBSTANTIAL CAPITAL EXPENDITURES DIRECTLY RELATE TO A UTILITY BEING ALLOWED THE OPPORTUNITY TO EARN A RETURN ADEQUATE TO ATTRACT CAPITAL AT REASONABLE TERMS?

A. Yes, they do. The allowed ROE should enable the subject utility to finance capital expenditures and working capital requirements at reasonable rates, and to maintain its financial integrity in a variety of economic and capital market conditions. As discussed throughout my direct testimony, a return adequate to

64 Company provided data (2021-2026).
65 Company provided data.
66 *Ibid.*, at G-3.

attract capital at reasonable terms enables the utility to provide safe, reliable service while maintaining its financial soundness. To the extent a utility is provided the opportunity to earn its market-based cost of capital, neither customers nor shareholders should be disadvantaged. These requirements are of particular importance to a utility when it is engaged in a substantial capital expenditure program.

The ratemaking process is predicated on the principle that, for investors and companies to commit the capital needed to provide safe and reliable utility services, the utility must have the opportunity to recover the return of, and the market-required return on, invested capital. Regulatory commissions recognize that since utility operations are capital intensive, regulatory decisions should enable the utility to attract capital at reasonable terms; doing so balances the long-term interests of the utility and its ratepayers.

Further, the financial community carefully monitors the current and expected financial conditions of utility companies, as well as the regulatory environment in which those companies operate. In that respect, the regulatory environment is one of the most important factors considered in both debt and equity investors' assessments of risk. That is especially important during periods in which the utility expects to make significant capital investments and, therefore, may require access to capital markets.

Q. DO CREDIT RATING AGENCIES RECOGNIZE RISK ASSOCIATED WITH INCREASED CAPITAL EXPENDITURES?

A. Yes, they do. From a credit perspective, the additional pressure on cash flows associated with high levels of capital expenditures exerts corresponding pressure on credit metrics and, therefore, credit ratings. S&P has noted several long-term challenges for utilities' financial health including: heavy construction programs to address demand growth; declining capacity margins; and aging infrastructure and regulatory responsiveness to mounting requests for rate increases.[67] More recently, S&P noted:

> We assume that capital spending will remain a focus of most utility managements and strain credit metrics. It provides growth when sales are diminished by ongoing demanded efficiency from regulators and other trends, and it is welcomed by policymakers that appreciate the economic stimulus and the benefits of safer, more reliable service. The speed with which the regulatory process turns the new spending into higher rates to begin to pay for it is an important factor in our assumptions and the forecast. Any extended lag between spending and recovery can exacerbate the negative effect on credit metrics and therefore ratings.[68]

The rating agency views noted above also are consistent with certain observations discussed in my direct testimony: (1) the benefits of maintaining a

67 Standard & Poor's, Industry Report Card: Utility Sectors in the Americas Remain Stable, While Challenges Beset European, Australian, and New Zealand Counterparts, RatingsDirect, June 27, 2008, at 4.

68 Standard & Poor's, *Industry Top Trends 2017: Utilities*, RatingsDirect, February 16, 2017, at 4.

strong financial profile are significant when capital access is required and become particularly acute during periods of market instability; and (2) the Commission's decision in this proceeding will have a direct bearing on the company's credit profile and its ability to access the capital needed to fund its investments.

Q. HOW DO THE COMPANY'S EXPECTED CAPITAL EXPENDITURES COMPARE TO THE UTILITY PROXY GROUP?

A. To reasonably make that comparison, I calculated the ratio of expected capital expenditures to net plant for each company in the Utility Proxy Group. I performed that calculation using NSP's projected capital expenditures during the period 2021 through 2024 relative to its net plant for the year ended December 31, 2020. As shown in Exhibit___(DWD-1), Schedule 11, NSP has the highest ratio of projected capital expenditures to net plant relative to the Utility Proxy Group, approximately 78% higher than the Utility Proxy Group median.

Q. WHAT ARE YOUR CONCLUSIONS REGARDING THE EFFECT OF NSP'S CAPITAL INVESTMENT PLAN ON ITS RISK PROFILE AND COST OF CAPITAL?

A. It is clear that NSP's capital investment plan relative to net plant is larger than the median of the Utility Proxy Group companies. It also is clear that equity investors and credit rating agencies recognize the additional risks associated with substantial capital expenditures.

Q. WHAT IS YOUR CONCLUSION REGARDING THE COMPANY'S RELATIVE RISK AS COMPARED TO THE UTILITY PROXY GROUP?

A. In view of the above, the Company is smaller and faces a higher level of expected capital expenditures than the Utility Proxy Group. Since the cost of capital is a comparative exercise, the Company faces relatively higher risk than the Utility Proxy Group.

Q. CAN A RELATIVE RISK ADJUSTMENT BE QUANTIFIED FOR THE COMPANY?

A. Yes. As discussed above, NSP has greater relative risk than the Utility Proxy Group. As a result, it is necessary to upwardly adjust the indicated range of common equity cost rates attributable to the Utility Proxy Group to reflect the Company's greater risk due to its greater business risk. As a proxy for the business risk adjustment, I will use the SBBI-2021 size study. The determination of the business risk adjustment is based on the size premiums for portfolios of the New York Stock Exchange, American Stock Exchange, and NASDAQ listed companies, ranked by deciles for the 1926 to 2020 period.[69] The average size premium for the Utility Proxy Group with a market capitalization of $15,189.501 million falls in the 2nd decile, while the Company's estimated market capitalization of $11,194.007 million places it in the 3rd decile. The size premium spread between the 2nd decile and the 3rd decile is 0.22%.[70] Even though a 0.22% upward risk adjustment to the common cost of equity is indicated, I only applied a risk premium of 0.05% to the Company's indicated common equity cost rate to reflect that the Company's Minnesota electric operations are a portion of

69 Source: Duff & Phelps Cost of Capital Navigator.
70 *Ibid.,* See also, Exhibit__(DWD-1), Schedule 10.

NSP's overall operations and benefit from that relationship. I believe 0.05% is a conservative adjustment due to the Company's higher relative risk.

### B. Credit Risk Adjustment

Q. Please discuss your proposed credit risk adjustment.

A. NSP's long-term issuer ratings are A2 and A- from Moody's Investors Services and S&P, respectively, which are slightly less risky than the average long-term issuer ratings for the Utility Proxy Group of A3/Baa1 and BBB+, respectively.[71] Hence, a downward credit risk adjustment is necessary to reflect the higher credit rating, *i.e.,* A2, of the Company relative to the A3/Baa1 average Moody's bond rating of the Utility Proxy Group.[72]

An indication of the magnitude of the necessary downward adjustment to reflect the lower credit risk inherent in an A2 bond rating is one-half of a recent three-month average spread between Moody's Baa and A-rated public utility bond yields of 0.25%, shown on page 4 of Exhibit___(DWD-1), Schedule 6, or negative 0.13%.[73]

71 Source of Information: S&P Global Market Intelligence.

72 As shown on page 5 of Exhibit___(DWD-1), Schedule 6.

73 0.13% = 0.25% * (1/2). Moody's does not provide public utility bond yields for A3/Baa1-rated bonds. As such, it was necessary to estimate the difference between A2-rated and A3/Baa1-rated public utility bonds. Because there are three steps between Baa2 and A2 (Baa2 to Baa1, Baa1 to A3, and A3 to A2) I assumed an adjustment of one-half of the difference between the A2-rated and Baa2-rated public utility bond yield was appropriate to reflect the proxy group's average rating of A3/Baa1.

### C. Flotation Costs

Q. WHAT ARE FLOTATION COSTS?

A. Flotation costs are those costs associated with the sale of new issuances of common stock. They include market pressure and the mandatory unavoidable costs of issuance (*e.g.*, underwriting fees and out-of-pocket costs for printing, legal, registration, etc.). For every dollar raised through debt or equity offerings, the Company receives less than one full dollar in financing.

Q. WHY IS IT IMPORTANT TO RECOGNIZE FLOTATION COSTS IN THE ALLOWED COMMON EQUITY COST RATE?

A. It is important because there is no other mechanism in the ratemaking paradigm through which such costs can be recognized and recovered. Because these costs are real, necessary, and legitimate, recovery of these costs should be permitted. As noted by Dr. Roger Morin:

> The costs of issuing these securities are just as real as operating and maintenance expenses or costs incurred to build utility plants, and fair regulatory treatment must permit recovery of these costs….
>
> The simple fact of the matter is that common equity capital is not free….[Flotation costs] must be recovered through a rate of return adjustment.[74]

74 Morin, at p. 321.

Q. DO THE COMMON EQUITY COST RATE MODELS YOU HAVE USED ALREADY REFLECT INVESTORS' ANTICIPATION OF FLOTATION COSTS?

A. No. All of these models assume no transaction costs. The literature is quite clear that these costs are not reflected in the market prices paid for common stocks. For example, Brigham and Daves confirm this and provide the methodology utilized to calculate the flotation adjustment.[75] In addition, Morin confirms the need for such an adjustment even when no new equity issuance is imminent.[76] Consequently, it is proper to include a flotation cost adjustment when using cost of common equity models to estimate the common equity cost rate.

Q. HOW DID YOU CALCULATE THE FLOTATION COST ALLOWANCE?

A. I modified the DCF calculation to provide a dividend yield that would reimburse investors for issuance costs in accordance with the method cited in literature by Brigham and Daves, as well as by Morin. The flotation cost adjustment recognizes the actual costs of issuing equity that were incurred by XEI. Based on the issuance costs shown on page 1 of Exhibit__(DWD-1), Schedule 12, an adjustment of 0.12% is required to reflect the flotation costs applicable to the Utility Proxy Group.

Q. WHAT IS THE INDICATED COST OF COMMON EQUITY AFTER YOUR COMPANY-SPECIFIC ADJUSTMENTS?

A. Applying the 0.05% business risk adjustment, the negative 0.13% credit risk

75 Eugene F. Brigham and Phillip R. Daves, Intermediate Financial Management, 9th Edition, Thomson/Southwestern, at p. 342.

76 Morin, at pp. 327-30.

adjustment, and the 0.12% flotation cost adjustment to the indicated range of common equity cost rates between 9.65% and 11.65% results in a Company-specific range of common equity rates between 9.69% and 11.69%. From this range, I recommend an ROE for the Company toward the lower end of my Company-specific range, specifically 10.20%.

Q. HAVE YOU REVIEWED THE TESTIMONY OF COMPANY WITNESS MR. TIMOTHY LYONS PROPOSING AN ROE ADJUSTMENT MECHANISM BEGINNING IN 2024?

A. Yes. Mr. Lyons supports the Company's proposal to adjust the ROE in 2024 if there are significant changes in financial market conditions during the term of the MYRP. The adjustment mechanism would examine the movement in Moody's Aa utility bond yield and if the deviation in October 2022 through September 2023 average yield exceeds 100 basis points compared to the Benchmark yield, the authorized ROE for 2024 would be adjusted by 50 percent of the deviation between current yield and the Benchmark yield.

Q. Does this adjustment mechanism impact your recommended ROE in this proceeding?

A. No, it does not.

## X. CONCLUSION

Q. WHAT IS YOUR RECOMMENDED ROE FOR THE COMPANY?

A. Given the discussion above and the results from the analyses, I recommend that an ROE of 10.20% is appropriate for the Company at this time.

Q. IN YOUR OPINION, IS YOUR PROPOSED ROE OF 10.20% FAIR AND REASONABLE TO NSP AND ITS CUSTOMERS?

A. Yes, it is.

Q. IN YOUR OPINION, IS NSP'S PROPOSED CAPITAL STRUCTURE CONSISTING OF 52.50% COMMON EQUITY, 0.61% SHORT-TERM DEBT, AND 46.89% LONG-TERM DEBT FAIR AND REASONABLE?

A. Yes, they are.

Q. IN YOUR OPINION, IS NSP'S PROPOSED COST OF LONG-TERM DEBT OF 4.13% FAIR AND REASONABLE?

A. Yes, they are.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

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***Appendix A***
*Resume & Testimony Listing of:*
**Dylan W. D'Ascendis, CRRA, CVA**
**Partner**

### *Summary*

Dylan is an experienced consultant and a Certified Rate of Return Analyst (CRRA) and Certified Valuation Analyst (CVA). Dylan joined ScottMadden in 2016 and has become a leading expert witness with respect to cost of capital and capital structure. He has served as a consultant for investor-owned and municipal utilities and authorities for 13 years. Dylan has testified as an expert witness on over 100 occasions regarding rate of return, cost of service, rate design, and valuation before more than 30 regulatory jurisdictions in the United States and Canada, an American Arbitration Association panel, and the Superior Court of Rhode Island. He also maintains the benchmark index against which the Hennessy Gas Utility Mutual Fund performance is measured. Dylan holds a B.A. in economic history from the University of Pennsylvania and an M.B.A. with concentrations in finance and international business from Rutgers University.

### *Areas of Specialization*

- Regulation and Rates
- Rate of Return
- Valuation
- Mutual Fund Benchmarking
- Capital Market Risk
- Cost of Service

### *Recent Expert Testimony Submission/Appearance*

- Regulatory Commission of Alaska – Capital Structure
- Federal Energy Regulatory Commission – Rate of Return
- Public Utility Commission of Texas – Return on Equity
- Hawaii Public Utilities Commission – Cost of Service / Rate Design
- Pennsylvania Public Utility Commission - Valuation

### *Recent Assignments*

- Provided expert testimony on the cost of capital for ratemaking purposes before numerous state utility regulatory agencies
- Sponsored valuation testimony for a large municipal water company in front of an American Arbitration Association Board to justify the reasonability of their lease payments to the City
- Co-authored a valuation report on behalf of a large investor-owned utility company in response to a new state regulation which allowed the appraised value of acquired assets into rate base

### *Recent Articles and Speeches*

- Co-Author of: "Decoupling, Risk Impacts and the Cost of Capital", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. The Electricity Journal, March, 2020
- Co-Author of: "Decoupling Impact and Public Utility Conservation Investment", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University and Pauline M. Ahern. Energy Policy Journal, 130 (2019), 311-319
- "Establishing Alternative Proxy Groups", before the Society of Utility and Regulatory Financial Analysts: 51st Financial Forum, April 4, 2019, New Orleans, LA
- "Past is Prologue: Future Test Year", Presentation before the National Association of Water Companies 2017 Southeast Water Infrastructure Summit, May 2, 2017, Savannah, GA.
- Co-author of: "Comparative Evaluation of the Predictive Risk Premium Model$^{TM}$, the Discounted Cash Flow Model and the Capital Asset Pricing Model", co-authored with Richard A. Michelfelder, Ph.D., Rutgers University, Pauline M. Ahern, and Frank J. Hanley, The Electricity Journal, May, 2013
- "Decoupling: Impact on the Risk and Cost of Common Equity of Public Utility Stocks", before the Society of Utility and Regulatory Financial Analysts: 45th Financial Forum, April 17-18, 2013, Indianapolis, IN

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***Appendix A***
*Resume and Testimony Listing of:*
**Dylan W. D'Ascendis, CRRA, CVA**
**Partner**

| Sponsor | Date | Case/Applicant | Docket No. | Subject |
|---|---|---|---|---|
| ***Regulatory Commission of Alaska*** | | | | |
| Cook Inlet Natural Gas Storage Alaska, LLC | 07/21 | Cook Inlet Natural Gas Storage Alaska, LLC | Docket No. TA45-733 | Capital Structure |
| Alaska Power Company | 09/20 | Alaska Power Company; Goat Lake Hydro, Inc.; BBL Hydro, Inc. | Tariff Nos. TA886-2; TA6-521; TA4-573 | Capital Structure |
| Alaska Power Company | 07/16 | Alaska Power Company | Docket No. TA857-2 | Rate of Return |
| ***Alberta Utilities Commission*** | | | | |
| AltaLink, L.P., and EPCOR Distribution & Transmission, Inc. | 01/20 | AltaLink, L.P., and EPCOR Distribution & Transmission, Inc. | 2021 Generic Cost of Capital, Proceeding ID. 24110 | Rate of Return |
| ***Arizona Corporation Commission*** | | | | |
| EPCOR Water Arizona, Inc. | 06/20 | EPCOR Water Arizona, Inc. | Docket No. WS-01303A-20-0177 | Rate of Return |
| Arizona Water Company | 12/19 | Arizona Water Company – Western Group | Docket No. W-01445A-19-0278 | Rate of Return |
| Arizona Water Company | 08/18 | Arizona Water Company – Northern Group | Docket No. W-01445A-18-0164 | Rate of Return |
| ***Arkansas Public Service Commission*** | | | | |
| Southwestern Electric Power Co. | 07/21 | Southwestern Electric Power Co. | Docket No. 21-070-U | Return on Equity |
| CenterPoint Energy Resources Corp. | 05/21 | CenterPoint Arkansas Gas | Docket No. 21-004-U | Return on Equity |
| ***Colorado Public Utilities Commission*** | | | | |
| Summit Utilities, Inc. | 04/18 | Colorado Natural Gas Company | Docket No. 18AL-0305G | Rate of Return |
| Atmos Energy Corporation | 06/17 | Atmos Energy Corporation | Docket No. 17AL-0429G | Rate of Return |
| ***Delaware Public Service Commission*** | | | | |
| Delmarva Power & Light Co. | 11/20 | Delmarva Power & Light Co. | Docket No. 20-0149 (Electric) | Return on Equity |
| Delmarva Power & Light Co. | 10/20 | Delmarva Power & Light Co. | Docket No. 20-0150 (Gas) | Return on Equity |
| Tidewater Utilities, Inc. | 11/13 | Tidewater Utilities, Inc. | Docket No. 13-466 | Capital Structure |
| ***Public Service Commission of the District of Columbia*** | | | | |
| Washington Gas Light Company | 09/20 | Washington Gas Light Company | Formal Case No. 1162 | Rate of Return |
| ***Federal Energy Regulatory Commission*** | | | | |
| LS Power Grid California, LLC | 10/20 | LS Power Grid California, LLC | Docket No. ER21-195-000 | Rate of Return |
| ***Florida Public Service Commission*** | | | | |
| Tampa Electric Company | 04/21 | Tampa Electric Company | Docket No. 20210034-EI | Return on Equity |
| Peoples Gas System | 09/20 | Peoples Gas System | Docket No. 20200051-GU | Rate of Return |
| Utilities, Inc. of Florida | 06/20 | Utilities, Inc. of Florida | Docket No. 20200139-WS | Rate of Return |
| ***Hawaii Public Utilities Commission*** | | | | |
| Launiupoko Irrigation Company, Inc. | 12/20 | Launiupoko Irrigation Company, Inc. | Docket No. 2020-0217 / Transferred to 2020-0089 | Capital Structure |
| Lanai Water Company, Inc. | 12/19 | Lanai Water Company, Inc. | Docket No. 2019-0386 | Cost of Service / Rate Design |
| Manele Water Resources, LLC | 08/19 | Manele Water Resources, LLC | Docket No. 2019-0311 | Cost of Service / Rate Design |
| Kaupulehu Water Company | 02/18 | Kaupulehu Water Company | Docket No. 2016-0363 | Rate of Return |
| Aqua Engineers, LLC | 05/17 | Puhi Sewer & Water Company | Docket No. 2017-0118 | Cost of Service / Rate Design |
| Hawaii Resources, Inc. | 09/16 | Laie Water Company | Docket No. 2016-0229 | Cost of Service / Rate Design |

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***Appendix A***
*Resume and Testimony Listing of:*
**Dylan W. D'Ascendis, CRRA, CVA**
**Partner**

| Sponsor | Date | Case/Applicant | Docket No. | Subject |
|---|---|---|---|---|
| ***Illinois Commerce Commission*** | | | | |
| Utility Services of Illinois, Inc. | 02/21 | Utility Services of Illinois, Inc. | Docket No. 21-0198 | Rate of Return |
| Ameren Illinois Company d/b/a Ameren Illinois | 07/20 | Ameren Illinois Company d/b/a Ameren Illinois | Docket No. 20-0308 | Return on Equity |
| Utility Services of Illinois, Inc. | 11/17 | Utility Services of Illinois, Inc. | Docket No. 17-1106 | Cost of Service / Rate Design |
| Aqua Illinois, Inc. | 04/17 | Aqua Illinois, Inc. | Docket No. 17-0259 | Rate of Return |
| Utility Services of Illinois, Inc. | 04/15 | Utility Services of Illinois, Inc. | Docket No. 14-0741 | Rate of Return |
| ***Indiana Utility Regulatory Commission*** | | | | |
| Aqua Indiana, Inc. | 03/16 | Aqua Indiana, Inc. Aboite Wastewater Division | Docket No. 44752 | Rate of Return |
| Twin Lakes, Utilities, Inc. | 08/13 | Twin Lakes, Utilities, Inc. | Docket No. 44388 | Rate of Return |
| ***Kansas Corporation Commission*** | | | | |
| Atmos Energy | 07/19 | Atmos Energy | 19-ATMG-525-RTS | Rate of Return |
| ***Kentucky Public Service Commission*** | | | | |
| Atmos Energy Corporation | 07/21 | Atmos Energy Corporation | 2021-00304 | PRP Rider Rate |
| Atmos Energy Corporation | 06/21 | Atmos Energy Corporation | 2021-00214 | Rate of Return |
| Duke Energy Kentucky, Inc. | 06/21 | Duke Energy Kentucky, Inc. | 2021-00190 | Return on Equity |
| Bluegrass Water Utility Operating Company | 10/20 | Bluegrass Water Utility Operating Company | 2020-00290 | Return on Equity |
| ***Louisiana Public Service Commission*** | | | | |
| Utilities, Inc. of Louisiana | 05/21 | Utilities, Inc. of Louisiana | Docket No. U-36003 | Rate of Return |
| Southwestern Electric Power Company | 12/20 | Southwestern Electric Power Company | Docket No. U-35441 | Return on Equity |
| Atmos Energy | 04/20 | Atmos Energy | Docket No. U-35535 | Rate of Return |
| Louisiana Water Service, Inc. | 06/13 | Louisiana Water Service, Inc. | Docket No. U-32848 | Rate of Return |
| ***Maine Public Utilities Commission*** | | | | |
| The Maine Water Company | 09/21 | The Maine Water Company | Docket No. 2021-00053 | Rate of Return |
| ***Maryland Public Service Commission*** | | | | |
| Washington Gas Light Company | 08/20 | Washington Gas Light Company | Case No. 9651 | Rate of Return |
| FirstEnergy, Inc. | 08/18 | Potomac Edison Company | Case No. 9490 | Rate of Return |
| ***Massachusetts Department of Public Utilities*** | | | | |
| Unitil Corporation | 12/19 | Fitchburg Gas & Electric Co. (Elec.) | D.P.U. 19-130 | Rate of Return |
| Unitil Corporation | 12/19 | Fitchburg Gas & Electric Co. (Gas) | D.P.U. 19-131 | Rate of Return |
| Liberty Utilities | 07/15 | Liberty Utilities d/b/a New England Natural Gas Company | Docket No. 15-75 | Rate of Return |
| ***Minnesota Public Utilities Commission*** | | | | |
| Northern States Power Company | 11/20 | Northern States Power Company | Docket No. E002/GR-20-723 | Rate of Return |
| ***Mississippi Public Service Commission*** | | | | |
| Atmos Energy | 03/19 | Atmos Energy | Docket No. 2015-UN-049 | Capital Structure |
| Atmos Energy | 07/18 | Atmos Energy | Docket No. 2015-UN-049 | Capital Structure |
| ***Missouri Public Service Commission*** | | | | |
| Spire Missouri, Inc. | 12/20 | Spire Missouri, Inc. | Case No. GR-2021-0108 | Return on Equity |
| Indian Hills Utility Operating Company, Inc. | 10/17 | Indian Hills Utility Operating Company, Inc. | Case No. SR-2017-0259 | Rate of Return |

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MANAGEMENT CONSULTANTS

***Appendix A***
*Resume and Testimony Listing of:*
**Dylan W. D'Ascendis, CRRA, CVA**
**Partner**

| Sponsor | Date | Case/Applicant | Docket No. | Subject |
|---|---|---|---|---|
| Raccoon Creek Utility Operating Company, Inc. | 09/16 | Raccoon Creek Utility Operating Company, Inc. | Docket No. SR-2016-0202 | Rate of Return |
| ***Public Utilities Commission of Nevada*** | | | | |
| Southwest Gas Corporation | 09/21 | Southwest Gas Corporation | Docket No. 21-09001 | Return on Equity |
| Southwest Gas Corporation | 08/20 | Southwest Gas Corporation | Docket No. 20-02023 | Return on Equity |
| ***New Hampshire Public Utilities Commission*** | | | | |
| Aquarion Water Company of New Hampshire, Inc. | 12/20 | Aquarion Water Company of New Hampshire, Inc. | Docket No. DW 20-184 | Rate of Return |
| ***New Jersey Board of Public Utilities*** | | | | |
| Middlesex Water Company | 05/21 | Middlesex Water Company | Docket No. WR21050813 | Rate of Return |
| Atlantic City Electric Company | 12/20 | Atlantic City Electric Company | Docket No. ER20120746 | Return on Equity |
| FirstEnergy | 02/20 | Jersey Central Power & Light Co. | Docket No. ER20020146 | Rate of Return |
| Aqua New Jersey, Inc. | 12/18 | Aqua New Jersey, Inc. | Docket No. WR18121351 | Rate of Return |
| Middlesex Water Company | 10/17 | Middlesex Water Company | Docket No. WR17101049 | Rate of Return |
| Middlesex Water Company | 03/15 | Middlesex Water Company | Docket No. WR15030391 | Rate of Return |
| The Atlantic City Sewerage Company | 10/14 | The Atlantic City Sewerage Company | Docket No. WR14101263 | Cost of Service / Rate Design |
| Middlesex Water Company | 11/13 | Middlesex Water Company | Docket No. WR1311059 | Capital Structure |
| ***New Mexico Public Regulation Commission*** | | | | |
| Southwestern Public Service Company | 01/21 | Southwestern Public Service Company | Case No. 20-00238-UT | Return on Equity |
| ***North Carolina Utilities Commission*** | | | | |
| Carolina Water Service, Inc. | 07/21 | Carolina Water Service, Inc. | Docket No. W-354 Sub 384 | Rate of Return |
| Piedmont Natural Gas Co., Inc. | 03/21 | Piedmont Natural Gas Co., Inc. | Docket No. G-9, Sub 781 | Return on Equity |
| Duke Energy Carolinas, LLC | 07/20 | Duke Energy Carolinas, LLC | Docket No. E-7, Sub 1214 | Return on Equity |
| Duke Energy Progress, LLC | 07/20 | Duke Energy Progress, LLC | Docket No. E-2, Sub 1219 | Return on Equity |
| Aqua North Carolina, Inc. | 12/19 | Aqua North Carolina, Inc. | Docket No. W-218 Sub 526 | Rate of Return |
| Carolina Water Service, Inc. | 06/19 | Carolina Water Service, Inc. | Docket No. W-354 Sub 364 | Rate of Return |
| Carolina Water Service, Inc. | 09/18 | Carolina Water Service, Inc. | Docket No. W-354 Sub 360 | Rate of Return |
| Aqua North Carolina, Inc. | 07/18 | Aqua North Carolina, Inc. | Docket No. W-218 Sub 497 | Rate of Return |
| ***North Dakota Public Service Commission*** | | | | |
| Northern States Power Company | 09/21 | Northern States Power Company | Case No. PU-21-381 | Rate of Return |
| Northern States Power Company | 11/20 | Northern States Power Company | Case No. PU-20-441 | Rate of Return |
| ***Public Utilities Commission of Ohio*** | | | | |
| Aqua Ohio, Inc. | 07/21 | Aqua Ohio, Inc. | Docket No. 21-0595-WW-AIR | Rate of Return |
| Aqua Ohio, Inc. | 05/16 | Aqua Ohio, Inc. | Docket No. 16-0907-WW-AIR | Rate of Return |
| ***Pennsylvania Public Utility Commission*** | | | | |
| Community Utilities of Pennsylvania, Inc. | 04/21 | Community Utilities of Pennsylvania, Inc. | Docket No. R-2021-3025207 | Rate of Return |
| Vicinity Energy Philadelphia, Inc. | 04/21 | Vicinity Energy Philadelphia, Inc. | Docket No. R-2021-3024060 | Rate of Return |
| Delaware County Regional Water Control Authority | 02/20 | Delaware County Regional Water Control Authority | Docket No. A-2019-3015173 | Valuation |
| Valley Energy, Inc. | 07/19 | C&T Enterprises | Docket No. R-2019-3008209 | Rate of Return |
| Wellsboro Electric Company | 07/19 | C&T Enterprises | Docket No. R-2019-3008208 | Rate of Return |
| Citizens' Electric Company of Lewisburg | 07/19 | C&T Enterprises | Docket No. R-2019-3008212 | Rate of Return |
| Steelton Borough Authority | 01/19 | Steelton Borough Authority | Docket No. A-2019-3006880 | Valuation |

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MANAGEMENT CONSULTANTS

***Appendix A***
*Resume and Testimony Listing of:*
**Dylan W. D'Ascendis, CRRA, CVA**
**Partner**

| Sponsor | Date | Case/Applicant | Docket No. | Subject |
|---|---|---|---|---|
| Mahoning Township, PA | 08/18 | Mahoning Township, PA | Docket No. A-2018-3003519 | Valuation |
| SUEZ Water Pennsylvania Inc. | 04/18 | SUEZ Water Pennsylvania Inc. | Docket No. R-2018-000834 | Rate of Return |
| Columbia Water Company | 09/17 | Columbia Water Company | Docket No. R-2017-2598203 | Rate of Return |
| Veolia Energy Philadelphia, Inc. | 06/17 | Veolia Energy Philadelphia, Inc. | Docket No. R-2017-2593142 | Rate of Return |
| Emporium Water Company | 07/14 | Emporium Water Company | Docket No. R-2014-2402324 | Rate of Return |
| Columbia Water Company | 07/13 | Columbia Water Company | Docket No. R-2013-2360798 | Rate of Return |
| Penn Estates Utilities, Inc. | 12/11 | Penn Estates, Utilities, Inc. | Docket No. R-2011-2255159 | Capital Structure / Long-Term Debt Cost Rate |
| ***South Carolina Public Service Commission*** | | | | |
| Blue Granite Water Co. | 12/19 | Blue Granite Water Company | Docket No. 2019-292-WS | Rate of Return |
| Carolina Water Service, Inc. | 02/18 | Carolina Water Service, Inc. | Docket No. 2017-292-WS | Rate of Return |
| Carolina Water Service, Inc. | 06/15 | Carolina Water Service, Inc. | Docket No. 2015-199-WS | Rate of Return |
| Carolina Water Service, Inc. | 11/13 | Carolina Water Service, Inc. | Docket No. 2013-275-WS | Rate of Return |
| United Utility Companies, Inc. | 09/13 | United Utility Companies, Inc. | Docket No. 2013-199-WS | Rate of Return |
| Utility Services of South Carolina, Inc. | 09/13 | Utility Services of South Carolina, Inc. | Docket No. 2013-201-WS | Rate of Return |
| Tega Cay Water Services, Inc. | 11/12 | Tega Cay Water Services, Inc. | Docket No. 2012-177-WS | Capital Structure |
| ***Tennessee Public Utility Commission*** | | | | |
| Piedmont Natural Gas Company | 07/20 | Piedmont Natural Gas Company | Docket No. 20-00086 | Return on Equity |
| ***Public Utility Commission of Texas*** | | | | |
| Southwestern Public Service Company | 02/21 | Southwestern Public Service Company | Docket No. 51802 | Return on Equity |
| Southwestern Electric Power Company | 10/20 | Southwestern Electric Power Company | Docket No. 51415 | Rate of Return |
| ***Virginia State Corporation Commission*** | | | | |
| Virginia Natural Gas, Inc. | 04/21 | Virginia Natural Gas, Inc. | PUR-2020-00095 | Return on Equity |
| Massanutten Public Service Corporation | 12/20 | Massanutten Public Service Corporation | PUE-2020-00039 | Return on Equity |
| Aqua Virginia, Inc. | 07/20 | Aqua Virginia, Inc. | PUR-2020-00106 | Rate of Return |
| WGL Holdings, Inc. | 07/18 | Washington Gas Light Company | PUR-2018-00080 | Rate of Return |
| Atmos Energy Corporation | 05/18 | Atmos Energy Corporation | PUR-2018-00014 | Rate of Return |
| Aqua Virginia, Inc. | 07/17 | Aqua Virginia, Inc. | PUR-2017-00082 | Rate of Return |
| Massanutten Public Service Corp. | 08/14 | Massanutten Public Service Corp. | PUE-2014-00035 | Rate of Return / Rate Design |

Northern States Power Company
Brief Summary of Common Equity Cost Rate

| Line No. | Principal Methods | Proxy Group of Thirteen Electric Companies |
|---|---|---|
| 1. | Discounted Cash Flow Model (DCF) (1) | 8.78% |
| 2. | Risk Premium Model (RPM) (2) | 10.95% |
| 3. | Capital Asset Pricing Model (CAPM) (3) | 12.53% |
| 4. | Market Models Applied to Comparable Risk, Non-Price Regulated Companies (4) | 12.24% |
| 5. | Indicated Range of Common Equity Cost Rates before Adjustment for Company-Specific Risk | 9.65% - 11.65% |
| 6. | Size Risk Adjustment (5) | 0.05% |
| 7. | Credit Risk Adjustment (6) | -0.13% |
| 8. | Flotation Cost Adjustment (7) | 0.12% |
| 9. | Indicated Range of Common Equity Cost Rates after Adjustment | 9.69% - 11.69% |
| 10. | Recommended Common Equity Cost Rate | 10.20% |

Notes:
(1) From pages 1 and 2 of Exhibit_(DWD-1), Schedule 5.
(2) From page 1 of Exhibit_(DWD-1), Schedule 6.
(3) From page 1 of Exhibit_(DWD-1), Schedule 7.
(4) From page 1 of Exhibit_(DWD-1), Schedule 9.
(5) Adjustment to reflect the Company's greater business risk due to its smaller size realtive to the Utility Proxy Group as detailed in Mr. D'Ascendis' direct testimony.
(6) Company-specific risk adjustment to reflect NSP Minnesota's greater credit risk compared to the Utility Proxy Group as detailed in Mr. D'Ascendis' direct testimony.
(7) From page 1 of Exhibit_(DWD-1), Schedule 12.

Northern States Power Company
CAPITALIZATION AND FINANCIAL STATISTICS (1)
2015 - 2020, Inclusive

| | 2020 | 2019 | 2018 | 2017 | 2016 | 5 YEAR AVERAGE |
|---|---|---|---|---|---|---|
| | | | (MILLIONS OF DOLLARS) | | | |
| CAPITALIZATION STATISTICS | | | | | | |
| AMOUNT OF CAPITAL EMPLOYED | | | | | | |
| TOTAL PERMANENT CAPITAL | $ 12,673.000 | $ 11,603.100 | $ 10,510.300 | $ 10,408.588 | $ 10,198.734 | |
| SHORT-TERM DEBT | 179.000 | 30.000 | 150.000 | 20.000 | 85.000 | |
| TOTAL-CAPITAL EMPLOYED | $ 12,852.000 | $ 11,633.100 | $ 10,660.300 | $ 10,428.588 | $ 10,283.734 | |
| INDICATED AVERAGE CAPITAL COST RATES (2) | | | | | | |
| TOTAL DEBT | 4.28 % | 4.38 % | 4.51 % | 4.61 % | 4.69 % | |
| CAPITAL STRUCTURE RATIOS | | | | | | |
| BASED ON TOTAL PERMANENT CAPITAL: | | | | | | |
| LONG-TERM DEBT | 46.59 % | 47.58 % | 46.97 % | 47.39 % | 47.49 % | 47.20 % |
| PREFERRED STOCK | - | - | - | - | - | - |
| COMMON EQUITY | 53.41 | 52.42 | 53.03 | 52.61 | 52.51 | 52.80 |
| TOTAL | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| BASED ON TOTAL CAPITAL: | | | | | | |
| TOTAL DEBT, INCLUDING SHORT-TERM | 47.33 % | 47.72 % | 47.72 % | 47.49 % | 47.92 % | 47.64 % |
| PREFERRED STOCK | - | - | - | - | - | - |
| COMMON EQUITY | 52.67 | 52.28 | 52.28 | 52.51 | 52.08 | 52.36 |
| TOTAL | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| DIVIDEND PAYOUT RATIO | 69.04 % | 85.99 % | 92.69 % | 103.36 % | 81.00 % | 86.42 % |
| RATE OF RETURN ON AVERAGE BOOK COMMON EQUITY | 9.20 % | 9.31 % | 8.91 % | 9.05 % | 9.29 % | 9.15 % |
| TOTAL DEBT / EBITDA (3) | 3.69 x | 3.46 x | 3.45 x | 3.09 x | 3.23 x | 3.38 x |
| FUNDS FROM OPERATIONS / TOTAL DEBT (4) | 15.52 % | 17.70 % | 31.94 % | 22.53 % | 25.64 % | 22.67 % |
| TOTAL DEBT / TOTAL CAPITAL | 47.33 % | 47.72 % | 47.72 % | 47.49 % | 47.92 % | 47.64 % |

Notes:
(1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group, and are based upon financial statements as originally reported in each year.
(2) Computed by relating actual total debt interest or preferred stock dividends booked to average of beginning and ending total debt or preferred stock reported to be outstanding.
(3) Total debt relative to EBITDA (Earnings before Interest, Income Taxes, Depreciation and Amortization).
(4) Funds from operations (sum of net income, depreciation, amortization, net deferred income tax and investment tax credits, less total AFUDC) plus interest charges as a percentage of total debt.

Source of Information: Company audited financial statements

Proxy Group of Thirteen Electric Companies
CAPITALIZATION AND FINANCIAL STATISTICS (1)
2016 - 2020, Inclusive

| | 2020 | 2019 | 2018 | 2017 | 2016 | |
|---|---|---|---|---|---|---|
| | | | (MILLIONS OF DOLLARS) | | | |
| CAPITALIZATION STATISTICS | | | | | | |
| AMOUNT OF CAPITAL EMPLOYED | | | | | | |
| TOTAL PERMANENT CAPITAL | $23,540.207 | $21,851.876 | $20,011.952 | $18,298.378 | $18,058.785 | |
| SHORT-TERM DEBT | $751.487 | $644.770 | $732.653 | $700.859 | $563.885 | |
| TOTAL CAPITAL EMPLOYED | $24,291.694 | $22,496.646 | $20,744.605 | $18,999.237 | $18,622.670 | |
| INDICATED AVERAGE CAPITAL COST RATES (2) | | | | | | |
| TOTAL DEBT | 4.15 % | 4.39 % | 4.56 % | 4.52 % | 4.79 % | |
| PREFERRED STOCK | 5.53 | 5.17 | 5.27 | 5.33 | 5.47 | |
| CAPITAL STRUCTURE RATIOS | | | | | | 5 YEAR AVERAGE |
| BASED ON TOTAL PERMANENT CAPITAL: | | | | | | |
| LONG-TERM DEBT | 53.56 % | 51.98 % | 51.08 % | 50.54 % | 49.79 % | 51.39 % |
| PREFERRED STOCK | 0.76 | 0.88 | 0.88 | 0.93 | 1.05 | 0.90 |
| COMMON EQUITY | 45.69 | 47.14 | 48.04 | 48.53 | 49.17 | 47.71 |
| TOTAL | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| BASED ON TOTAL CAPITAL: | | | | | | |
| TOTAL DEBT, INCLUDING SHORT-TERM | 54.79 % | 52.91 % | 52.27 % | 52.46 % | 51.36 % | 52.76 % |
| PREFERRED STOCK | 0.72 | 0.86 | 0.85 | 0.87 | 1.00 | 0.86 |
| COMMON EQUITY | 44.49 | 46.23 | 46.88 | 46.67 | 47.64 | 46.38 |
| TOTAL | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| FINANCIAL STATISTICS | | | | | | |
| FINANCIAL RATIOS - MARKET BASED | | | | | | |
| EARNINGS / PRICE RATIO | 4.06 % | 4.98 % | 4.81 % | 4.75 % | 4.58 % | 4.64 % |
| MARKET / AVERAGE BOOK RATIO | 188.40 | 202.95 | 195.30 | 205.25 | 169.89 | 192.36 |
| DIVIDEND YIELD | 3.48 | 3.18 | 3.51 | 3.28 | 3.52 | 3.39 |
| DIVIDEND PAYOUT RATIO | 63.61 | 63.15 | 47.46 | 74.57 | 50.24 | 59.81 |
| RATE OF RETURN ON AVERAGE BOOK COMMON EQUITY | 7.83 % | 10.01 % | 8.84 % | 9.10 % | 8.25 % | 8.81 % |
| TOTAL DEBT / EBITDA (3) | 5.85 x | 4.49 x | 5.06 x | 4.08 x | 5.34 x | 4.96 x |
| FUNDS FROM OPERATIONS / TOTAL DEBT (4) | 13.09 % | 14.23 % | 18.49 % | 18.73 % | 18.60 % | 16.63 % |
| TOTAL DEBT / TOTAL CAPITAL | 54.79 % | 52.91 % | 52.27 % | 52.46 % | 51.36 % | 52.76 % |

Notes:

(1) All capitalization and financial statistics for the group are the arithmetic average of the achieved results for each individual company in the group, and are based upon financial statements as originally reported in each year.

(2) Computed by relating actual total debt interest or preferred stock dividends booked to average of beginning and ending total debt or preferred stock reported to be outstanding.

(3) Total debt relative to EBITDA (Earnings before Interest, Income Taxes, Depreciation and Amortization).

(4) Funds from operations (sum of net income, depreciation, amortization, net deferred income tax and investment tax credits, less total AFUDC) plus interest charges as a percentage of total debt.

Source of Information: Company Annual Forms 10-K

Capital Structure Based upon Total Permanent Capital for the
Proxy Group of Thirteen Electric Companies
2016 - 2020, Inclusive

| | 2020 | 2019 | 2018 | 2017 | 2016 | 5 YEAR AVERAGE |
|---|---|---|---|---|---|---|
| **Alliant Energy Corporation** | | | | | | |
| Long-Term Debt | 51.92 % | 51.87 % | 51.29 % | 50.85 % | 48.94 % | 50.97 % |
| Short-Term Debt | 2.98 | 2.83 | 4.11 | 3.35 | 2.77 | 3.21 |
| Preferred Stock | 1.53 | 1.68 | 1.86 | 2.09 | 2.27 | 1.89 |
| Common Equity | 43.57 | 43.62 | 42.74 | 43.71 | 46.02 | 43.93 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| **Ameren Corporation** | | | | | | |
| Long-Term Debt | 53.67 % | 51.99 % | 50.21 % | 49.95 % | 48.25 % | 50.81 % |
| Short-Term Debt | 2.37 | 2.44 | 3.55 | 3.05 | 3.70 | 3.02 |
| Preferred Stock | 0.69 | 0.79 | 0.84 | 0.89 | 0.94 | 0.83 |
| Common Equity | 43.27 | 44.78 | 45.40 | 46.11 | 47.11 | 45.34 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| **Duke Energy Corporation** | | | | | | |
| Long-Term Debt | 54.07 % | 53.78 % | 53.59 % | 54.35 % | 52.39 % | 53.64 % |
| Short-Term Debt | 2.60 | 2.90 | 3.35 | 2.25 | 2.72 | 2.76 |
| Preferred Stock | 1.77 | 1.81 | - | - | - | 0.72 |
| Common Equity | 41.56 | 41.51 | 43.06 | 43.40 | 44.89 | 42.88 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| **Edison International** | | | | | | |
| Long-Term Debt | 52.97 % | 53.34 % | 52.39 % | 42.71 % | 41.86 % | 48.66 % |
| Short-Term Debt | 6.15 | 1.60 | 2.56 | 8.43 | 4.91 | 4.73 |
| Preferred Stock | 4.87 | 6.38 | 7.81 | 7.74 | 8.22 | 7.00 |
| Common Equity | 36.01 | 38.68 | 37.24 | 41.12 | 45.01 | 39.61 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| **Entergy Corporation** | | | | | | |
| Long-Term Debt | 63.59 % | 58.99 % | 59.50 % | 60.68 % | 63.03 % | 61.16 % |
| Short-Term Debt | 4.63 | 6.43 | 7.15 | 6.35 | 1.76 | 5.26 |
| Preferred Stock | 0.72 | 0.84 | 0.81 | 0.80 | 0.86 | 0.81 |
| Common Equity | 31.06 | 33.74 | 32.54 | 32.17 | 34.35 | 32.77 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| **Evergy, Inc.** | | | | | | |
| Long-Term Debt | 51.60 % | 49.27 % | 40.17 % | 47.90 % | NA % | 47.23 % |
| Short-Term Debt | 1.68 | 4.82 | 5.93 | 3.43 | NA | 3.97 |
| Preferred Stock | - | - | - | - | NA | 0.00 |
| Common Equity | 46.72 | 45.91 | 53.90 | 48.67 | NA | 48.80 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | - % | 100.00 % |
| **IDACORP, Inc.** | | | | | | |
| Long-Term Debt | 43.86 % | 42.70 % | 43.63 % | 43.68 % | 44.51 % | 43.68 % |
| Short-Term Debt | - | - | - | - | 0.56 | 0.11 |
| Preferred Stock | - | - | - | - | - | 0.00 |
| Common Equity | 56.14 | 57.30 | 56.37 | 56.32 | 54.93 | 56.21 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| **NorthWestern Corporation** | | | | | | |
| Long-Term Debt | 51.55 % | 52.27 % | 51.98 % | 46.18 % | 47.93 % | 49.98 % |
| Short-Term Debt | 2.22 | - | - | 8.12 | 7.92 | 3.65 |
| Preferred Stock | - | - | - | - | - | 0.00 |
| Common Equity | 46.23 | 47.73 | 48.02 | 45.70 | 44.15 | 46.37 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| **OGE Energy Corporation** | | | | | | |
| Long-Term Debt | 48.39 % | 42.91 % | 44.00 % | 42.73 % | 41.68 % | 43.95 % |
| Short-Term Debt | 1.32 | 1.50 | - | 2.40 | 3.75 | 1.79 |
| Preferred Stock | - | - | - | - | - | 0.00 |
| Common Equity | 50.29 | 55.59 | 56.00 | 54.87 | 54.57 | 54.26 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| **Otter Tail Corporation** | | | | | | |
| Long-Term Debt | 44.54 % | 46.69 % | 44.12 % | 37.74 % | 43.03 % | 43.22 % |
| Short-Term Debt | 4.72 | 0.41 | 1.39 | 8.65 | 3.43 | 3.72 |
| Preferred Stock | - | - | - | - | - | 0.00 |
| Common Equity | 50.74 | 52.90 | 54.49 | 53.61 | 53.54 | 53.06 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |

Capital Structure Based upon Total Permanent Capital for the
Proxy Group of Thirteen Electric Companies
2016 - 2020, Inclusive

| | 2020 | 2019 | 2018 | 2017 | 2016 | 5 YEAR AVERAGE |
|---|---|---|---|---|---|---|
| Pinnacle West Capital Corporation | | | | | | |
| Long-Term Debt | 52.11 % | 50.39 % | 49.23 % | 48.22 % | 45.43 % | 49.08 % |
| Short-Term Debt | 1.40 | 1.03 | 0.73 | 0.95 | 1.94 | 1.21 |
| Preferred Stock | - | - | - | - | - | 0.00 |
| Common Equity | 46.49 | 48.58 | 50.04 | 50.83 | 52.63 | 49.71 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| Portland General Electric Company | | | | | | |
| Long-Term Debt | 52.44 % | 50.06 % | 49.72 % | 50.10 % | 50.06 % | 50.48 % |
| Short-Term Debt | 2.58 | - | - | - | - | 0.52 |
| Preferred Stock | - | - | - | - | - | 0.00 |
| Common Equity | 44.98 | 49.94 | 50.28 | 49.90 | 49.94 | 49.01 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.01 % |
| Xcel Energy, Inc. | | | | | | |
| Long-Term Debt | 56.96 % | 56.69 % | 55.00 % | 54.97 % | 55.87 % | 55.90 % |
| Short-Term Debt | 1.66 | 1.86 | 3.52 | 2.99 | 1.52 | 2.31 |
| Preferred Stock | - | - | - | - | - | 0.00 |
| Common Equity | 41.38 | 41.45 | 41.48 | 42.04 | 42.61 | 41.79 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |
| Proxy Group of Thirteen Electric Companies | | | | | | |
| Long-Term Debt | 52.12 % | 50.84 % | 49.60 % | 48.47 % | 48.58 % | 49.90 % |
| Short-Term Debt | 2.64 | 1.99 | 2.48 | 3.84 | 2.92 | 2.79 |
| Preferred Stock | 0.74 | 0.88 | 0.87 | 0.89 | 1.02 | 0.87 |
| Common Equity | 44.50 | 46.29 | 47.05 | 46.80 | 47.48 | 46.44 |
| Total Capital | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % | 100.00 % |

Source of Information
Annual Forms 10-K

Northern States Power Company
Operating Subsidiary Company Capital Structures of the
Proxy Group of Thirteen Electric Companies

| | | 2020 | | | |
|---|---|---|---|---|---|
| Company Name | Parent Company Ticker | Common Equity | Long-Term Debt | Short-Term Debt | Total Capital |
| Ameren Illinois Company | AEE | 54.98% | 44.81% | 0.22% | 100.00% |
| Central Illinois Light Company | AEE | 54.98% | 44.81% | 0.22% | 100.00% |
| Illinois Power Company | AEE | 54.98% | 44.81% | 0.22% | 100.00% |
| Union Electric Company | AEE | 54.98% | 44.81% | 0.22% | 100.00% |
| Duke Energy Carolinas, LLC | DUK | 50.60% | 47.45% | 1.95% | 100.00% |
| Duke Energy Florida, LLC | DUK | 50.60% | 47.45% | 1.95% | 100.00% |
| Duke Energy Indiana, LLC | DUK | 50.60% | 47.45% | 1.95% | 100.00% |
| Duke Energy Kentucky, Inc. | DUK | 50.60% | 47.45% | 1.95% | 100.00% |
| Duke Energy Ohio, Inc. | DUK | 50.60% | 47.45% | 1.95% | 100.00% |
| Duke Energy Progress, LLC | DUK | 50.60% | 47.45% | 1.95% | 100.00% |
| Florida Progress Corporation | DUK | 50.60% | 47.45% | 1.95% | 100.00% |
| Piedmont Natural Gas Company, Inc. | DUK | 50.60% | 47.45% | 1.95% | 100.00% |
| Progress Energy, Inc. | DUK | 50.60% | 47.45% | 1.95% | 100.00% |
| Southern California Edison Company | EIX | 41.41% | 52.23% | 6.36% | 100.00% |
| Entergy Arkansas, LLC | ETR | 44.81% | 55.19% | 0.00% | 100.00% |
| Entergy Gulf States Louisiana, L.L.C. | ETR | 44.81% | 55.19% | 0.00% | 100.00% |
| Entergy Louisiana, LLC | ETR | 44.81% | 55.19% | 0.00% | 100.00% |
| Entergy Mississippi, LLC | ETR | 44.81% | 55.19% | 0.00% | 100.00% |
| Entergy New Orleans, LLC | ETR | 44.81% | 55.19% | 0.00% | 100.00% |
| Entergy Texas, Inc. | ETR | 44.81% | 55.19% | 0.00% | 100.00% |
| Evergy Kansas Central, Inc. | EVRG | 50.24% | 47.07% | 2.69% | 100.00% |
| Evergy Kansas South, Inc. | EVRG | 50.24% | 47.07% | 2.69% | 100.00% |
| Evergy Metro, Inc. | EVRG | 50.24% | 47.07% | 2.69% | 100.00% |
| Evergy Missouri West, Inc. | EVRG | 50.24% | 47.07% | 2.69% | 100.00% |
| Idaho Power Company | IDA | 54.16% | 45.84% | 0.00% | 100.00% |
| Interstate Power and Light Company | LNT | 51.52% | 48.48% | 0.00% | 100.00% |
| Wisconsin Power and Light Company | LNT | 51.52% | 48.48% | 0.00% | 100.00% |
| NorthWestern Corporation | NWE | 46.08% | 51.70% | 2.22% | 100.00% |
| Oklahoma Gas and Electric Company | OGE | 52.93% | 47.07% | 0.00% | 100.00% |
| Otter Tail Power Company | OTTR | NA | NA | NA | NA |
| Arizona Public Service Company | PNW | 49.89% | 50.11% | 0.00% | 100.00% |
| Portland General Electric Company | POR | 43.56% | 53.93% | 2.50% | 100.00% |
| Northern States Power Company | XEL | 50.59% | 48.07% | 1.34% | 100.00% |
| Northern States Power Company | XEL | 50.59% | 48.07% | 1.34% | 100.00% |
| Public Service Company of Colorado | XEL | 50.59% | 48.07% | 1.34% | 100.00% |
| Southwestern Public Service Company | XEL | 50.59% | 48.07% | 1.34% | 100.00% |
| | Mean | 51.95% | 46.64% | 1.41% | 100.00% |

Source: S&P Global Market Intelligence

Northern States Power Company
Cost of Long-Term Debt Comparison

| Issue | Initial Offering | Date of Offering | Date of Maturity | Years to Maturity | Coupon | Net Issuance Costs | Net Proceeds | Annual Interest Expense | Annual Net Amortization | Total Expense | Yield | Bloomberg Fair Value Curve BFV Term | Utility A-Rated | Utility BBB-Rated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Series due July 1, 2025 (FMB) | $ 250,000 | 7/7/1995 | 7/1/2025 | 30 | 7.125% | $ 417 | $ 249,583 | $ 17,813 | $ 141 | $ 17,953 | 7.19% | 30 | 7.42% | 7.50% |
| Series due March 1, 2028 (FMB) | $ 150,000 | 3/11/1998 | 3/1/2028 | 30 | 6.500% | $ 607 | $ 149,393 | $ 9,750 | $ 108 | $ 9,858 | 6.60% | 30 | 6.86% | 7.07% |
| Series Due July 15, 2035 (FMB) | $ 250,000 | 7/21/2005 | 7/15/2035 | 30 | 5.250% | $ 1,525 | $ 248,475 | $ 13,125 | $ 117 | $ 13,242 | 5.33% | 30 | 5.18% | 5.55% |
| Series Due June 1, 2036 (FMB) | $ 400,000 | 5/25/2006 | 6/1/2036 | 30 | 6.250% | $ (4,657) | $ 404,657 | $ 25,000 | $ (335) | $ 24,665 | 6.10% | 30 | 6.27% | 6.59% |
| Series Due July 1, 2037 (FMB) | $ 350,000 | 6/1/2007 | 7/1/2037 | 30 | 6.200% | $ 3,152 | $ 346,848 | $ 21,700 | $ 211 | $ 21,911 | 6.32% | 30 | 6.09% | 6.24% |
| Series Due November 1, 2039 (FMB) | $ 300,000 | 11/17/2009 | 11/1/2039 | 30 | 5.350% | $ 4,579 | $ 295,421 | $ 16,050 | $ 265 | $ 16,315 | 5.52% | 30 | 5.57% | 6.23% |
| Series Due August 15, 2040 (FMB) | $ 250,000 | 8/11/2010 | 8/15/2040 | 30 | 4.850% | $ 2,246 | $ 247,754 | $ 12,125 | $ 124 | $ 12,249 | 4.94% | 30 | 5.25% | 5.76% |
| Series Due August 15, 2022 (FMB) (2) | $ 100,000 | 8/13/2012 | 8/15/2022 | 10 | 2.150% | $ 60 | $ 99,940 | $ 2,150 | $ 220 | $ 2,370 | 2.37% | 10 | 2.78% | 3.53% |
| Series Due August 15, 2042 (FMB) | $ 500,000 | 8/13/2012 | 8/15/2042 | 30 | 3.400% | $ 36,826 | $ 463,174 | $ 17,000 | $ 1,833 | $ 18,833 | 4.07% | 30 | 3.74% | 4.19% |
| Series Due May 15, 2023 (FMB) | $ 400,000 | 5/20/2013 | 5/15/2023 | 10 | 2.600% | $ 436 | $ 399,564 | $ 10,400 | $ 527 | $ 10,927 | 2.73% | 10 | 2.81% | 3.38% |
| Series Due May 15, 2044 (FMB) | $ 300,000 | 5/13/2014 | 5/15/2044 | 30 | 4.125% | $ 3,417 | $ 296,583 | $ 12,375 | $ 156 | $ 12,531 | 4.23% | 30 | 4.35% | 4.72% |
| Series Due Aug 15, 2045 (FMB) | $ 300,000 | 8/11/2015 | 8/15/2045 | 30 | 4.000% | $ 6,767 | $ 293,233 | $ 12,000 | $ 293 | $ 12,293 | 4.19% | 30 | 4.37% | 4.77% |
| Series Due May 15, 2046 (FMB) | $ 350,000 | 5/31/2016 | 5/15/2046 | 30 | 3.600% | $ 5,967 | $ 344,033 | $ 12,600 | $ 250 | $ 12,850 | 3.74% | 30 | 3.95% | 4.42% |
| Series Due Sep 15, 2047 (FMB) | $ 600,000 | 9/13/2017 | 9/15/2047 | 30 | 3.700% | $ 19,421 | $ 580,579 | $ 22,200 | $ 771 | $ 22,971 | 3.96% | 30 | 3.85% | 4.17% |
| Series Due Mar 1, 2050 (FMB) | $ 600,000 | 9/10/2019 | 3/1/2050 | 30 | 2.900% | $ 18,408 | $ 581,592 | $ 17,400 | $ 666 | $ 18,066 | 3.11% | 30 | 3.29% | 3.66% |
| Series Due Jun 1, 2051 (FMB) | $ 700,000 | 6/15/2020 | 6/1/2051 | 31 | 2.600% | $ 21,418 | $ 678,582 | $ 18,200 | $ 741 | $ 18,941 | 2.79% | 31 | 3.12% | 3.55% |
| Series Due Apr 1, 2031 (FMB) | $ 425,000 | 3/30/2021 | 4/1/2031 | 10 | 2.250% | $ 5,885 | $ 419,115 | $ 9,563 | $ 675 | $ 10,238 | 2.44% | 10 | 2.33% | 2.54% |
| Series Due Apr 1, 2052 (FMB) | $ 425,000 | 3/30/2021 | 4/1/2052 | 31 | 3.200% | $ 7,203 | $ 417,797 | $ 13,600 | $ 242 | $ 13,842 | 3.31% | 31 | 3.36% | 3.66% |
| Series Due May 1, 2052 (FMB) (1) | $ 366,667 | 5/1/2022 | 5/1/2052 | 30 | 3.300% | $ 5,431 | $ 361,236 | $ 12,100 | $ 184 | $ 12,284 | 3.40% | 30 | N/A | N/A |

| | | | | | | | | | | | | | Bloomberg Fair Value Curve A-Rated | BBB-Rated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TOTAL** | $ 6,650,000 | | | Weighted Averages: | 3.96% | | | | | | 4.13% | | 4.20% | 4.58% |

Notes:
Sources: Company provided data and Bloomberg Professional.
Fair Value Curve yields are 30-day averages from Bloomberg Professional.

Northern States Power Company
Indicated Common Equity Cost Rate Using the Discounted Cash Flow Model for the
Proxy Group of Thirteen Electric Companies

| | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
|---|---|---|---|---|---|---|---|
| Proxy Group of Thirteen Electric Companies | Average Dividend Yield (1) | Value Line Projected Five Year Growth in EPS (2) | Zack's Five Year Projected Growth Rate in EPS | Yahoo! Finance Projected Five Year Growth in EPS | Average Projected Five Year Growth in EPS (3) | Adjusted Dividend Yield (4) | Indicated Common Equity Cost Rate (5) |
| Alliant Energy Corporation | 2.74 % | 5.50 % | 5.60 % | 5.10 % | 5.40 % | 2.81 % | 8.21 % |
| Ameren Corporation | 2.59 | 6.50 | 7.30 | 7.70 | 7.17 | 2.68 | 9.85 |
| Duke Energy Corporation | 3.81 | 7.00 | 5.30 | 5.45 | 5.92 | 3.92 | 9.84 |
| Edison International | 4.65 | NMF | 3.40 | 3.40 | 3.40 | 4.73 | 8.13 |
| Entergy Corporation | 3.59 | 3.00 | 1.40 | 3.85 | 2.75 | 3.64 | 6.39 |
| Evergy, Inc. | 3.30 | 8.00 | 5.80 | 5.70 | 6.50 | 3.41 | 9.91 |
| IDACORP, Inc. | 2.76 | 4.00 | 3.90 | 3.20 | 3.70 | 2.81 | 6.51 |
| NorthWestern Corporation | 3.97 | 3.00 | 4.80 | 4.50 | 4.10 | 4.05 | 8.15 |
| OGE Energy Corporation | 4.66 | 4.00 | 4.50 | 3.90 | 4.13 | 4.76 | 8.89 |
| Otter Tail Corporation | 3.07 | 7.00 | 4.70 | 9.00 | 6.90 | 3.18 | 10.08 |
| Pinnacle West Capital Corporation | 4.03 | 5.00 | 5.00 | 0.10 | 3.37 | 4.10 | 7.47 |
| Portland General Electric Company | 3.52 | 8.50 | 8.60 | 7.10 | 8.07 | 3.66 | 11.73 |
| Xcel Energy, Inc. | 2.68 | 6.00 | 6.10 | 6.30 | 6.13 | 2.76 | 8.89 |
| | | | | | | Average | 8.77 % |
| | | | | | | Median | 8.89 % |
| | | | | | | Average of Mean and Median | 8.83 % |
| | | | | | | Excl. 7% or less: | 9.05 % |

Notes:

(1) Indicated dividend at 08/31/2021 divided by the average closing price of the last 60 trading days ending 08/31/2021 for each company.

(2) From pages 3 through 15 of this Schedule.

(3) Average of columns 2 through 4 excluding negative growth rates.

(4) This reflects a growth rate component equal to one-half the conclusion of growth rate (from column 5) x column 1 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for Alliant Energy Corporation, 2.74% x (1+(1/2 x 5.40%) ) = 2.81%.

(5) Column 5 + Column 6.

Source of Information:

Value Line Investment Survey
www.zacks.com Downloaded on 08/31/2021
www.yahoo.com Downloaded on 08/31/2021

Northern States Power Company
Indicated Common Equity Cost Rate Using the Two Growth Discounted Cash Flow Model for the
Proxy Group of Thirteen Electric Companies

| Proxy Group of Thirteen Electric Companies | [1] Stock Price | [2] Annualized Dividend | [3] Dividend Yield (1) | [4] Value Line Projected Five Year Growth in EPS (2) | [5] Zack's Five Year Projected Growth Rate in EPS | [7] Yahoo! Finance Projected Five Year Growth in EPS | [8] Average Projected Five Year Growth in EPS (3) | [9] Adjusted Dividend Yield (4) | [10] Indicated Common Equity Cost Rate (5) |
|---|---|---|---|---|---|---|---|---|---|
| Alliant Energy Corporation | $ 60.79 | $ 1.61 | 2.65 % | 5.50 % | 5.60 % | 5.10 % | 5.40 % | 2.72 % | 8.12 % |
| Ameren Corporation | 87.72 | 2.20 | 2.51 | 6.50 | 7.30 | 7.70 | 7.17 | 2.60 | 8.01 (6) |
| Duke Energy Corporation | 104.66 | 3.94 | 3.76 | 7.00 | 5.30 | 5.45 | 5.92 | 3.87 | 9.79 |
| Edison International | 57.84 | 2.65 | 4.58 | NMF | 3.40 | 3.40 | 3.40 | 4.66 | 9.59 (6) |
| Entergy Corporation | 110.61 | 3.80 | 3.44 | 3.00 | 1.40 | 3.85 | 2.75 | 3.49 | 8.37 (6) |
| Evergy, Inc. | 68.45 | 2.14 | 3.13 | 8.00 | 5.80 | 5.70 | 6.50 | 3.23 | 9.73 |
| IDACORP, Inc. | 105.35 | 2.84 | 2.70 | 4.00 | 3.90 | 3.20 | 3.70 | 2.75 | 6.45 |
| NorthWestern Corporation | 63.60 | 2.48 | 3.90 | 3.00 | 4.80 | 4.50 | 4.10 | 3.98 | 8.08 |
| OGE Energy Corporation | 35.41 | 1.61 | 4.55 | 4.00 | 4.50 | 3.90 | 4.13 | 4.64 | 8.77 |
| Otter Tail Corporation | 54.87 | 1.56 | 2.84 | 7.00 | 4.70 | 9.00 | 6.90 | 2.94 | 8.36 (6) |
| Pinnacle West Capital Corporation | 76.90 | 3.32 | 4.32 | 5.00 | 5.00 | 0.10 | 3.37 | 4.39 | 9.32 (6) |
| Portland General Electric Company | 51.35 | 1.72 | 3.35 | 8.50 | 8.60 | 7.10 | 8.07 | 3.49 | 9.13 (6) |
| Xcel Energy, Inc. | 68.75 | 1.83 | 2.66 | 6.00 | 6.10 | 6.30 | 6.13 | 2.74 | 8.87 |
| | | | | | | Average | 5.20 | Average | 8.66 % |
| | | | | | 1 Standard Deviation Below Mean | | 3.55 | | |
| | | | | | 1 Standard Deviation Above Mean | | 6.84 | Median | 8.77 % |
| | | | | | | | Average of Mean and Median | | 8.72 % |
| | | | | | | | | Excl. 7% or less: | 8.84 % |

NA= Not Available
NMF= Not Meaningful Figure

Notes:

(1) Indicated dividend at 08/31/2021 divided by the average closing price of the last 60 trading days ending 08/31/2021 for each
(2) From pages 3 through 15 of this Schedule.
(3) Average of columns 4 through 7 excluding negative growth rates.
(4) This reflects a growth rate component equal to one-half the conclusion of growth rate (from column 8) x column 3 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for Alliant Energy Corporation, 2.65% x (1+( 1/2 x 5.40%) ) = 2.72%.
(5) Column 8 + column 9.
(6) The Two Growth Method was applied to Companies with short-term EPS growth rates greater than one standard deviation from the overall Utility Proxy Group mean growth rate. The mean of all Utility Proxy Group Companies with growth rates are within one standard deviation of the overall mean growth rate was applied as the long-term growth rate for these Companies.

Source of Information:
Value Line Investment Survey
www.zacks.com Downloaded on 08/31/2021
www.yahoo.com Downloaded on 08/31/2021

# ALLIANT ENERGY NDQ-LNT

RECENT PRICE 57.15 | P/E RATIO 22.0 (Trailing: 23.6 Median: 19.0) | RELATIVE P/E RATIO 1.03 | DIV'D YLD 2.8% | VALUE LINE

TIMELINESS 3 Raised 4/30/21
SAFETY 2 Raised 9/28/07
TECHNICAL 3 Raised 6/4/21
BETA .85 (1.00 = Market)

**18-Month Target Price Range**

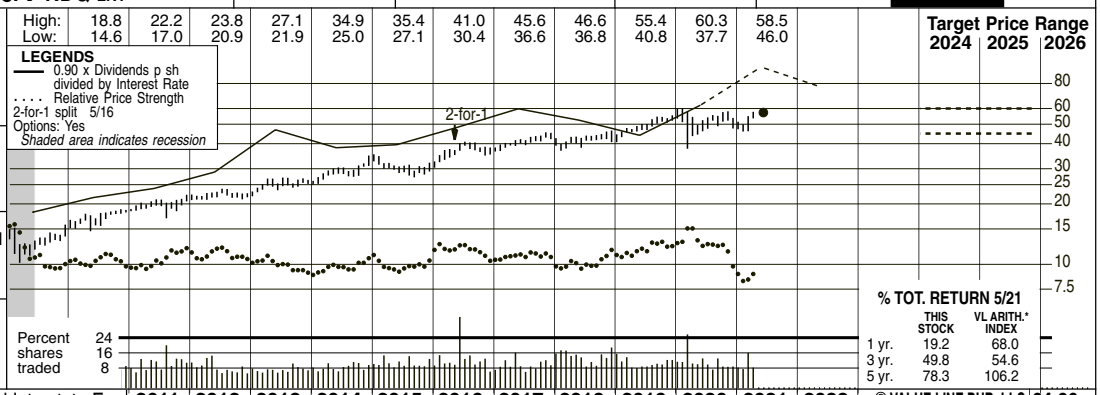
| Low-High | Midpoint (% to Mid) |
|---|---|
| $42-$86 | $64 (10%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 60 | (+5%) | *4%* |
| Low | 45 | (-20%) | *-2%* |

**Institutional Decisions**

| | 3Q2020 | 4Q2020 | 1Q2021 |
|---|---|---|---|
| to Buy | 249 | 261 | 249 |
| to Sell | 219 | 241 | 253 |
| Hld's(000) | 182149 | 181812 | 188898 |




Alliant Energy, formerly called Interstate Energy Corporation, was formed on April 21, 1998 through the merger of WPL Holdings, IES Industries, and Interstate Power. WPL stockholders received one share of Interstate Energy stock for each WPL share, IES stockholders received 1.14 Interstate Energy shares for each IES share, and Interstate Power stockholders received 1.11 Interstate Energy shares for each Interstate Power share.

**CAPITAL STRUCTURE as of 3/31/21**
**Total Debt** $7115.0 mill. **Due in 5 Yrs** $1950.0 mill.
**LT Debt** $6471.0 mill. **LT Interest** $270.0 mill.
(LT interest earned: 3.1x)

**Pension Assets-12/20** $984.0 mill. **Oblig.** $1351.0 mill.
**Pfd Stock** $400.0 mill. **Pfd Div'd** $10.2 mill.
16,000,000 shs.

**Common Stock** 250,134,552 shs.

**MARKET CAP: $14.3 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2018 | 2019 | 2020 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +2.0 | -2.2 | -2.3 |
| Avg. Indust. Use (MWH) | 11830 | 11448 | 11134 |
| Avg. Indust. Revs. per KWH (¢) | 7.25 | 6.98 | 7.55 |
| Capacity at Peak (Mw) | 5459 | 5626 | 5496 |
| Peak Load, Summer (Mw) | 5459 | 5626 | 5496 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +.4 | +.6 | +.6 |
| Fixed Charge Cov. (%) | 322 | 324 | 342 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | -.5% | .5% | *1.0%* |
| "Cash Flow" | 5.5% | 4.5% | *4.0%* |
| Earnings | 6.0% | 6.0% | *5.5%* |
| Dividends | 7.0% | 7.0% | *6.0%* |
| Book Value | 4.5% | 5.5% | *6.0%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 916.3 | 816.1 | 928.6 | 873.5 | 3534.5 |
| 2019 | 987.2 | 790.2 | 990.2 | 880.1 | 3647.7 |
| 2020 | 915.7 | 763.1 | 920.0 | 817.2 | 3416.0 |
| 2021 | 901.0 | ***800*** | ***975*** | ***949*** | ***3625*** |
| 2022 | ***980*** | ***835*** | ***1015*** | ***970*** | ***3800*** |

| Calendar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .52 | .43 | .87 | .37 | 2.19 |
| 2019 | .53 | .40 | .94 | .46 | 2.33 |
| 2020 | .72 | .54 | .94 | .26 | 2.47 |
| 2021 | .68 | ***.53*** | ***.95*** | ***.44*** | ***2.60*** |
| 2022 | ***.66*** | ***.56*** | ***1.05*** | ***.48*** | ***2.75*** |

| Calendar | QUARTERLY DIVIDENDS PAID B ■† Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .315 | .315 | .315 | .315 | 1.26 |
| 2018 | .335 | .335 | .335 | .335 | 1.34 |
| 2019 | .355 | .355 | .355 | .355 | 1.42 |
| 2020 | .38 | .38 | .38 | .38 | 1.52 |
| 2021 | .403 | .403 | | | |

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 16.51 | 13.94 | 14.77 | 15.10 | 14.34 | 14.58 | 14.62 | 14.97 | 14.89 | 13.67 | ***14.20*** | ***14.60*** | Revenues per sh | ***15.50*** |
| | 2.75 | 2.95 | 3.34 | 3.44 | 3.45 | 3.45 | 3.10 | 4.32 | 4.59 | 4.92 | ***5.10*** | ***5.35*** | "Cash Flow" per sh | ***5.90*** |
| | 1.38 | 1.53 | 1.65 | 1.74 | 1.69 | 1.65 | 1.99 | 2.19 | 2.33 | 2.47 | ***2.60*** | ***2.75*** | Earnings per sh A | ***3.25*** |
| | .85 | .90 | .94 | 1.02 | 1.10 | 1.18 | 1.26 | 1.34 | 1.42 | 1.52 | ***1.61*** | ***1.70*** | Div'd Decl'd per sh B ■ † | ***2.05*** |
| | 3.03 | 5.22 | 3.32 | 3.78 | 4.25 | 5.26 | 6.34 | 6.34 | 6.28 | 5.17 | ***5.25*** | ***5.40*** | Cap'l Spending per sh | ***5.55*** |
| | 13.57 | 14.12 | 14.79 | 15.54 | 16.41 | 16.96 | 17.21 | 19.43 | 21.24 | 22.76 | ***24.35*** | ***25.80*** | Book Value per sh C | ***30.00*** |
| | 222.04 | 221.97 | 221.89 | 221.87 | 226.92 | 227.67 | 231.35 | 236.06 | 245.02 | 249.87 | ***255.00*** | ***260.00*** | Common Shs Outst'g D | ***270.00*** |
| | 14.5 | 14.5 | 15.3 | 16.6 | 18.1 | 22.3 | 20.6 | 19.1 | 21.2 | 21.2 | ***Bold figures are*** | | Avg Ann'l P/E Ratio | ***16.0*** |
| | .91 | .92 | .86 | .87 | .91 | 1.17 | 1.04 | 1.03 | 1.13 | 1.02 | ***Value Line*** | | Relative P/E Ratio | ***.90*** |
| | 4.3% | 4.1% | 3.7% | 3.5% | 3.6% | 3.2% | 3.1% | 3.2% | 2.9% | 2.9% | ***estimates*** | | Avg Ann'l Div'd Yield | ***3.9%*** |
| | 3665.3 | 3094.5 | 3276.8 | 3350.3 | 3253.6 | 3320.0 | 3382.2 | 3534.5 | 3647.7 | 3416.0 | ***3625*** | ***3800*** | Revenues ($mill) | ***4180*** |
| | 304.4 | 337.8 | 382.1 | 385.5 | 380.7 | 373.8 | 455.9 | 512.1 | 557.2 | 614.0 | ***655*** | ***705*** | Net Profit ($mill) | ***865*** |
| | 19.0% | 21.5% | 12.4% | 10.1% | 15.3% | 13.4% | 12.5% | 8.4% | 10.8% | NMF | ***NMF*** | ***NMF*** | Income Tax Rate | ***11.0%*** |
| | -- | -- | -- | -- | 6.5% | 7.0% | 7.6% | 7.8% | 7.8% | 7.6% | ***8.0%*** | ***8.0%*** | AFUDC % to Net Profit | ***8.0%*** |
| | 45.7% | 48.4% | 46.1% | 49.7% | 48.6% | 52.8% | 49.0% | 53.4% | 51.5% | 54.3% | ***54.0%*** | ***54.0%*** | Long-Term Debt Ratio | ***54.0%*** |
| | 50.9% | 48.4% | 50.8% | 47.5% | 51.4% | 47.2% | 48.6% | 46.6% | 48.5% | 45.7% | ***46.0%*** | ***46.0%*** | Common Equity Ratio | ***46.0%*** |
| | 5921.2 | 6476.6 | 6461.0 | 7257.2 | 7246.3 | 8177.6 | 8192.8 | 9832.0 | 10738 | 11362 | ***11500*** | ***12200*** | Total Capital ($mill) | ***14500*** |
| | 7037.1 | 7838.0 | 7147.3 | 6442.0 | 8970.2 | 9809.9 | 10798 | 12031 | 13087 | 13884 | ***14500*** | ***15100*** | Net Plant ($mill) | ***18150*** |
| | 6.4% | 6.3% | 7.0% | 6.3% | 6.3% | 5.6% | 6.8% | 6.3% | 6.4% | 5.5% | ***5.5%*** | ***6.0%*** | Return on Total Cap'l | ***6.0%*** |
| | 9.5% | 10.1% | 11.0% | 10.6% | 10.2% | 9.7% | 10.9% | 11.2% | 10.7% | 10.8% | ***10.5%*** | ***10.5%*** | Return on Shr. Equity | ***10.5%*** |
| | 9.5% | 10.3% | 11.3% | 10.9% | 10.2% | 9.7% | 6.4% | 11.2% | 10.7% | 10.8% | ***10.5%*** | ***10.5%*** | Return on Com Equity E | ***10.5%*** |
| | 3.3% | 3.9% | 4.9% | 4.3% | 3.6% | 2.8% | 4.0% | 4.4% | 4.2% | 4.2% | ***4.0%*** | ***4.0%*** | Retained to Com Eq | ***4.0%*** |
| | 67% | 64% | 57% | 61% | 65% | 71% | 63% | 61% | 61% | 62% | ***62%*** | ***62%*** | All Div'ds to Net Prof | ***63%*** |

**BUSINESS:** Alliant Energy Corp., formerly named Interstate Energy, is a holding company formed through the merger of WPL Holdings, IES Industries, and Interstate Power. Supplies electricity, gas, and other services in Wisconsin, Iowa, and Minnesota. Electric revenue by state: WI, 42%; IA, 57%; MN, 1%. Electric revenue: residential, 37%; commercial, 24%; industrial, 29%; wholesale, 7%; other, 3%. Fuel sources, 2020: coal, 23%; gas, 34%; other, 43%. Fuel costs: 41% of revs. 2020 depreciation rate: 6.4%. Estimated plant age: 18 years. Has approximately 3,375 employees. Chairman & Chief Executive Officer: John O. Larsen. Incorporated: Wisconsin. Address: 4902 N. Biltmore Lane, Madison, Wisconsin 53718. Telephone: 608-458-3311. Internet: www.alliantenergy.com.

**Earnings at Alliant Energy are likely to rise 5%-6% in 2021 and 2022.** As a reminder, the utility has reached an agreement in Wisconsin to hold rates steady in 2021 by using excess deferred tax benefits and fuel savings to offset a higher revenue requirement. The agreement with the Public Service Commission of Wisconsin will enable Alliant to earn a respectable return on investment without increasing base rates for the second-consecutive year. In Iowa, the company does not have any rate cases pending and does not intend to submit one for a while. This was made possible through an agreement with the Iowa Utilities Board and other stakeholders on a renewable energy rider. The program allows LNT to recover costs associated with various renewable energy projects without having to formally pursue a rate increase.

**Alliant awaits a rate order in Wisconsin.** The utility reached a settlement calling for annual base rate increases of $70 million and $15 million for WPL's retail electric and gas customers, respectively, covering the 2022/2023 period. Key drivers of the proposed rate hike include lower excess deferred income tax benefits and new investments in wind and solar power. If approved by the Public Service Commission of Wisconsin, the allowed ROE will be 10% and the common-equity ratio will be 54%. A ruling is expected later this year.

**The company is expanding its clean energy portfolio.** In Wisconsin, Alliant filed a request with the PSCW to construct up to 414 mw of new solar generation by the end of 2023. The proposal builds on the 675 mw of solar generation that the utility has already committed to in Wisconsin, bringing the total amount of new solar to 1,089 mw by 2023. The cost of both projects is expected to be around $940 million. In Iowa, Alliant plans to construct 400 mw of additional solar power by 2023, building on the 1,300 mw of wind generation that it already has in that state.

**This neutrally ranked stock does not stand out at the moment.** With the quotation near the high end of our 2024-2026 Target Price Range, long-term total return potential is low compared to the *Value Line* median. In addition, the dividend yield (2.8%) is below average for an electric utility.

*Daniel Henigson, CFA* *June 11, 2021*

**(A)** Diluted EPS. May not sum due to changes in share count. Excl. nonrecur. gains (losses): '11, (1¢); '12, (8¢). Next earnings rpt. due early August. **(B)** Dividends historically paid in mid-Feb., May, Aug., and Nov. ■ Div'd reinvest. plan avail. † Shareholder invest. plan avail. **(C)** Incl. deferred chgs. In '20: $73.0 mill., $0.29/sh. **(D)** In millions, adjusted for split. **(E)** Rate base: Orig. cost. Rates all'd on com. eq. in IA in '20: 10.0%; in WI in '20 Regul. Clim.: WI, Above Avg.; IA, Avg.

| | |
|---|---|
| Company's Financial Strength | A |
| Stock's Price Stability | 95 |
| Price Growth Persistence | 75 |
| Earnings Predictability | 95 |

# AMEREN NYSE-AEE

RECENT PRICE **84.20** | P/E RATIO **22.2** (Trailing: 22.0 Median: 18.0) | RELATIVE P/E RATIO **1.04** | DIV'D YLD **2.7%** | **VALUE LINE**

**TIMELINESS** 2 Raised 5/28/21
**SAFETY** 2 Raised 6/20/14
TECHNICAL 3 Raised 5/7/21
**BETA** .80 (1.00 = Market)

**18-Month Target Price Range**

| Low-High | Midpoint (% to Mid) |
|---|---|
| $63-$129 | $96 (15%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 100 | (+20%) | *7%* |
| Low | 75 | (-10%) | *1%* |

**Institutional Decisions**

| | 3Q2020 | 4Q2020 | 1Q2021 |
|---|---|---|---|
| to Buy | 242 | 266 | 249 |
| to Sell | 255 | 250 | 269 |
| Hld's(000) | 188020 | 196751 | 194499 |

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 29.9 | 34.1 | 35.3 | 37.3 | 48.1 | 46.8 | 54.1 | 64.9 | 70.9 | 80.9 | 87.7 | 86.8 | | | | | | |
| Low: | 23.1 | 25.5 | 28.4 | 30.6 | 35.2 | 37.3 | 41.5 | 51.4 | 51.9 | 63.1 | 58.7 | 69.8 | | | | | | |

LEGENDS
0.64 x Dividends p sh divided by Interest Rate
Relative Price Strength
Options: Yes
*Shaded area indicates recession*

Target Price Range 2024 | 2025 | 2026

% TOT. RETURN 5/21

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 15.0 | 68.0 |
| 3 yr. | 53.2 | 54.6 |
| 5 yr. | 95.3 | 106.2 |

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 33.12 | 33.30 | 36.23 | 36.92 | 29.87 | 31.77 | 31.04 | 28.14 | 24.06 | 24.95 | 25.13 | 25.04 | 25.46 | 25.73 | 24.00 | 22.87 | *23.55* | *23.95* | Revenues per sh | *25.75* |
| | 6.10 | 6.02 | 6.76 | 6.44 | 6.06 | 6.33 | 5.87 | 5.87 | 5.25 | 5.77 | 6.08 | 6.59 | 6.80 | 7.64 | 7.83 | 8.08 | *8.65* | *9.10* | "Cash Flow" per sh | *10.75* |
| | 3.13 | 2.66 | 2.98 | 2.88 | 2.78 | 2.77 | 2.47 | 2.41 | 2.10 | 2.40 | 2.38 | 2.68 | 2.77 | 3.32 | 3.35 | 3.50 | *3.80* | *4.05* | Earnings per sh [A] | *5.00* |
| | 2.54 | 2.54 | 2.54 | 2.54 | 1.54 | 1.54 | 1.56 | 1.60 | 1.60 | 1.61 | 1.66 | 1.72 | 1.78 | 1.85 | 1.92 | 2.00 | *2.20* | *2.34* | Div'd Decl'd per sh [B] ■ | *2.90* |
| | 4.63 | 4.99 | 6.96 | 9.75 | 7.51 | 4.66 | 4.50 | 5.49 | 5.87 | 7.66 | 8.12 | 8.78 | 9.05 | 9.56 | 9.92 | 13.02 | *14.40* | *11.70* | Cap'l Spending per sh | *12.75* |
| | 31.09 | 31.86 | 32.41 | 32.80 | 33.08 | 32.15 | 32.64 | 27.27 | 26.97 | 27.67 | 28.63 | 29.27 | 29.61 | 31.21 | 32.73 | 35.29 | *37.55* | *39.95* | Book Value per sh [C] | *47.75* |
| | 204.70 | 206.60 | 208.30 | 212.30 | 237.40 | 240.40 | 242.60 | 242.63 | 242.63 | 242.63 | 242.63 | 242.63 | 242.63 | 244.50 | 246.20 | 253.30 | *259.00* | *265.00* | Common Shs Outst'g [D] | *280.00* |
| | 16.7 | 19.4 | 17.4 | 14.2 | 9.3 | 9.7 | 11.9 | 13.4 | 16.5 | 16.7 | 17.5 | 18.3 | 20.6 | 18.3 | 22.1 | 22.2 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *17.0* |
| | .89 | 1.05 | .92 | .85 | .62 | .62 | .75 | .85 | .93 | .88 | .88 | .96 | 1.04 | .99 | 1.18 | 1.15 | | | Relative P/E Ratio | *.90* |
| | 4.9% | 4.9% | 4.9% | 6.2% | 6.0% | 5.8% | 5.3% | 5.0% | 4.6% | 4.0% | 4.0% | 3.5% | 3.1% | 3.0% | 2.6% | 2.6% | | | Avg Ann'l Div'd Yield | *3.4%* |
| | | | | | | | 7531.0 | 6828.0 | 5838.0 | 6053.0 | 6098.0 | 6076.0 | 6177.0 | 6291.0 | 5910.0 | 5794.0 | *6100* | *6350* | Revenues ($mill) | *7200* |
| | | | | | | | 602.0 | 589.0 | 518.0 | 593.0 | 585.0 | 659.0 | 683.0 | 821.0 | 834.0 | 877.0 | *990* | *1075* | Net Profit ($mill) | *1390* |
| | | | | | | | 37.3% | 36.9% | 37.5% | 38.9% | 38.3% | 36.7% | 38.2% | 22.4% | 17.9% | 15.0% | *10.0%* | *10.0%* | Income Tax Rate | *10.0%* |
| | | | | | | | 5.6% | 6.1% | 7.1% | 5.7% | 5.1% | 4.1% | 5.6% | 6.9% | 5.8% | 5.5% | *5.0%* | *5.0%* | AFUDC % to Net Profit | *4.0%* |
| | | | | | | | 45.3% | 49.5% | 45.2% | 47.2% | 49.3% | 47.7% | 49.2% | 50.3% | 52.1% | 55.0% | *54.0%* | *53.5%* | Long-Term Debt Ratio | *50.5%* |
| | | | | | | | 53.7% | 49.4% | 53.7% | 51.7% | 49.7% | 51.3% | 49.8% | 48.8% | 47.1% | 44.3% | *45.5%* | *46.0%* | Common Equity Ratio | *49.0%* |
| | | | | | | | 14738 | 13384 | 12190 | 12975 | 13968 | 13840 | 14420 | 15632 | 17116 | 20158 | *21450* | *23050* | Total Capital ($mill) | *27200* |
| | | | | | | | 18127 | 16096 | 16205 | 17424 | 18799 | 20113 | 21466 | 22810 | 24376 | 26807 | *29275* | *31050* | Net Plant ($mill) | *36700* |
| | | | | | | | 5.6% | 6.0% | 5.6% | 5.8% | 5.3% | 6.0% | 6.0% | 6.4% | 6.0% | 5.3% | *5.5%* | *5.5%* | Return on Total Cap'l | *6.0%* |
| | | | | | | | 7.5% | 8.7% | 7.7% | 8.7% | 8.3% | 9.1% | 9.3% | 10.6% | 10.2% | 9.7% | *10.0%* | *10.0%* | Return on Shr. Equity | *10.5%* |
| | | | | | | | 7.5% | 8.8% | 7.8% | 8.7% | 8.3% | 9.2% | 9.4% | 10.7% | 10.3% | 9.7% | *10.0%* | *10.0%* | Return on Com Equity [E] | *10.5%* |
| | | | | | | | 2.8% | 3.0% | 1.9% | 2.9% | 2.5% | 3.3% | 3.4% | 4.8% | 4.4% | 4.2% | *4.5%* | *4.5%* | Retained to Com Eq | *4.5%* |
| | | | | | | | 63% | 66% | 76% | 67% | 70% | 64% | 64% | 56% | 57% | 57% | *57%* | *58%* | All Div'ds to Net Prof | *58%* |

**CAPITAL STRUCTURE as of 3/31/21**
**Total Debt** $12424 mill. **Due in 5 Yrs** $2792 mill.
**LT Debt** $11527 mill. **LT Interest** $439 mill.
(LT interest earned: 3.7x)
**Leases, Uncapitalized** Annual rentals $9 mill.
**Pension Assets-12/20** $5510 mill.
**Oblig** $5510 mill.
**Pfd Stock** $142 mill. **Pfd Div'd** $6 mill.
807,595 sh. $3.50 to $5.50 cum. (no par), $100 stated val., redeem. $102.176-$110/sh.; 616,323 sh. 4.00% to 6.625%, $100 par, redeem. $100-$104.30/sh.
**Common Stock** 255,552,619 shs. **as of 4/30/21**
**MARKET CAP: $22 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2018 | 2019 | 2020 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +5.6 | -3.5 | -5.6 |
| 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 (yr-end) | NA | NA | NA |
| Fixed Charge Cov. (%) | 313 | 307 | 291 |

**ANNUAL RATES** of change (per sh)

| | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | -3.0% | -.5% | *1.0%* |
| "Cash Flow" | 2.5% | 6.5% | *5.5%* |
| Earnings | 2.0% | 8.0% | *6.5%* |
| Dividends | .5% | 3.5% | *7.0%* |
| Book Value | - - | 3.5% | *6.5%* |

**QUARTERLY REVENUES ($ mill.)**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 1585 | 1563 | 1724 | 1419 | 6291.0 |
| 2019 | 1556 | 1379 | 1659 | 1316 | 5910.0 |
| 2020 | 1440 | 1398 | 1628 | 1328 | 5794.0 |
| 2021 | 1566 | *1450* | *1700* | *1384* | *6100* |
| 2022 | *1650* | *1500* | *1750* | *1450* | *6350* |

**EARNINGS PER SHARE [A]**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .62 | .97 | 1.45 | .28 | 3.32 |
| 2019 | .78 | .72 | 1.47 | .38 | 3.35 |
| 2020 | .59 | .98 | 1.47 | .46 | 3.50 |
| 2021 | .91 | *.75* | *1.70* | *.44* | *3.80* |
| 2022 | *.85* | *.85* | *1.85* | *.50* | *4.05* |

**QUARTERLY DIVIDENDS PAID [B] ■**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .44 | .44 | .44 | .4575 | 1.78 |
| 2018 | .4575 | .4575 | .4575 | .475 | 1.85 |
| 2019 | .475 | .475 | .475 | .495 | 1.92 |
| 2020 | .495 | .495 | .495 | .515 | 2.00 |
| 2021 | .55 | | | | |

**BUSINESS:** Ameren Corporation is a holding company formed through the merger of Union Electric and CIPSCO. Has 1.2 million electric and 127,000 gas customers in Missouri; 1.2 million electric and 813,000 gas customers in Illinois. Discontinued nonregulated power-generation operation in '13. Electric revenue breakdown: residential, 43%; commercial, 32%; industrial, 8%; other, 17%. Generating sources: coal, 67%; nuclear, 19%; hydro & other, 6%; purchased, 8%. Fuel costs: 22% of revenues. '20 reported deprec. rates: 3%-4%. Has 9,200 employees. Chairman, President & CEO: Warner L. Baxter. Inc.: Missouri. Address: One Ameren Plaza, 1901 Chouteau Ave., P.O. Box 66149, St. Louis, Missouri 63166-6149. Tel.: 314-621-3222. Internet: www.ameren.com.

**Ameren filed electric and gas rate cases in Missouri.** The utility is seeking an electric increase of $299 million, based on a 9.9% return on equity and a 51.9% common-equity ratio. The gas request is $9 million, based on a 9.8% ROE and the same common-equity ratio. Among other things, Ameren is seeking to place wind capacity in the rate base. Decisions are expected by February, with new tariffs taking effect in March.

**Earnings will likely advance solidly in 2021.** First-quarter profits soared, thanks in part to an electric rate hike in Missouri that took effect in April of 2020 and a gas tariff increase that took effect in Illinois in January of 2021. Ameren's electric operations in Illinois are benefiting from a higher allowed ROE. We have raised our share-earnings estimate by a dime, to $3.80. This is within the company's targeted range of $3.65-$3.85 a share.

**Further profit growth is likely in 2022.** Ameren should benefit from rate relief in Missouri. Ongoing investment in the utility's electric transmission system is another source of income. Our estimate of $4.05 a share, which we boosted by $0.10, would produce a 7% increase. This is within management's goal of 6%-8% annually. However . . .

**We assume in our estimates no change in the allowed ROE for electric transmission.** The Federal Energy Regulatory Commission is considering eliminating a half percentage point "adder" that is now reflected in the company's transmission rates. This would lower Ameren's annual earning power by $0.04 a share.

**Ameren expects the Callaway nuclear plant to return to service in July.** The unit has been out of service due to a non-nuclear problem with the generator. The repair and replacement power costs are covered by insurance, so management expects no significant effect on the company's financial results. Still, any extended and unplanned outage at a nuclear facility bears watching.

**Ameren stock is timely, but expensively priced.** The dividend yield is below the utility mean. The recent quotation is within our 2024-2026 Target Price Range, so total return prospects over that time frame are unspectacular.

*Paul E. Debbas, CFA* *June 11, 2021*

**(A)** Diluted EPS. Excl. nonrec. gain (losses): '05, (11¢); '10, ($2.19); '11, (32¢); '12, ($6.42); '17, (63¢); gain (loss) from disc. ops.: '13, (92¢); '15, 21¢. Next earnings report due mid-Aug. **(B)** Div'ds paid late Mar., June, Sept., & Dec. ■ Div'd reinvest. plan avail. **(C)** Incl. intang. In '20: $5.97/sh. **(D)** In mill. **(E)** Rate base: Orig. cost depr. Rate allowed on com. eq. in MO in '20: elec., none; in '11: gas, none; in IL: electric, varies; in '21: gas, 9.67%; earned on avg. com. eq., '20: 10.2%. Regulatory Climate: MO, Average; IL, Below Average.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 95 |
| **Price Growth Persistence** | 80 |
| **Earnings Predictability** | 95 |

# DUKE ENERGY NYSE-DUK

RECENT PRICE 106.19 | P/E RATIO 20.2 (Trailing: 27.0 Median: 18.0) | RELATIVE P/E RATIO 1.05 | DIV'D YLD 3.7% | VALUE LINE

TIMELINESS 3 Raised 5/7/21
SAFETY 2 New 6/1/07
TECHNICAL 4 Lowered 7/30/21
BETA .90 (1.00 = Market)

**18-Month Target Price Range**

| Low-High | Midpoint (% to Mid) |
|---|---|
| $52-$130 | $91 (-15%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 125 | (+20%) | *8%* |
| Low | 95 | (-10%) | *2%* |

**Institutional Decisions**

| | 3Q2020 | 4Q2020 | 1Q2021 |
|---|---|---|---|
| to Buy | 686 | 763 | 796 |
| to Sell | 702 | 683 | 681 |
| Hld's(000) | 464090 | 472627 | 483371 |

| | High: | 55.8 | 66.4 | 71.1 | 75.5 | 87.3 | 90.0 | 87.8 | 91.8 | 91.4 | 97.4 | 103.8 | 108.0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Low: | 46.4 | 50.6 | 59.6 | 64.2 | 67.1 | 65.5 | 70.2 | 76.1 | 72.0 | 82.5 | 62.1 | 85.6 |

LEGENDS
0.54 x Dividends p sh divided by Interest Rate
Relative Price Strength
1-for-3 Rev split 7/12
Options: Yes
*Shaded area indicates recession*

Target Price Range 2024 2025 2026

% TOT. RETURN 7/21

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 29.3 | 55.5 |
| 3 yr. | 44.8 | 48.6 |
| 5 yr. | 50.6 | 95.5 |

| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| - - | 25.32 | 30.24 | 31.15 | 29.18 | 32.22 | 32.63 | 27.88 | 34.84 | 33.84 | 34.10 | 32.49 | 33.66 | 33.73 | 34.21 | 31.04 | *32.15* | *33.05* | Revenues per sh | *36.00* |
| - - | 7.86 | 8.11 | 7.34 | 7.58 | 8.49 | 8.68 | 6.80 | 8.56 | 9.11 | 9.40 | 9.20 | 10.01 | 10.49 | 12.13 | 10.89 | *12.60* | *13.30* | "Cash Flow" per sh | *15.50* |
| - - | 2.76 | 3.60 | 3.03 | 3.39 | 4.02 | 4.14 | 3.71 | 3.98 | 4.13 | 4.10 | 3.71 | 4.22 | 4.13 | 5.07 | 3.92 | *5.15* | *5.45* | Earnings per sh A | *6.50* |
| - - | - - | 2.58 | 2.70 | 2.82 | 2.91 | 2.97 | 3.03 | 3.09 | 3.15 | 3.24 | 3.36 | 3.49 | 3.64 | 3.75 | 3.82 | *3.90* | *3.98* | Div'd Decl'd per sh B ■ | *4.25* |
| - - | 8.07 | 7.43 | 10.35 | 9.85 | 10.84 | 9.80 | 7.81 | 7.83 | 7.62 | 9.83 | 11.29 | 11.50 | 12.91 | 15.17 | 12.88 | *13.60* | *16.60* | Cap'l Spending per sh | *15.50* |
| - - | 62.30 | 50.40 | 49.51 | 49.85 | 50.84 | 51.14 | 58.04 | 58.54 | 57.81 | 57.74 | 58.62 | 59.63 | 60.27 | 61.20 | 59.82 | *61.15* | *62.60* | Book Value per sh C | *68.50* |
| - - | 418.96 | 420.62 | 423.96 | 436.29 | 442.96 | 445.29 | 704.00 | 706.00 | 707.00 | 688.00 | 700.00 | 700.00 | 727.00 | 733.00 | 769.00 | *770.00* | *770.00* | Common Shs Outst'g D | *770.00* |
| - - | - - | 16.1 | 17.3 | 13.3 | 12.7 | 13.8 | 17.5 | 17.4 | 17.9 | 18.2 | 21.3 | 19.9 | 19.4 | 17.7 | 22.4 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *17.0* |
| - - | - - | .85 | 1.04 | .89 | .81 | .87 | 1.11 | .98 | .94 | .92 | 1.12 | 1.00 | 1.05 | .94 | 1.16 | | | Relative P/E Ratio | *.95* |
| - - | - - | 4.4% | 5.2% | 6.2% | 5.7% | 5.2% | 4.7% | 4.4% | 4.3% | 4.3% | 4.3% | 4.2% | 4.5% | 4.2% | 4.4% | | | Avg Ann'l Div'd Yield | *3.9%* |
| 14529 | 19624 | 24598 | 23925 | 23459 | 22743 | 23565 | 24521 | 25079 | 23868 | *24750* | *25450* | Revenues ($mill) | *27800* | | | | | | |
| 1839.0 | 2136.0 | 2813.0 | 2934.0 | 2854.0 | 2560.0 | 2963.0 | 2928.0 | 3755.0 | 2996.0 | *4080* | *4315* | Net Profit ($mill) | *5100* | | | | | | |
| 31.3% | 30.2% | 32.6% | 30.6% | 32.2% | 31.0% | 30.4% | 14.2% | 12.7% | 4.9% | *7.0%* | *7.0%* | Income Tax Rate | *7.0%* | | | | | | |
| 23.2% | 22.3% | 8.8% | 7.2% | 9.2% | 11.7% | 12.3% | 13.0% | 7.9% | 8.9% | *7.0%* | *7.0%* | AFUDC % to Net Profit | *7.0%* | | | | | | |
| 45.1% | 47.0% | 48.0% | 47.7% | 48.6% | 52.6% | 54.0% | 53.8% | 54.0% | 53.7% | *54.0%* | *54.5%* | Long-Term Debt Ratio | *54.5%* | | | | | | |
| 54.9% | 52.9% | 52.0% | 52.3% | 51.4% | 47.4% | 46.0% | 46.2% | 44.1% | 44.4% | *44.0%* | *44.0%* | Common Equity Ratio | *43.5%* | | | | | | |
| 41451 | 77307 | 79482 | 78088 | 77222 | 86609 | 90774 | 94940 | 101807 | 103589 | *106550* | *109700* | Total Capital ($mill) | *120900* | | | | | | |
| 42661 | 68558 | 69490 | 70046 | 75709 | 82520 | 86391 | 91694 | 102127 | 106782 | *111500* | *118275* | Net Plant ($mill) | *134100* | | | | | | |
| 5.6% | 3.6% | 4.6% | 4.8% | 4.8% | 4.0% | 4.3% | 4.2% | 4.8% | 3.9% | *5.0%* | *5.0%* | Return on Total Cap'l | *5.5%* | | | | | | |
| 8.1% | 5.2% | 6.8% | 7.2% | 7.2% | 6.2% | 7.1% | 6.7% | 8.0% | 6.2% | *8.5%* | *8.5%* | Return on Shr. Equity | *9.5%* | | | | | | |
| 8.1% | 5.2% | 6.8% | 7.2% | 7.2% | 6.2% | 7.1% | 6.7% | 8.3% | 6.3% | *8.5%* | *8.5%* | Return on Com Equity E | *9.5%* | | | | | | |
| 2.2% | .9% | 1.5% | 1.7% | 1.5% | .6% | 1.2% | 1.0% | 2.4% | .4% | *2.0%* | *2.5%* | Retained to Com Eq | *3.5%* | | | | | | |
| 72% | 82% | 78% | 76% | 79% | 91% | 83% | 84% | 71% | 94% | *76%* | *74%* | All Div'ds to Net Prof | *66%* | | | | | | |

**CAPITAL STRUCTURE as of 3/31/21**
**Total Debt** $64418 mill. **Due in 5 Yrs** $21060 mill.
**LT Debt** $54768 mill. **LT Interest** $2178 mill.
Incl. $845 mill. finance leases.
(LT interest earned: 2.2x)
**Leases, Uncapitalized** Annual rentals $229 mill.
**Pension Assets-12/20** $9337 mill.
**Oblig** $8634 mill.
**Pfd Stock** $1962 mill. **Pfd Div'd** $107 mill.
40 mill. shs. 5.75%, cum., $25 liq. value, redeemable at $25.50 prior to 6/15/24; 1 mill. shs. 4.875%, cum., $1000 liq. value.
**Common Stock** 769,218,956 shs. **as of 4/30/21**
**MARKET CAP: $82 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2018 | 2019 | 2020 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +3.9 | -.9 | -2.3 |
| Avg. Indust. Use (MWH) | 2953 | 2934 | 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 (avg.) | +1.4 | +1.5 | NA |
| Fixed Charge Cov. (%) | 218 | 233 | 183 |

| ANNUAL RATES of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | .5% | -1.0% | *1.5%* |
| "Cash Flow" | 3.5% | 4.5% | *5.5%* |
| Earnings | 2.5% | 1.5% | *7.0%* |
| Dividends | 3.0% | 3.5% | *2.0%* |
| Book Value | 2.0% | 1.0% | *2.0%* |

| Calendar | QUARTERLY REVENUES ($ mill.) Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 6135 | 5643 | 6628 | 6115 | 24521 |
| 2019 | 6163 | 5873 | 6940 | 6103 | 25079 |
| 2020 | 5949 | 5421 | 6721 | 5777 | 23868 |
| 2021 | 6150 | *5650* | *6900* | *6050* | *24750* |
| 2022 | *6350* | *5800* | *7100* | *6200* | *25450* |

| Calendar | EARNINGS PER SHARE A Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 1.17 | .71 | 1.63 | .61 | 4.13 |
| 2019 | 1.24 | 1.12 | 1.82 | .89 | 5.07 |
| 2020 | 1.24 | 1.08 | 1.74 | d.13 | 3.92 |
| 2021 | 1.25 | *1.10* | *1.80* | *1.00* | *5.15* |
| 2022 | *1.35* | *1.15* | *1.90* | *1.05* | *5.45* |

| Calendar | QUARTERLY DIVIDENDS PAID B ■ Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .855 | .855 | .89 | .89 | 3.49 |
| 2018 | .89 | .89 | .9275 | .9275 | 3.64 |
| 2019 | .9275 | .9275 | .945 | .945 | 3.75 |
| 2020 | .945 | .945 | .965 | .965 | 3.82 |
| 2021 | .965 | .965 | .985 | | |

**BUSINESS:** Duke Energy Corporation is a holding company for utilities with 7.6 mill. elec. customers in NC, FL, IN, SC, OH, & KY, and 1.6 mill. gas customers in OH, KY, NC, SC, and TN. Owns independent power plants & has 25% stake in National Methanol in Saudi Arabia. Acq'd Progress Energy 7/12; Piedmont Natural Gas 10/16; discontinued most int'l ops. in '16. Elec. rev. breakdown: residential, 45%; commercial, 28%; industrial, 13%; other, 14%. Generating sources: gas, 31%; nuclear, 30%; coal, 18%; other, 2%; purchased, 19%. Fuel costs: 27% of revs. '20 reported deprec. rate: 3.0%. Has 27,500 employees. Chairman, President & CEO: Lynn J. Good. Inc.: DE. Address: 550 South Tryon St., Charlotte, NC 28202-1803. Tel.: 704-382-3853. Internet: www.duke-energy.com.

**Duke Energy has come under criticism from an investor group.** Elliott Management, with an undisclosed stake in Duke, is proposing the separation of Duke into three utilities, believing that the performance of those in Florida and the Midwest need improvement. Duke responded by stating its belief that the company's scale is an asset. So far, this does not appear to have had a large effect on the share price, but this bears attention from investors.

**Earnings will likely be much improved in 2021.** The bottom line fell into the red in the fourth quarter of 2020 due to coal-ash remediation costs that the company was unable to recover from customers. Duke is also benefiting from rate relief. Our estimate is at the midpoint of management's targeted range of $5.00-$5.30 a share.

**Rate relief should help lift the bottom line in 2022.** In Florida, the state commission approved a settlement calling for electric tariff hikes of $67 million in 2022, $49 million in 2023, and $79 million in 2024. The allowed return on equity is 8.85%-10.85% and the common-equity ratio is 53%. In North Carolina, Piedmont Gas is seeking an increase of $109 million (10.4%), based on an ROE of 10.25% and a common-equity ratio of 53%. New rates will be in place as early as November of 2021. Note that earlier this year, Duke's electric utilities in North Carolina received rate hikes, so a full year's effect of these increases will boost earnings in 2022.

**Duke is awaiting regulatory approval of an asset sale.** The company intends to raise over $2 billion through the sale of its Indiana electric utility in two phases. This would take care of its equity needs through 2025. The proposed sale has come under some criticism, however.

**The board raised the dividend, effective with the September payment.** The 2.1% increase was $0.02 a share. This growth rate is well below the industry average because the payout ratio is high.

**The dividend yield is slightly above the utility mean.** There is some speculative appeal if anything happens from the conflict with Elliott Management. Note, too, that in 2020 NextEra Energy reportedly expressed interest in buying Duke.

*Paul E. Debbas, CFA* *August 13, 2021*

**(A)** Dil. EPS. Excl. nonrec. losses: '12, 70¢; '13, 24¢; '14, 67¢; '17, 15¢; '18, 41¢; '20, $2.21; losses on disc. ops.: '14, 80¢; '16, 60¢; '18, '20 EPS don't sum due to rounding. Next egs. due early Nov. **(B)** Div'ds paid mid-Mar., June, Sept., & Dec. ■ Div'd reinv. plan avail. **(C)** Incl. intang. In '20: $41.25/sh. **(D)** In mill., adj. for rev. split. **(E)** Rate base: Net orig. cost. Rate all'd on com. eq. in '21 in NC: 9.6%; in '19 in SC: 9.5%; in '20 in FL: 9.5%-11.5%; in '20 in IN: 9.7%; earn. on avg. com. eq., '20: 9.9%. Reg. Clim.: NC, SC Avg.; OH, IN Above Avg.

| | |
|---|---|
| Company's Financial Strength | A |
| Stock's Price Stability | 95 |
| Price Growth Persistence | 40 |
| Earnings Predictability | 90 |

# EDISON INTERNAT'L NYSE-EIX

RECENT PRICE 58.20 | P/E RATIO 13.9 (Trailing: 30.6 Median: 15.0) | RELATIVE P/E RATIO 0.70 | DIV'D YLD 4.6% | VALUE LINE

TIMELINESS 4 Lowered 5/7/21
SAFETY 3 Lowered 11/23/18
TECHNICAL 5 Lowered 7/9/21
BETA .95 (1.00 = Market)

**18-Month Target Price Range**

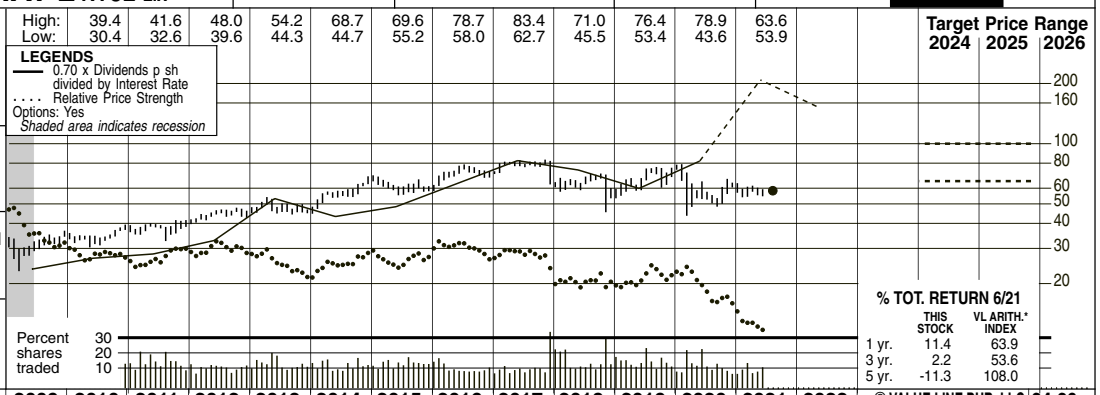
| Low-High | Midpoint (% to Mid) |
|---|---|
| $44-$97 | $71 (20%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 100 | (+70%) | *18%* |
| Low | 65 | (+10%) | *7%* |

**Institutional Decisions**

| | 3Q2020 | 4Q2020 | 1Q2021 |
|---|---|---|---|
| to Buy | 269 | 303 | 289 |
| to Sell | 264 | 238 | 261 |
| Hld's(000) | 334110 | 329568 | 330900 |




| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36.38 | 38.74 | 40.25 | 43.31 | 37.98 | 38.09 | 39.16 | 36.41 | 38.61 | 41.17 | 35.37 | 36.43 | 37.81 | 38.85 | 34.11 | 35.83 | *36.60* | *38.30* | Revenues per sh | *44.50* |
| 6.99 | 7.25 | 7.60 | 8.08 | 7.96 | 8.41 | 9.03 | 9.63 | 8.80 | 9.95 | 10.35 | 10.43 | 11.03 | 4.69 | 9.15 | 7.94 | *10.70* | *11.20* | "Cash Flow" per sh | *13.25* |
| 3.34 | 3.28 | 3.32 | 3.68 | 3.24 | 3.35 | 3.23 | 4.55 | 3.78 | 4.33 | 4.15 | 3.94 | 4.51 | d1.26 | 3.98 | 1.72 | *4.20* | *4.35* | Earnings per sh A | *5.25* |
| 1.02 | 1.10 | 1.18 | 1.23 | 1.25 | 1.27 | 1.29 | 1.31 | 1.37 | 1.48 | 1.73 | 1.98 | 2.23 | 2.43 | 2.48 | 2.58 | *2.68* | *2.78* | Div'd Decl'd per sh B ■ | *3.10* |
| 5.73 | 7.78 | 8.67 | 8.67 | 10.07 | 13.94 | 14.76 | 12.73 | 11.05 | 11.99 | 12.97 | 11.46 | 11.75 | 13.84 | 13.47 | 14.47 | *14.30* | *13.75* | Cap'l Spending per sh | *14.25* |
| 20.30 | 23.66 | 25.92 | 29.21 | 30.20 | 32.44 | 30.86 | 28.95 | 30.50 | 33.64 | 34.89 | 36.82 | 35.82 | 32.10 | 36.75 | 37.08 | *39.00* | *40.60* | Book Value per sh C | *46.75* |
| 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 325.81 | 361.99 | 378.91 | *385.00* | *385.00* | Common Shs Outst'g D | *385.00* |
| 11.7 | 13.0 | 16.0 | 12.4 | 9.7 | 10.3 | 11.8 | 9.7 | 12.7 | 13.0 | 14.8 | 17.9 | 17.2 | - - | 16.7 | 34.9 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *15.5* |
| .62 | .70 | .85 | .75 | .65 | .66 | .74 | .62 | .71 | .68 | .75 | .94 | .87 | - - | .89 | 1.79 | | | Relative P/E Ratio | *.85* |
| 2.6% | 2.6% | 2.2% | 2.7% | 4.0% | 3.7% | 3.4% | 3.0% | 2.8% | 2.6% | 2.8% | 2.8% | 2.9% | 3.8% | 3.7% | 4.3% | | | Avg Ann'l Div'd Yield | *3.8%* |
| 12760 | 11862 | 12581 | 13413 | 11524 | 11869 | 12320 | 12657 | 12347 | 13578 | *14100* | *14750* | Revenues ($mill) | *17100* |
| 1112.0 | 1594.0 | 1344.0 | 1539.0 | 1480.0 | 1422.0 | 1603.0 | d290.0 | 1477.0 | 775.0 | *1770* | *1845* | Net Profit ($mill) | *2235* |
| 25.7% | 14.3% | 25.2% | 22.4% | 6.6% | 11.1% | 5.0% | - - | - - | - - | *NMF* | *NMF* | Income Tax Rate | *NMF* |
| 14.8% | 8.5% | 7.8% | 5.8% | 8.0% | 6.8% | 7.2% | - - | 11.1% | 22.5% | *10.0%* | *9.0%* | AFUDC % to Net Profit | *8.0%* |
| 55.3% | 45.2% | 45.7% | 44.1% | 45.0% | 41.8% | 45.6% | 53.6% | 53.5% | 55.2% | *54.5%* | *55.0%* | Long-Term Debt Ratio | *58.0%* |
| 40.6% | 46.2% | 46.2% | 47.2% | 46.7% | 49.2% | 45.8% | 38.3% | 39.9% | 39.5% | *38.0%* | *37.5%* | Common Equity Ratio | *36.0%* |
| 24773 | 20422 | 21516 | 23216 | 24352 | 24362 | 25506 | 27284 | 33360 | 35581 | *39750* | *41975* | Total Capital ($mill) | *50100* |
| 32116 | 30273 | 30455 | 32981 | 35085 | 37000 | 39050 | 41348 | 44285 | 47839 | *50850* | *53500* | Net Plant ($mill) | *61100* |
| 6.0% | 8.9% | 7.3% | 7.7% | 7.1% | 6.9% | 7.3% | .1% | 5.6% | 3.4% | *5.5%* | *5.5%* | Return on Total Cap'l | *6.0%* |
| 10.0% | 14.2% | 11.5% | 11.9% | 11.1% | 10.0% | 11.6% | NMF | 9.5% | 4.9% | *9.5%* | *10.0%* | Return on Shr. Equity | *10.5%* |
| 10.5% | 15.9% | 12.5% | 13.0% | 12.0% | 10.8% | 12.7% | NMF | 10.2% | 4.6% | *11.0%* | *11.0%* | Return on Com Equity E | *11.5%* |
| 6.3% | 11.4% | 8.1% | 8.8% | 7.2% | 5.6% | 6.6% | NMF | 4.1% | NMF | *4.0%* | *4.0%* | Retained to Com Eq | *5.0%* |
| 43% | 32% | 40% | 37% | 44% | 53% | 52% | NMF | 63% | NMF | *66%* | *67%* | All Div'ds to Net Prof | *61%* |

**CAPITAL STRUCTURE as of 3/31/21**
**Total Debt** $23594 mill. **Due in 5 Yrs** $7848 mill.
**LT Debt** $20165 mill. **LT Interest** $921 mill.
(LT interest earned: 1.5x)
**Leases, Uncapitalized** Annual rentals $39 mill.
**Pension Assets-12/20** $4171 mill.
**Oblig** $4476 mill.
**Pfd Stock** $1901 mill. **Pfd Div'd** $106 mill.
350,000 sh. 6.25%, $1000 liq. value; 638,020 sh. 5.0%-5.75%, $2500 liq. value, all cumulative.

**Common Stock** 379,438,053 shs.
**as of 4/20/21**
**MARKET CAP: $22 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2018 | 2019 | 2020 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -.4 | -2.7 | +.7 |
| Avg. Indust. Use (MWH) | 667 | 657 | 589 |
| Avg. Indust. Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | 23766 | 22009 | 23133 |
| Annual Load Factor (%) | 48.0 | 49.6 | 46.7 |
| % Change Customers (yr-end) | +.6 | +.5 | +.6 |
| Fixed Charge Cov. (%) | NMF | 172 | NMF |

**ANNUAL RATES**

| of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | -1.0% | -1.0% | *3.5%* |
| "Cash Flow" | -1.0% | -5.5% | *10.5%* |
| Earnings | -8.0% | -18.5% | *NMF* |
| Dividends | 7.0% | 10.5% | *3.5%* |
| Book Value | 1.5% | 1.5% | *5.0%* |

**QUARTERLY REVENUES ($ mill.)**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 2564 | 2815 | 4269 | 3009 | 12657 |
| 2019 | 2824 | 2812 | 3741 | 2970 | 12347 |
| 2020 | 2790 | 2987 | 4644 | 3157 | 13578 |
| 2021 | 2960 | *3140* | *4800* | *3200* | *14100* |
| 2022 | *3100* | *3250* | *5050* | *3350* | *14750* |

**EARNINGS PER SHARE A**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .82 | .84 | 1.57 | d4.49 | d1.26 |
| 2019 | .64 | 1.57 | 1.35 | .45 | 3.98 |
| 2020 | .50 | .85 | d.76 | 1.13 | 1.72 |
| 2021 | .68 | *1.10* | *1.45* | *.97* | *4.20* |
| 2022 | *.70* | *1.15* | *1.50* | *1.00* | *4.35* |

**QUARTERLY DIVIDENDS PAID B ■**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .5425 | .5425 | .5425 | .5425 | 2.17 |
| 2018 | .605 | .605 | .605 | .605 | 2.42 |
| 2019 | .6125 | .6125 | .6125 | .6125 | 2.45 |
| 2020 | .6375 | .6375 | .6375 | .6375 | 2.55 |
| 2021 | .6625 | .6625 | .6625 | | |

**BUSINESS:** Edison International (formerly SCECorp) is a holding company for Southern California Edison Company (SCE), which supplies electricity to 5.2 mill. customers in a 50,000-sq.-mi. area in central, coastal, & southern CA (excl. Los Angeles & San Diego). Edison Energy is an energy svcs. co. Disc. Edison Mission Energy (independent power producer) in '12. Elec. rev. breakdown: residential, 42%; commercial, 40%; industrial, 4%; other, 14%. Generating sources: nuclear, 8%; gas, 5%; hydro, 4%; purchased, 83%. Fuel costs: 36% of revs. '20 reported depr. rate: 3.6%. Has 13,400 empls. Chairman: William P. Sullivan. Pres. & CEO: Pedro J. Pizzaro. Inc.: CA. Address: 2244 Walnut Grove Ave., P.O. Box 976, Rosemead, CA 91770. Tel.: 626-302-2222. Web: www.edison.com.

**Edison International's utility subsidiary is awaiting an order from the California Public Utilities Commission (CPUC) on its general rate case.** Southern California Edison is asking for increases of $1.3 billion in 2021 (retroactive to the start of the year), $452 million in 2022, and $524 million in 2023. When the ruling will come is unknown. Through a separate proceeding, SCE is seeking an additional $497 million for wildfire-mitigation and grid safety and resiliency costs. A decision is expected in the first quarter of 2022. Finally, the utility is issuing securitized bonds to recover over $2.0 billion of costs that are not eligible for recovery through the general rate case.

**The company's reported earnings are still based on rates that were in place in 2020.** Thus, this doesn't reflect its earning power once the rate ruling is in place. In fact, management hasn't put forth any earnings guidance for 2021, and won't do so until after the CPUC issues its order.

**We expect an earnings recovery this year, followed by moderate growth in 2022.** Results fell into the red in the third quarter of 2020 due to charges for expected liabilities for wildfires and mudslides in SCE's service area. (This is also why the company posted a loss in 2018.) We assume no such charge in 2021. We also assume that the utility will get reasonable treatment from the CPUC in the aforementioned regulatory matters. Note that our estimates reflect the effects of financing measures made since 2019, such as an increase in the share count.

**Wildfires continue to be a key issue for the company.** SCE has resolved $4.2 billion of insurance claims for its $6.2 billion of wildfire liabilities. If there are any major wildfires subsequently, the utility may tap a statewide insurance fund to cover its liabilities. The company and the state are taking additional measures for wildfire mitigation. Even so, the cost of wildfire insurance has surged in recent years.

**This untimely stock's dividend yield is well above the utility mean.** This reflects wildfire-related uncertainties. Risk-tolerant income seekers ought to consider this equity, which also has good 18-month and 3- to 5-year total return potential.

*Paul E. Debbas, CFA* *July 23, 2021*

**(A)** Dil. EPS. Excl. nonrec. gains (losses): '09, (64¢); '10, 54¢; '11, ($3.33); '13, ($1.12); '15, ($1.18); '17, ($1.37); '18, (15¢); '19, (21¢); '20, 25¢; gains (loss) from disc. ops.: '12, ($5.11); '13, 11¢; '14, 57¢; '15, 11¢; '18, 10¢. '19 EPS don't sum due to chng. in shs. Next earnings report due late July. **(B)** Div'ds paid late Jan., Apr., July, & Oct. ■ Div'd reinv. plan avail. **(C)** Incl. def'd charges. In '20: $18.79/sh. **(D)** In mill. **(E)** Rate base: net orig. cost. Rate all'd on com. eq. in '20: 10.3%; earned on avg. com. eq., '20: 4.7%. Regulatory Climate: Average.

| | |
|---|---|
| Company's Financial Strength | B+ |
| Stock's Price Stability | 80 |
| Price Growth Persistence | 40 |
| Earnings Predictability | 5 |

# ENTERGY CORP. NYSE-ETR

RECENT PRICE 105.26 | P/E RATIO 17.7 (Trailing: 13.2 Median: 13.0) | RELATIVE P/E RATIO 0.83 | DIV'D YLD 3.7% | VALUE LINE

TIMELINESS 2 Raised 6/11/21
SAFETY 2 Raised 12/13/19
TECHNICAL 4 Raised 6/11/21
BETA .95 (1.00 = Market)

**18-Month Target Price Range**

| Low-High | Midpoint (% to Mid) |
|---|---|
| $55-$138 | $97 (-10%) |

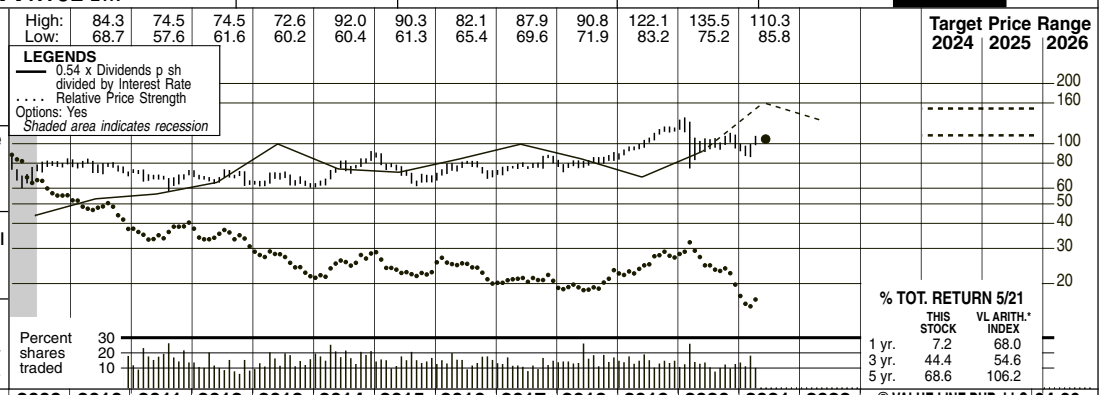
**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 150 | (+45%) | *12%* |
| Low | 110 | (+5%) | *5%* |

**Institutional Decisions**

| | 3Q2020 | 4Q2020 | 1Q2021 |
|---|---|---|---|
| to Buy | 262 | 312 | 254 |
| to Sell | 303 | 276 | 321 |
| Hld's(000) | 173339 | 174980 | 172087 |

| | 2024 | 2025 | 2026 |
|---|---|---|---|
| Target Price Range | | | |




**% TOT. RETURN 5/21**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 7.2 | 68.0 |
| 3 yr. | 44.4 | 54.6 |
| 5 yr. | 68.6 | 106.2 |

| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 46.61 | 53.94 | 59.47 | 69.15 | 56.82 | 64.27 | 63.67 | 57.94 | 63.86 | 69.71 | 64.54 | 60.55 | 61.35 | 58.23 | 54.63 | 50.51 | *52.70* | *50.95* | Revenues per sh | *55.25* |
| 8.18 | 10.69 | 11.73 | 12.89 | 13.29 | 16.54 | 17.53 | 15.98 | 16.25 | 17.68 | 17.71 | 18.72 | 16.70 | 16.50 | 17.19 | 18.21 | *17.50* | *18.45* | "Cash Flow" per sh | *21.00* |
| 4.40 | 5.36 | 5.60 | 6.20 | 6.30 | 6.66 | 7.55 | 6.02 | 4.96 | 5.77 | 5.81 | 6.88 | 5.19 | 5.88 | 6.30 | 6.90 | *5.95* | *6.35* | Earnings per sh [A] | *7.50* |
| 2.16 | 2.16 | 2.58 | 3.00 | 3.00 | 3.24 | 3.32 | 3.32 | 3.32 | 3.32 | 3.34 | 3.42 | 3.50 | 3.58 | 3.66 | 3.74 | *3.86* | *4.08* | Div'd Decl'd per sh [B] ■ † | *4.80* |
| 6.72 | 9.44 | 10.29 | 13.92 | 12.99 | 13.33 | 15.21 | 18.18 | 15.73 | 14.82 | 16.79 | 17.28 | 22.07 | 22.45 | 21.72 | 24.52 | *17.00* | *17.30* | Cap'l Spending per sh | *18.75* |
| 35.71 | 40.45 | 40.71 | 42.07 | 45.54 | 47.53 | 50.81 | 51.73 | 54.00 | 55.83 | 51.89 | 45.12 | 44.28 | 46.78 | 51.34 | 54.56 | *57.85* | *60.35* | Book Value per sh [C] | *69.00* |
| 216.83 | 202.67 | 193.12 | 189.36 | 189.12 | 178.75 | 176.36 | 177.81 | 178.37 | 179.24 | 178.39 | 179.13 | 180.52 | 189.06 | 199.15 | 200.24 | *205.00* | *206.00* | Common Shs Outst'g [D] | *212.00* |
| 16.3 | 14.3 | 19.3 | 16.6 | 12.0 | 11.6 | 9.1 | 11.2 | 13.2 | 12.9 | 12.5 | 10.9 | 15.0 | 13.8 | 16.5 | 15.3 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *17.5* |
| .87 | .77 | 1.02 | 1.00 | .80 | .74 | .57 | .71 | .74 | .68 | .63 | .57 | .75 | .75 | .88 | .79 | | | Relative P/E Ratio | *.95* |
| 3.0% | 2.8% | 2.4% | 2.9% | 4.0% | 4.2% | 4.9% | 4.9% | 5.1% | 4.5% | 4.6% | 4.6% | 4.5% | 4.4% | 3.5% | 3.6% | | | Avg Ann'l Div'd Yield | *3.7%* |
| 11229 | 10302 | 11391 | 12495 | 11513 | 10846 | 11074 | 11009 | 10879 | 10114 | *10800* | *10500* | Revenues ($mill) | *11700* |
| 1367.4 | 1091.9 | 904.5 | 1060.0 | 1061.2 | 1249.8 | 950.7 | 1092.1 | 1258.2 | 1406.7 | *1235* | *1330* | Net Profit ($mill) | *1615* |
| 17.3% | 13.0% | 26.7% | 37.8% | 2.2% | 11.3% | 1.8% | - - | 1.8% | NMF | *22.0%* | *22.0%* | Income Tax Rate | *22.0%* |
| 8.9% | 11.9% | 10.1% | 9.3% | 7.4% | 8.1% | 14.7% | 17.5% | 16.7% | 12.2% | *6.0%* | *7.0%* | AFUDC % to Net Profit | *7.0%* |
| 52.2% | 55.8% | 55.1% | 54.9% | 57.8% | 63.6% | 63.6% | 63.2% | 62.0% | 65.5% | *66.5%* | *66.0%* | Long-Term Debt Ratio | *66.0%* |
| 46.4% | 42.9% | 43.6% | 43.8% | 40.8% | 35.5% | 35.5% | 35.9% | 37.1% | 33.7% | *33.0%* | *33.5%* | Common Equity Ratio | *33.5%* |
| 19324 | 21432 | 22109 | 22842 | 22714 | 22777 | 22528 | 24602 | 27557 | 32386 | *36075* | *37100* | Total Capital ($mill) | *43600* |
| 25609 | 27299 | 27882 | 28723 | 27824 | 27921 | 29664 | 31974 | 35183 | 38853 | *40025* | *41150* | Net Plant ($mill) | *45700* |
| 8.5% | 6.4% | 5.4% | 6.0% | 6.0% | 6.9% | 5.7% | 5.8% | 5.9% | 5.6% | *4.5%* | *4.5%* | Return on Total Cap'l | *5.0%* |
| 14.8% | 11.5% | 9.1% | 10.3% | 11.1% | 15.1% | 11.6% | 12.0% | 12.0% | 12.6% | *10.0%* | *10.5%* | Return on Shr. Equity | *11.0%* |
| 15.0% | 11.6% | 9.2% | 10.4% | 11.2% | 15.2% | 11.7% | 12.2% | 12.1% | 12.7% | *10.0%* | *10.5%* | Return on Com Equity [E] | *11.0%* |
| 8.4% | 5.2% | 3.0% | 4.4% | 4.8% | 7.7% | 3.9% | 4.9% | 5.2% | 5.9% | *3.5%* | *4.0%* | Retained to Com Eq | *4.0%* |
| 45% | 56% | 68% | 58% | 58% | 50% | 68% | 61% | 58% | 55% | *65%* | *64%* | All Div'ds to Net Prof | *64%* |

**CAPITAL STRUCTURE as of 3/31/21**
**Total Debt** $25732 mill. **Due in 5 Yrs** $8503.7 mill.
**LT Debt** $24075 mill. **LT Interest** $796.0 mill.
Incl. $146.9 mill. of securitization bonds.
(LT interest earned: 2.9x)
**Leases, Uncapitalized** Annual rentals $65.7 mill.
**Pension Assets-12/20** $6854.4 mill.
**Oblig** $9143.7 mill.
**Pfd Stock** $254.4 mill. **Pfd Div'd** $18.3 mill.
200,000 shs. 6.25%-7.5%, $100 par; 250,000 shs. 8.75%, 1.4 mill. shs. 5.375%; all cum., without sinking fund.
**Common Stock** 200,659,948 shs. **as of 4/30/21**
**MARKET CAP: $21 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2018 | 2019 | 2020 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +4.1 | -1.4 | -4.1 |
| Avg. Indust. Use (MWH) | 946 | 1070 | 1017 |
| Avg. Indust. Revs. per KWH(¢) | 5.16 | 5.24 | 4.95 |
| Capacity at Peak (Mw) | 23121 | 23887 | NA |
| Peak Load, Summer (Mw) | 21587 | 21598 | NA |
| Annual Load Factor (%) | 65 | 64 | NA |
| % Change Customers (yr-end) | +.6 | +.8 | +1.0 |
| Fixed Charge Cov. (%) | NMF | 165 | 202 |

**ANNUAL RATES**

| of change (per sh) | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | -1.5% | -4.0% | *Nil* |
| "Cash Flow" | 2.0% | - - | *3.5%* |
| Earnings | - - | 3.0% | *3.0%* |
| Dividends | 1.5% | 2.0% | *4.5%* |
| Book Value | 1.0% | -1.0% | *5.0%* |

**QUARTERLY REVENUES ($ mill.)**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 2724 | 2669 | 3104 | 2512 | 11009 |
| 2019 | 2610 | 2666 | 3141 | 2462 | 10878 |
| 2020 | 2427 | 2413 | 2904 | 2370 | 10114 |
| 2021 | 2845 | *2555* | *3000* | *2400* | *10800* |
| 2022 | *2700* | *2600* | *2900* | *2300* | *10500* |

**EARNINGS PER SHARE [A]**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .73 | 1.34 | 3.42 | .39 | 5.88 |
| 2019 | 1.32 | 1.22 | 1.82 | 1.94 | 6.30 |
| 2020 | .59 | 1.79 | 2.59 | 1.93 | 6.90 |
| 2021 | 1.66 | *1.25* | *2.35* | *.69* | *5.95* |
| 2022 | *1.25* | *1.60* | *2.75* | *.75* | *6.35* |

**QUARTERLY DIVIDENDS PAID [B] ■ †**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .87 | .87 | .87 | .89 | 3.50 |
| 2018 | .89 | .89 | .89 | .91 | 3.58 |
| 2019 | .91 | .91 | .91 | .93 | 3.66 |
| 2020 | .93 | .93 | .93 | .95 | 3.74 |
| 2021 | .95 | .95 | | | |

**BUSINESS:** Entergy Corporation supplies electricity to 3.0 million customers through subsidiaries in Arkansas, Louisiana, Mississippi, Texas, and New Orleans (regulated separately from Louisiana). Distributes gas to 202,000 customers in Louisiana. Has a nonutility subsidiary that owns four nuclear units (three no longer operating). Electric revenue breakdown: residential, 39%; commercial, 25%; industrial, 26%; other, 10%. Generating sources: gas, 47%; nuclear, 29%; coal, 3%; purchased, 21%. Fuel costs: 24% of revenues. '20 reported depreciation rate: 2.8%. Has 13,000 employees. Chairman & CEO: Leo P. Denault. Incorporated: Delaware. Address: 639 Loyola Avenue, P.O. Box 61000, New Orleans, Louisiana 70161. Telephone: 504-576-4000. Internet: www.entergy.com.

**The earnings decline we estimate for Entergy in 2021 is not a sign of trouble for the company.** In recent years, Entergy has been booking tax credits that have made its tax rate low or negative. This boosted December-quarter profits well above the typical level in each of the past two years. We are not assuming any such income in 2021, although this cannot be ruled out. Our estimate is at the midpoint of Entergy's targeted range of $5.80-$6.10 a share. Based on statements by management, dividend growth is expected to accelerate in the fourth quarter.

**Some regulatory matters are pending.** Entergy Texas awaits a commission ruling on settlements that would provide $39 million in revenues through two regulatory mechanisms. Entergy Mississippi is seeking $48.2 million through the state's formula rate plan. New rates are expected to take effect in July. A full year's effect of rate relief granted in 2021, plus additional orders in 2022, points to higher earnings next year. Through legislation, Entergy Arkansas got a more-favorable outcome of a rate order that will net it an additional $67 million. Note that formula rate plans in most of the company's jurisdictions provide rate relief annually. Our earnings estimate for 2022 is within management's forecast of $6.15-$6.45 a share.

**Entergy has one more nonregulated nuclear unit remaining.** In recent years, the company has exited these operations because returns have not been good. Entergy has sold the plants (and their nuclear decommissioning trusts) to companies that will conduct the decommissioning. The last nuclear plant, in Michigan, will be shut in 2022.

**The company plans to issue securitized bonds.** Most of this (nearly $2.4 billion) would be for the recovery of costs associated with three hurricanes that hit the utility's service area from August through October of 2020. Entergy needs regulatory approval in Louisiana and Texas. If this is obtained, the bonds would be issued in 2022.

**Entergy stock has a dividend yield that is about average for a utility.** Total return potential is decent for the 3- to 5-year period, but negative for the 18-month span.

*Paul E. Debbas, CFA* *June 11, 2021*

**(A)** Diluted EPS. Excl. nonrec. losses: '05, 21¢; '12, $1.26; '13, $1.14; '14, 56¢; '15, $6.99; '16, $10.14; '17, $2.91; '18, $1.25. Next earnings report due early Aug. **(B)** Div'ds historically paid in early Mar., June, Sept., & Dec. ■ Div'd reinvestment plan avail. † Shareholder investment plan avail. **(C)** Incl. deferred charges. In '20: $33.43/sh. **(D)** In millions. **(E)** Rate base: Net original cost. Allowed ROE (blended): 9.95%; earned on avg. com. eq., '20: 13.1%. Regulatory Climate: Average.

| | |
|---|---|
| Company's Financial Strength | B++ |
| Stock's Price Stability | 90 |
| Price Growth Persistence | 30 |
| Earnings Predictability | 65 |

# EVERGY, INC. NYSE-EVRG

RECENT PRICE 61.99 | P/E RATIO 17.2 (Trailing: 19.1 Median: NMF) | RELATIVE P/E RATIO 0.81 | DIV'D YLD 3.6% | VALUE LINE

TIMELINESS 4 Lowered 6/11/21
SAFETY 2 New 9/14/18
TECHNICAL 2 Raised 6/11/21
BETA .95 (1.00 = Market)

**18-Month Target Price Range**

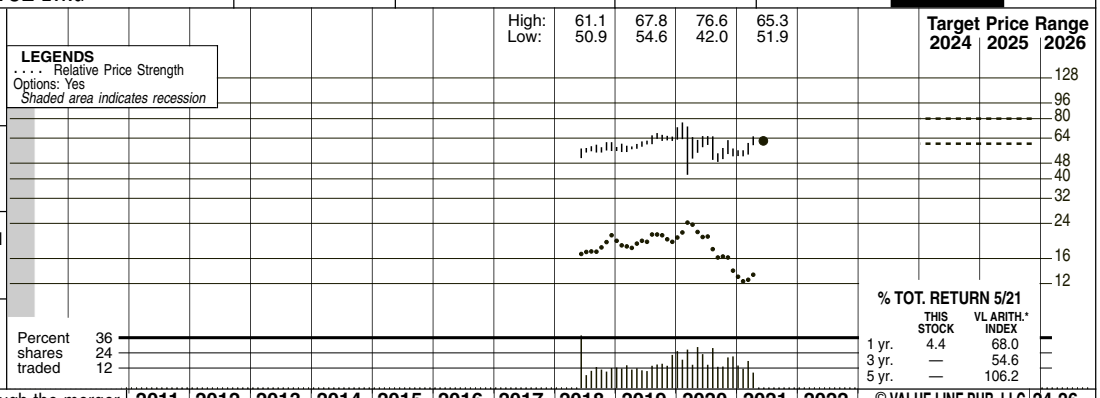
| Low-High | Midpoint (% to Mid) |
|---|---|
| $30-$83 | $57 (-10%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 80 | (+30%) | *10%* |
| Low | 60 | (-5%) | *3%* |

**Institutional Decisions**

| | 3Q2020 | 4Q2020 | 1Q2021 |
|---|---|---|---|
| to Buy | 260 | 268 | 268 |
| to Sell | 279 | 291 | 255 |
| Hld's(000) | 181645 | 188200 | 191409 |




Evergy, Inc. was formed through the merger of Great Plains Energy and Westar Energy in June of 2018. Great Plains Energy holders received .5981 of a share of Evergy for each of their shares, and Westar Energy holders received one share of Evergy for each of their shares. The merger was completed on June 4, 2018. Shares of Evergy began trading on the New York Stock Exchange one day later.

**CAPITAL STRUCTURE as of 3/31/21**
**Total Debt** $11284 mill. **Due in 5 Yrs** $4377.0 mill.
**LT Debt** $9090.6 mill. **LT Interest** $327.2 mill.
Incl. $45.3 mill. finance leases.
(LT interest earned: 3.2x)

**Leases, Uncapitalized** Annual rentals $18.5 mill.

**Pension Assets-12/20** $1799.1 mill. **Oblig** $2901.1 mill.

**Pfd Stock** None

**Common Stock** 229,267,502 shs.
**as of 4/30/21**
**MARKET CAP: $14 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2018 | 2019 | 2020 |
|---|---|---|---|
| % Change Retail Sales (KWH) | NA | NA | -3.9 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | 7.11 | 7.25 | 7.14 |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | NA | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | NA | NA | NA |
| Fixed Charge Cov. (%) | 322 | 305 | 286 |

**ANNUAL RATES** of change (per sh)

| | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | -- | -- | *3.5%* |
| "Cash Flow" | -- | -- | *6.5%* |
| Earnings | -- | -- | *8.0%* |
| Dividends | -- | -- | *5.5%* |
| Book Value | -- | -- | *3.0%* |

**QUARTERLY REVENUES ($ mill.)**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 600.2 | 893.4 | 1582.5 | 1199.8 | 4275.9 |
| 2019 | 1216.9 | 1221.7 | 1577.6 | 1131.6 | 5147.8 |
| 2020 | 1116.7 | 1184.7 | 1517.6 | 1094.4 | 4913.4 |
| 2021 | 1612 | *1238* | *1550* | *1100* | *5500* |
| 2022 | *1250* | *1250* | *1600* | *1100* | *5200* |

**EARNINGS PER SHARE A**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .42 | .56 | 1.32 | .07 | 2.50 |
| 2019 | .39 | .57 | 1.56 | .28 | 2.79 |
| 2020 | .31 | .59 | 1.60 | .22 | 2.72 |
| 2021 | .84 | *.70* | *1.75* | *.31* | *3.60* |
| 2022 | *.55* | *.75* | *1.90* | *.35* | *3.55* |

**QUARTERLY DIVIDENDS PAID B ■**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | -- | -- | -- | -- | -- |
| 2018 | .40 | .40 | .46 | .475 | 1.74 |
| 2019 | .475 | .475 | .475 | .505 | 1.93 |
| 2020 | .505 | .505 | .505 | .535 | 2.05 |
| 2021 | .535 | | | | |

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -- | -- | -- | -- | -- | -- | -- | 16.75 | 22.71 | 21.66 | *23.90* | *22.60* | Revenues per sh | *25.00* |
| | -- | -- | -- | -- | -- | -- | -- | 4.89 | 7.18 | 7.06 | *7.95* | *8.10* | "Cash Flow" per sh | *9.25* |
| | -- | -- | -- | -- | -- | -- | -- | 2.50 | 2.79 | 2.72 | *3.60* | *3.55* | Earnings per sh A | *4.25* |
| | -- | -- | -- | -- | -- | -- | -- | 1.74 | 1.93 | 2.05 | *2.17* | *2.29* | Div'd Decl'd per sh B ■ | *2.65* |
| | -- | -- | -- | -- | -- | -- | -- | 4.19 | 5.34 | 6.88 | *8.15* | *8.00* | Cap'l Spending per sh | *8.00* |
| | -- | -- | -- | -- | -- | -- | -- | 39.28 | 37.82 | 38.50 | *39.95* | *41.20* | Book Value per sh C | *45.50* |
| | -- | -- | -- | -- | -- | -- | -- | 255.33 | 226.64 | 226.84 | *230.00* | *230.00* | Common Shs Outst'g D | *230.00* |
| | -- | -- | -- | -- | -- | -- | -- | 22.7 | 21.8 | 21.7 | *Bold figures are* | | Avg Ann'l P/E Ratio | *17.0* |
| | -- | -- | -- | -- | -- | -- | -- | 1.23 | 1.16 | 1.12 | *Value Line* | | Relative P/E Ratio | *.95* |
| | -- | -- | -- | -- | -- | -- | -- | 3.1% | 3.2% | 3.5% | *estimates* | | Avg Ann'l Div'd Yield | *3.7%* |
| | -- | -- | -- | -- | -- | -- | -- | 4275.9 | 5147.8 | 4913.4 | *5500* | *5200* | Revenues ($mill) | *5750* |
| | -- | -- | -- | -- | -- | -- | -- | 535.8 | 669.9 | 618.3 | *840* | *835* | Net Profit ($mill) | *980* |
| | -- | -- | -- | -- | -- | -- | -- | 9.8% | 12.6% | 14.1% | *12.0%* | *12.0%* | Income Tax Rate | *12.0%* |
| | -- | -- | -- | -- | -- | -- | -- | 2.5% | 2.5% | 5.5% | *5.0%* | *5.0%* | AFUDC % to Net Profit | *5.0%* |
| | -- | -- | -- | -- | -- | -- | -- | 40.0% | 50.6% | 51.3% | *51.0%* | *51.0%* | Long-Term Debt Ratio | *51.5%* |
| | -- | -- | -- | -- | -- | -- | -- | 60.0% | 49.4% | 48.7% | *49.0%* | *49.0%* | Common Equity Ratio | *48.5%* |
| | -- | -- | -- | -- | -- | -- | -- | 16716 | 17337 | 17924 | *18775* | *19425* | Total Capital ($mill) | *21600* |
| | -- | -- | -- | -- | -- | -- | -- | 18952 | 19346 | 20106 | *20975* | *21775* | Net Plant ($mill) | *23900* |
| | -- | -- | -- | -- | -- | -- | -- | 4.0% | 4.8% | 4.5% | *5.5%* | *5.0%* | Return on Total Cap'l | *5.5%* |
| | -- | -- | -- | -- | -- | -- | -- | 5.3% | 7.8% | 7.1% | *9.0%* | *8.5%* | Return on Shr. Equity | *9.0%* |
| | -- | -- | -- | -- | -- | -- | -- | 5.3% | 7.8% | 7.1% | *9.0%* | *8.5%* | Return on Com Equity E | *9.0%* |
| | -- | -- | -- | -- | -- | -- | -- | .6% | 2.4% | 1.8% | *3.5%* | *3.0%* | Retained to Com Eq | *3.5%* |
| | -- | -- | -- | -- | -- | -- | -- | 89% | 69% | 75% | *59%* | *63%* | All Div'ds to Net Prof | *62%* |

**BUSINESS:** Evergy, Inc. was formed through the merger of Great Plains Energy and Westar Energy in June of 2018. Through its subsidiaries (now doing business under the Evergy name), provides electric service to 1.6 million customers in Kansas and Missouri, including the greater Kansas City area. Electric revenue breakdown: residential, 39%; commercial, 33%; industrial, 12%; wholesale, 5%; other, 11%. Generating sources: coal, 54%; nuclear, 17%; purchased, 29%. Fuel costs: 22% of revenues. '20 reported deprec. rate: 3%. Has 5,100 employees. Chairman: Mark A. Ruelle. President & Chief Executive Officer: David A. Campbell. Incorporated: Missouri. Address: 1200 Main Street, Kansas City, Missouri 64105. Telephone: 816-556-2200. Internet: www.evergy.com.

**Our 2021 earnings estimate for Evergy requires an explanation.** First-quarter pretax earnings included $96.5 million of unusually high profits from the company's small energy-marketing subsidiary, which benefited from a surge in power prices in Texas during a cold spell in February. We had anticipated this, but not to such a large extent. Accordingly, we raised our 2021 earnings estimate by $0.20 a share, to $3.60. This is near the upper end of Evergy's targeted range (on a GAAP basis) of $3.43-$3.63 a share. Additionally, its utilities incurred a surge in fuel and purchased-power costs of $340 million. These are passed through to customers, which explains why the top line increased so significantly. Because the first-quarter comparison will be so tough in 2022, we look for a slight earnings decline for the full year, even though Evergy should benefit from higher kilowatt-hour sales as the economy recovers, effective expense control, and investment in its transmission system. The company's capital budget calls for $3.0 billion of spending on transmission from 2021 through 2025.

**The company filed integrated resource plans in Missouri and Kansas.** These include the retirement of 1,200 megawatts of coal-fired generation and the addition of 3,200 mw of renewable capacity. Evergy wants to issue securitized bonds to recover its undepreciated interest in the coal units that will be closed. Kansas enacted a law permitting securitization, and similar legislation awaits the governor's signature in Missouri.

**An agreement with Bluescape, an investor group, was completed in April.** An affiliate of Bluescape paid $113 million for 2.27 million common shares and received warrants for the purchase of 3.95 million shares. The chairman of Bluescape, John Wilder (a former utility chief executive officer), was added to Evergy's board of directors. Evergy and Bluescape have a standstill agreement that runs through the 2022 annual meeting.

**This untimely stock has an average dividend yield, by utility standards.** Total return potential is negative for the next 18 months and unspectacular for the 3- to 5-year period. The recent quotation is within our 2024-2026 Target Price Range.

*Paul E. Debbas, CFA* *June 11, 2021*

**(A)** Diluted EPS. '18 EPS don't sum to full-year total due to change in shares, '19 due to rounding. Next earnings report due early Aug. **(B)** Dividends paid in mid-March, June, September, and December. ■ Dividend reinvestment plan available. **(C)** Incl. intangibles. In '20: $4204.8 mill., $18.54/sh. **(D)** In millions. **(E)** Rate base: Original cost depreciated. Rate allowed on common equity in Missouri in '18: none specified; in Kansas in '18: 9.3%. Earned on average common equity, '20: 7.1%. Regulatory Climate: Average.

| | |
|---|---|
| Company's Financial Strength | B++ |
| Stock's Price Stability | 70 |
| Price Growth Persistence | NMF |
| Earnings Predictability | NMF |

# IDACORP, INC. NYSE-IDA

RECENT PRICE 99.35 | P/E RATIO 20.7 (Trailing: 20.5 Median: 17.0) | RELATIVE P/E RATIO 1.05 | DIV'D YLD 3.0% | VALUE LINE

TIMELINESS 3 Lowered 3/5/21
SAFETY 1 Raised 1/22/21
TECHNICAL 3 Lowered 7/2/21
BETA .85 (1.00 = Market)

**18-Month Target Price Range**

| Low-High | Midpoint (% to Mid) |
|---|---|
| $76-$148 | $112 (15%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 120 | (+20%) | *8%* |
| Low | 100 | (Nil) | *4%* |

**Institutional Decisions**

| | 3Q2020 | 4Q2020 | 1Q2021 |
|---|---|---|---|
| to Buy | 186 | 152 | 183 |
| to Sell | 147 | 183 | 156 |
| Hld's(000) | 38758 | 39313 | 39645 |

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 37.8 | 42.7 | 45.7 | 54.7 | 70.1 | 70.5 | 83.4 | 100.0 | 102.4 | 114.0 | 113.6 | 105.0 | | | | | | |
| Low: | 30.0 | 33.9 | 38.2 | 43.1 | 50.2 | 55.4 | 65.0 | 77.5 | 79.6 | 89.3 | 69.1 | 85.3 | | | | | | |

LEGENDS
0.70 x Dividends p sh divided by Interest Rate
Relative Price Strength
Options: Yes
*Shaded area indicates recession*

Target Price Range 2024 | 2025 | 2026

% TOT. RETURN 6/21

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 15.0 | 63.9 |
| 3 yr. | 14.0 | 53.6 |
| 5 yr. | 36.3 | 108.0 |

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20.15 | 21.23 | 19.51 | 20.47 | 21.92 | 20.97 | 20.55 | 21.55 | 24.81 | 25.51 | 25.23 | 25.04 | 26.76 | 27.19 | 26.70 | 26.77 | *28.15* | *28.75* | Revenues per sh | *31.75* |
| | 3.87 | 4.58 | 4.11 | 4.27 | 5.07 | 5.35 | 5.84 | 5.93 | 6.29 | 6.58 | 6.70 | 6.86 | 7.50 | 7.85 | 8.07 | 8.19 | *8.40* | *8.75* | "Cash Flow" per sh | *10.00* |
| | 1.75 | 2.35 | 1.86 | 2.18 | 2.64 | 2.95 | 3.36 | 3.37 | 3.64 | 3.85 | 3.87 | 3.94 | 4.21 | 4.49 | 4.61 | 4.69 | *4.80* | *5.05* | Earnings per sh A | *5.75* |
| | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.20 | 1.37 | 1.57 | 1.76 | 1.92 | 2.08 | 2.24 | 2.40 | 2.56 | 2.72 | *2.89* | *3.09* | Div'd Decl'd per sh B ■ † | *3.70* |
| | 4.53 | 5.16 | 6.39 | 5.19 | 5.26 | 6.85 | 6.76 | 4.78 | 4.68 | 5.45 | 5.84 | 5.89 | 5.66 | 5.51 | 5.53 | 6.16 | *7.25* | *7.70* | Cap'l Spending per sh | *10.00* |
| | 24.04 | 25.77 | 26.79 | 27.76 | 29.17 | 31.01 | 33.19 | 35.07 | 36.84 | 38.85 | 40.88 | 42.74 | 44.65 | 47.01 | 48.88 | 50.73 | *52.65* | *54.60* | Book Value per sh C | *60.75* |
| | 42.66 | 43.63 | 45.06 | 46.92 | 47.90 | 49.41 | 49.95 | 50.16 | 50.23 | 50.27 | 50.34 | 50.40 | 50.42 | 50.42 | 50.42 | 50.46 | *50.45* | *50.45* | Common Shs Outst'g D | *50.45* |
| | 16.7 | 15.1 | 18.2 | 13.9 | 10.2 | 11.8 | 11.5 | 12.4 | 13.4 | 14.7 | 16.2 | 19.1 | 20.6 | 20.5 | 22.3 | 19.9 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *19.0* |
| | .89 | .82 | .97 | .84 | .68 | .75 | .72 | .79 | .75 | .77 | .82 | 1.00 | 1.04 | 1.11 | 1.19 | 1.02 | | | Relative P/E Ratio | *1.05* |
| | 4.1% | 3.4% | 3.5% | 4.0% | 4.5% | 3.4% | 3.1% | 3.3% | 3.2% | 3.1% | 3.1% | 2.8% | 2.6% | 2.6% | 2.5% | 2.9% | | | Avg Ann'l Div'd Yield | *3.4%* |
| | | | | | | | 1026.8 | 1080.7 | 1246.2 | 1282.5 | 1270.3 | 1262.0 | 1349.5 | 1370.8 | 1346.4 | 1350.7 | *1420* | *1450* | Revenues ($mill) | *1600* |
| | | | | | | | 166.9 | 168.9 | 182.4 | 193.5 | 194.7 | 198.3 | 212.4 | 226.8 | 232.9 | 237.4 | *240* | *255* | Net Profit ($mill) | *290* |
| | | | | | | | - - | 13.4% | 28.3% | 8.0% | 19.0% | 15.5% | 18.6% | 7.1% | 9.5% | 10.8% | *10.5%* | *10.5%* | Income Tax Rate | *10.5%* |
| | | | | | | | 23.3% | 20.3% | 12.3% | 13.6% | 16.3% | 16.3% | 13.9% | 15.2% | 16.2% | 17.3% | *17.0%* | *17.0%* | AFUDC % to Net Profit | *17.0%* |
| | | | | | | | 45.6% | 45.5% | 46.6% | 45.3% | 45.6% | 44.8% | 43.7% | 43.6% | 41.3% | 43.9% | *44.5%* | *44.5%* | Long-Term Debt Ratio | *49.0%* |
| | | | | | | | 54.4% | 54.5% | 53.4% | 54.7% | 54.4% | 55.2% | 56.3% | 56.4% | 58.7% | 56.1% | *55.5%* | *55.5%* | Common Equity Ratio | *51.0%* |
| | | | | | | | 3045.2 | 3225.4 | 3465.9 | 3567.6 | 3783.3 | 3898.5 | 3997.5 | 4205.1 | 4201.3 | 4560.4 | *4805* | *4980* | Total Capital ($mill) | *6000* |
| | | | | | | | 3406.6 | 3536.0 | 3665.0 | 3833.5 | 3992.4 | 4172.0 | 4283.9 | 4395.7 | 4531.5 | 4709.5 | *4895* | *5095* | Net Plant ($mill) | *5925* |
| | | | | | | | 6.8% | 6.5% | 6.4% | 6.6% | 6.2% | 6.1% | 6.3% | 6.4% | 6.5% | 6.1% | *6.0%* | *6.0%* | Return on Total Cap'l | *6.0%* |
| | | | | | | | 10.1% | 9.6% | 9.9% | 9.9% | 9.5% | 9.2% | 9.4% | 9.6% | 9.4% | 9.3% | *9.0%* | *9.0%* | Return on Shr. Equity | *9.5%* |
| | | | | | | | 10.1% | 9.6% | 9.9% | 9.9% | 9.5% | 9.2% | 9.4% | 9.6% | 9.4% | 9.3% | *9.0%* | *9.0%* | Return on Com Equity E | *9.5%* |
| | | | | | | | 6.5% | 5.7% | 5.6% | 5.4% | 4.8% | 4.3% | 4.4% | 4.4% | 4.2% | 3.9% | *3.5%* | *3.5%* | Retained to Com Eq | *3.5%* |
| | | | | | | | 36% | 41% | 43% | 46% | 50% | 53% | 53% | 54% | 56% | 58% | *60%* | *61%* | All Div'ds to Net Prof | *65%* |

**CAPITAL STRUCTURE as of 3/31/21**
**Total Debt** $2000.5 mill. **Due in 5 Yrs** $144.7 mill.
**LT Debt** $2000.5 mill. **LT Interest** $83.4 mill.
(LT interest earned: 3.7x)

**Pension Assets-12/20** $871.6 mill.
**Oblig** $1337.4 mill.

**Pfd Stock** None

**Common Stock** 50,515,478 shs.
**as of 4/23/21**

**MARKET CAP: $5.0 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2018 | 2019 | 2020 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +.1 | -.3 | +2.0 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | 5.64 | 5.32 | 5.38 |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | 3392 | 3242 | 3392 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +2.3 | +2.5 | +2.7 |
| Fixed Charge Cov. (%) | 309 | 307 | 313 |

**ANNUAL RATES** of change (per sh)

| | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | 2.5% | 1.5% | *3.0%* |
| "Cash Flow" | 5.0% | 4.5% | *3.5%* |
| Earnings | 6.0% | 4.0% | *4.0%* |
| Dividends | 8.0% | 8.0% | *6.5%* |
| Book Value | 5.0% | 4.5% | *3.5%* |

**QUARTERLY REVENUES($ mill.)**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 310.1 | 340.0 | 408.8 | 311.9 | 1370.8 |
| 2019 | 350.3 | 316.9 | 386.3 | 292.9 | 1346.4 |
| 2020 | 291.0 | 318.8 | 425.3 | 315.6 | 1350.7 |
| 2021 | 316.1 | *338.9* | *440* | *325* | *1420* |
| 2022 | *320* | *345* | *455* | *330* | *1450* |

**EARNINGS PER SHARE A**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .72 | 1.23 | 2.02 | .52 | 4.49 |
| 2019 | .84 | 1.05 | 1.78 | .93 | 4.61 |
| 2020 | .74 | 1.19 | 2.02 | .74 | 4.69 |
| 2021 | .89 | *1.25* | *1.95* | *.71* | *4.80* |
| 2022 | *.90* | *1.20* | *2.10* | *.85* | *5.05* |

**QUARTERLY DIVIDENDS PAID B ■ †**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .55 | .55 | .55 | .59 | 2.24 |
| 2018 | .59 | .59 | .59 | .63 | 2.40 |
| 2019 | .63 | .63 | .63 | .67 | 2.56 |
| 2020 | .67 | .67 | .67 | .71 | 2.72 |
| 2021 | .71 | .71 | | | |

**BUSINESS:** IDACORP, Inc. is a holding company for Idaho Power Company, a regulated electric utility that serves 583,000 customers throughout a 24,000-square-mile area in southern Idaho and eastern Oregon (population: 1.2 million). Most of the company's revenues are derived from the Idaho portion of its service area. Revenue breakdown: residential, 42%; commercial, 22%; industrial, 14%; irrigation, 12%; other, 10%. Generating sources: hydro, 39%; coal, 21%; gas, 12%; purchased, 28%. Fuel costs: 32% of revenues. '20 reported depreciation rate: 2.9%. Has 1,900 employees. Chairman: Richard J. Dahl. President & CEO: Lisa Grow. Incorporated: Idaho. Address: 1221 W. Idaho St., Boise, Idaho 83702. Telephone: 208-388-2200. Internet: www.idacorpinc.com.

**IDACORP is off to a good start in 2021.** The customer growth rate of its utility subsidiary, Idaho Power, has been strong in recent years thanks in part to a good business climate, including low electric rates. The economy of the utility's service area is strong, and several large customers are expanding. Moody's projection for GDP growth here is 8% for 2021. For the 12-month period ending March 31st, the customer growth rate accelerated to 2.9%, from 2.7% in 2020. This might eventually put some pressure on operating and maintenance expenses, but for now, management still expects these to wind up in a range of $345 million-$355 million in 2021, versus $352 million last year. Although IDACORP had a strong first-quarter showing, management maintained its 2021 earnings target of $4.60-$4.80 a share. Our estimate remains at the top of this range. The company's guidance is typically conservative. IDACORP has a track record of exceeding the midpoint of its initial range, sometimes by a wide margin. We note that the effects of hot and dry weather were a boon for kilowatt-hour sales in the second quarter.

**We look for continued solid profit growth in 2022.** Moody's expects another year of 8% GDP growth in Idaho Power's service territory. There is little reason to think the favorable trend in customer growth will change. Our estimate of $5.05 a share would profit a bottom-line growth rate of 5%.

**We expect a healthy dividend increase at the board meeting in September.** IDACORP's goal is growth of at least 5% and a payout ratio of 60%-70%. The payout ratio is below this range, so we estimate a $0.05-a-share (7.0%) increase in the quarterly disbursement.

**Finances are sound.** The fixed-charge coverage and common-equity ratio are above the utility norms. IDACORP expects no new equity over the five-year period, despite the utility's rising capital budget. No long-term debt is due until 2023.

**IDACORP's strengths are reflected in the stock price.** The dividend yield is low for a utility. The recent quotation is near the low end of our 2024-2026 Target Price Range, so total return potential is only modest over that time frame.

*Paul E. Debbas, CFA* *July 23, 2021*

**(A)** Diluted EPS. Excl. nonrecurring gain (loss): '05, (24¢); '06, 17¢. '19 earnings don't sum due to rounding. Next earnings report due late July. **(B)** Dividends historically paid in late Feb., May, Aug., and Nov. ■ Dividend reinvestment plan available. † Shareholder investment plan available. **(C)** Incl. intangibles. In '20: $1495.5 mill., $26.31/sh. **(D)** In millions. **(E)** Rate base: Net original cost. Rate allowed on common equity in '12: 10% (imputed); earned on avg. com. eq., '20: 9.5%. Regulatory Climate: Above Average.

| | |
|---|---|
| Company's Financial Strength | A+ |
| Stock's Price Stability | 100 |
| Price Growth Persistence | 85 |
| Earnings Predictability | 100 |

# NORTHWESTERN NDQ-NWE

RECENT PRICE **61.42** | P/E RATIO **17.1** (Trailing: 18.6 Median: 17.0) | RELATIVE P/E RATIO **0.86** | DIV'D YLD **4.1%** | **VALUE LINE**

**TIMELINESS** 3 Raised 6/4/21
**SAFETY** 2 Raised 7/27/18
TECHNICAL 2 Raised 7/23/21
**BETA** .95 (1.00 = Market)

**18-Month Target Price Range**

| Low-High | Midpoint (% to Mid) |
|---|---|
| $33-$88 | $61 (0%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 85 | (+40%) | *12%* |
| Low | 65 | (+5%) | *6%* |

**Institutional Decisions**

| | 3Q2020 | 4Q2020 | 1Q2021 |
|---|---|---|---|
| to Buy | 134 | 116 | 114 |
| to Sell | 126 | 135 | 130 |
| Hld's(000) | 47772 | 47664 | 47776 |

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 30.6 | 36.6 | 38.0 | 47.2 | 58.7 | 59.7 | 63.8 | 64.5 | 65.7 | 76.7 | 80.5 | 70.8 | | | | | | |
| Low: | 23.8 | 27.4 | 33.0 | 35.1 | 42.6 | 48.4 | 52.2 | 55.7 | 50.0 | 57.3 | 45.1 | 53.2 | | | | | | |

LEGENDS
0.61 x Dividends p sh divided by Interest Rate
Relative Price Strength
Options: Yes
*Shaded area indicates recession*

Target Price Range 2024 | 2025 | 2026
160 120 100 80 60 50 40 30 20 15

Percent shares traded 30 20 10

**% TOT. RETURN 6/21**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 15.2 | 63.9 |
| 3 yr. | 17.7 | 53.6 |
| 5 yr. | 14.9 | 108.0 |

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 32.57 | 31.49 | 30.79 | 35.09 | 31.72 | 30.66 | 30.80 | 28.76 | 29.80 | 25.68 | 25.21 | 26.01 | 26.45 | 23.81 | 24.93 | 23.70 | *25.25* | *24.30* | Revenues per sh | *26.50* |
| | 4.00 | 3.62 | 3.70 | 4.40 | 4.62 | 4.76 | 5.42 | 5.18 | 5.45 | 5.39 | 5.92 | 6.74 | 6.76 | 6.96 | 7.07 | 6.72 | *7.30* | *7.35* | "Cash Flow" per sh | *8.25* |
| | 1.71 | 1.31 | 1.44 | 1.77 | 2.02 | 2.14 | 2.53 | 2.26 | 2.46 | 2.99 | 2.90 | 3.39 | 3.34 | 3.40 | 3.53 | 3.06 | *3.60* | *3.70* | Earnings per sh [A] | *4.00* |
| | 1.00 | 1.24 | 1.28 | 1.32 | 1.34 | 1.36 | 1.44 | 1.48 | 1.52 | 1.60 | 1.92 | 2.00 | 2.10 | 2.20 | 2.30 | 2.40 | *2.48* | *2.56* | Div'd Decl'd per sh [B] ■ † | *2.80* |
| | 2.26 | 2.81 | 3.00 | 3.47 | 5.26 | 6.30 | 5.20 | 5.89 | 5.95 | 5.76 | 5.89 | 5.96 | 5.60 | 5.64 | 6.26 | 8.02 | *8.75* | *8.50* | Cap'l Spending per sh | *7.25* |
| | 20.60 | 20.65 | 21.12 | 21.25 | 21.86 | 22.64 | 23.68 | 25.09 | 26.60 | 31.50 | 33.22 | 34.68 | 36.44 | 38.60 | 40.42 | 41.10 | *42.45* | *43.90* | Book Value per sh [C] | *47.75* |
| | 35.79 | 35.97 | 38.97 | 35.93 | 36.00 | 36.23 | 36.28 | 37.22 | 38.75 | 46.91 | 48.17 | 48.33 | 49.37 | 50.32 | 50.45 | 50.59 | *51.50* | *53.50* | Common Shs Outst'g [D] | *54.50* |
| | 17.1 | 26.0 | 21.7 | 13.9 | 11.5 | 12.9 | 12.6 | 15.7 | 16.9 | 16.2 | 18.4 | 17.2 | 17.8 | 16.8 | 19.9 | 19.5 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *19.0* |
| | .91 | 1.40 | 1.15 | .84 | .77 | .82 | .79 | 1.00 | .95 | .85 | .93 | .90 | .90 | .91 | 1.06 | 1.00 | | | Relative P/E Ratio | *1.05* |
| | 3.4% | 3.6% | 4.1% | 5.4% | 5.7% | 4.9% | 4.5% | 4.2% | 3.7% | 3.3% | 3.6% | 3.4% | 3.5% | 3.9% | 3.3% | 4.0% | | | Avg Ann'l Div'd Yield | *3.7%* |
| | | | | | | | 1117.3 | 1070.3 | 1154.5 | 1204.9 | 1214.3 | 1257.2 | 1305.7 | 1198.1 | 1257.9 | 1198.7 | *1300* | *1300* | Revenues ($mill) | *1450* |
| | | | | | | | 92.6 | 83.7 | 94.0 | 120.7 | 138.4 | 164.2 | 162.7 | 171.1 | 179.3 | 155.2 | *185* | *195* | Net Profit ($mill) | *225* |
| | | | | | | | 9.8% | 9.6% | 13.2% | -- | 13.7% | -- | 7.6% | -- | 1.6% | -- | *Nil* | *5.0%* | Income Tax Rate | *12.0%* |
| | | | | | | | 3.3% | 9.4% | 8.7% | 8.9% | 9.8% | 4.3% | 5.2% | 3.4% | 4.6% | 6.3% | *6.0%* | *6.0%* | AFUDC % to Net Profit | *4.0%* |
| | | | | | | | 52.2% | 53.8% | 53.5% | 53.4% | 53.1% | 52.0% | 50.2% | 52.2% | 52.5% | 52.8% | *52.5%* | *50.0%* | Long-Term Debt Ratio | *49.0%* |
| | | | | | | | 47.8% | 46.2% | 46.5% | 46.6% | 46.9% | 48.0% | 49.8% | 47.8% | 47.5% | 47.2% | *47.5%* | *50.0%* | Common Equity Ratio | *51.0%* |
| | | | | | | | 1797.1 | 2020.7 | 2215.7 | 3168.0 | 3408.6 | 3493.9 | 3614.5 | 4064.6 | 4289.8 | 4409.1 | *4590* | *4675* | Total Capital ($mill) | *5100* |
| | | | | | | | 2213.3 | 2435.6 | 2690.1 | 3758.0 | 4059.5 | 4214.9 | 4358.3 | 4521.3 | 4700.9 | 4952.9 | *5215* | *5470* | Net Plant ($mill) | *6050* |
| | | | | | | | 7.0% | 5.5% | 5.5% | 4.8% | 5.2% | 5.9% | 5.6% | 5.2% | 5.2% | 4.5% | *5.0%* | *5.0%* | Return on Total Cap'l | *5.5%* |
| | | | | | | | 10.8% | 9.0% | 9.1% | 8.2% | 8.6% | 9.8% | 9.0% | 8.8% | 8.8% | 7.5% | *8.5%* | *8.5%* | Return on Shr. Equity | *8.5%* |
| | | | | | | | 10.8% | 9.0% | 9.1% | 8.2% | 8.6% | 9.8% | 9.0% | 8.8% | 8.8% | 7.5% | *8.5%* | *8.5%* | Return on Com Equity [E] | *8.5%* |
| | | | | | | | 4.7% | 3.2% | 3.5% | 3.8% | 3.0% | 4.1% | 3.4% | 3.2% | 3.1% | 1.7% | *2.5%* | *2.5%* | Retained to Com Eq | *2.5%* |
| | | | | | | | 56% | 65% | 61% | 54% | 65% | 58% | 62% | 64% | 64% | 78% | *69%* | *69%* | All Div'ds to Net Prof | *68%* |

**CAPITAL STRUCTURE as of 3/31/21**
**Total Debt** $2480.9 mill. **Due in 5 Yrs** $782.2 mill.
**LT Debt** $2478.2 mill. **LT Interest** $87.8 mill.
Incl. $14.1 mill. finance leases.
(LT interest earned: 2.8x)

**Pension Assets-12/20** $688.5 mill.
**Oblig** $821.0 mill.

**Pfd Stock** None

**Common Stock** 50,675,207 shs.
**as of 4/16/21**

**MARKET CAP: $3.1 billion (Mid Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2018 | 2019 | 2020 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +2.9 | +4.6 | -4.4 |
| Avg. Indust. Use (MWH) | 34573 | 37808 | 33526 |
| Avg. Indust. Revs. per KWH (¢) | NA | NA | NA |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Winter (Mw) | 2173 | 2237 | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +1.2 | +1.2 | +1.2 |
| Fixed Charge Cov. (%) | 275 | 284 | 237 |

**ANNUAL RATES** of change (per sh)

| | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | -3.0% | -2.0% | *1.5%* |
| "Cash Flow" | 4.0% | 4.5% | *3.0%* |
| Earnings | 5.5% | 3.5% | *3.0%* |
| Dividends | 5.5% | 6.5% | *3.5%* |
| Book Value | 6.0% | 5.5% | *3.0%* |

**QUARTERLY REVENUES ($ mill.)**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 341.5 | 261.8 | 279.9 | 314.9 | 1198.1 |
| 2019 | 384.2 | 270.7 | 274.8 | 328.2 | 1257.9 |
| 2020 | 335.3 | 269.4 | 280.6 | 313.4 | 1198.7 |
| 2021 | 400.8 | *284.2* | *290* | *325* | *1300* |
| 2022 | *370* | *295* | *300* | *335* | *1300* |

**EARNINGS PER SHARE [A]**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 1.18 | .61 | .56 | 1.06 | 3.40 |
| 2019 | 1.44 | .49 | .42 | 1.18 | 3.53 |
| 2020 | 1.00 | .43 | .58 | 1.06 | 3.06 |
| 2021 | 1.24 | *.50* | *.65* | *1.21* | *3.60* |
| 2022 | *1.30* | *.50* | *.65* | *1.25* | *3.70* |

**QUARTERLY DIVIDENDS PAID [B] ■ †**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .525 | .525 | .525 | .525 | 2.10 |
| 2018 | .55 | .55 | .55 | .55 | 2.20 |
| 2019 | .575 | .575 | .575 | .575 | 2.30 |
| 2020 | .60 | .60 | .60 | .60 | 2.40 |
| 2021 | .62 | .62 | | | |

**BUSINESS:** NorthWestern Corporation (doing business as NorthWestern Energy) supplies electricity & gas in the Upper Midwest and Northwest, serving 449,000 electric customers in Montana and South Dakota and 294,000 gas customers in Montana (85% of gross margin), South Dakota (14%), and Nebraska (1%). Electric revenue breakdown: residential, 39%; commercial, 47%; industrial, 4%; other, 10%. Generating sources: hydro, 33%; coal, 22%; wind, 7%; other, 3%; purchased, 35%. Fuel costs: 25% of revenues. '20 reported deprec. rate: 2.8%. Has 1,500 employees. Chairman: Stephen P. Adik. CEO: Robert C. Rowe. President & COO: Brian B. Bird. Inc.: DE. Address: 3010 West 69th Street, Sioux Falls, SD 57108. Tel.: 605-978-2900. Internet: www.northwesternenergy.com.

**After a depressed tally in 2020, NorthWestern's earnings should return to a more-typical level this year.** Management estimates that coronavirus-related effects reduced earnings by $0.09-$0.14 a share last year. Unfavorable weather patterns lowered the bottom line by $0.14 a share. Finally, a disallowance of power costs amounted to $0.15 a share in the fourth quarter. Earnings were much improved in the March period, and we raised our full-year estimate by $0.10 a share, to the top end of NorthWestern's targeted range of $3.40-$3.60.

**We estimate 3% earnings growth in 2022.** We figure there will be few, if any, coronavirus-related drag. However, average shares oustanding almost certainly will be higher due to expected equity issuances (see below). NorthWestern's goal for yearly profit growth is 3%-6%.

**The utility plans to ask the Montana commission for permission to build a gas-fired generating plant.** This would add 175 megawatts of capacity at an expected cost of $250 million. The facility is expected to be on line in late 2023 or early 2024. A decision from the regulators is expected by May of 2022.

**NorthWestern is adding generating capacity in South Dakota, too.** A 60-mw gas-fired unit is under construction at an expected cost of $80 million. Commercial operation is expected by yearend. The utility is planning to add 30 mw-40 mw in a different part of the state in 2023. The expected cost is about $60 million.

**The company is issuing common equity.** This will occur from time to time through a $200 million at-the-market program. The specific amount each year is uncertain, but the issuances are expected to occur over the next three years. NorthWestern's finances are sound, and its credit ratings are investment grade. However, the company has a negative outlook from Moody's due to a decline in the ratio of funds from operations to debt, which is a key metric for the rating agencies.

**The stock's dividend yield is a cut above the utility mean.** Total return potential to 2024-2026 is about average, but the equity lacks appeal for the 18-month span. The recent price is near the low end of our 3- to 5-year Target Price Range.

*Paul E. Debbas, CFA* *July 23, 2021*

**(A)** Diluted EPS. Excl. gain (loss) on disc. ops.: '05, (6¢); '06, 1¢; nonrec. gains: '12, 39¢ net; '15, 27¢; '18, 52¢; '19, 45¢. '18, '20 EPS don't sum due to rounding. Next earnings report due late Oct. **(B)** Div'ds historically paid in late Mar., June, Sept. & Dec. ■ Div'd reinvest. plan avail. **(C)** Incl. def'd charges. In '20: $20.93/sh. **(D)** In mill. **(E)** Rate base: Net orig. cost. Rate allowed on com. eq. in MT in '19 (elec.): 9.65%; in '17 (gas): 9.55%; in SD in '15: none spec.; in NE in '07: 10.4%; earned on avg. com. eq., '20: 7.5%. Reg. Climate: Below Avg.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 90 |
| **Price Growth Persistence** | 60 |
| **Earnings Predictability** | 85 |

# OGE ENERGY CORP. NYSE-OGE

RECENT PRICE 34.50 | P/E RATIO 15.7 (Trailing: 16.4 Median: 17.0) | RELATIVE P/E RATIO 0.74 | DIV'D YLD 4.8% | VALUE LINE

TIMELINESS 5 Lowered 5/28/21
SAFETY 2 Lowered 12/18/15
TECHNICAL 5 Lowered 5/28/21
BETA 1.05 (1.00 = Market)

**18-Month Target Price Range**

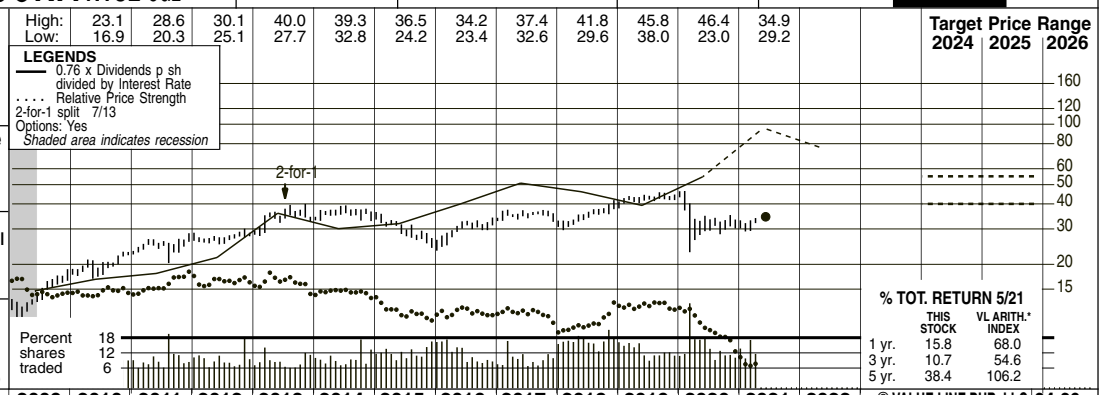
| Low-High | Midpoint (% to Mid) |
|---|---|
| $22-$52 | $37 (5%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 55 | (+60%) | *15%* |
| Low | 40 | (+15%) | *8%* |

**Institutional Decisions**

| | 3Q2020 | 4Q2020 | 1Q2021 |
|---|---|---|---|
| to Buy | 181 | 188 | 191 |
| to Sell | 195 | 193 | 201 |
| Hld's(000) | 126932 | 127332 | 128569 |




| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32.83 | 21.96 | 20.68 | 21.77 | 14.79 | 19.04 | 19.96 | 18.58 | 14.45 | 12.30 | 11.00 | 11.31 | 11.32 | 11.37 | 11.15 | 10.61 | *18.00* | *13.75* | Revenues per sh | *16.75* |
| 1.94 | 2.23 | 2.39 | 2.40 | 2.69 | 3.01 | 3.31 | 3.69 | 3.46 | 3.40 | 3.23 | 3.31 | 3.34 | 3.74 | 4.02 | 4.03 | *4.25* | *4.55* | "Cash Flow" per sh | *5.50* |
| .92 | 1.23 | 1.32 | 1.25 | 1.33 | 1.50 | 1.73 | 1.79 | 1.94 | 1.98 | 1.69 | 1.69 | 1.92 | 2.12 | 2.24 | 2.08 | *2.20* | *2.40* | Earnings per sh [A] | *2.75* |
| .67 | .67 | .68 | .70 | .71 | .73 | .76 | .80 | .85 | .95 | 1.05 | 1.16 | 1.27 | 1.40 | 1.51 | 1.58 | *1.64* | *1.69* | Div'd Decl'd per sh [B] ■ | *1.95* |
| 1.65 | 2.67 | 3.04 | 4.01 | 4.37 | 4.36 | 6.48 | 5.85 | 4.99 | 2.86 | 2.74 | 3.31 | 4.13 | 2.87 | 3.18 | 3.25 | *3.85* | *3.90* | Cap'l Spending per sh | *4.25* |
| 7.59 | 8.79 | 9.16 | 10.14 | 10.52 | 11.73 | 13.06 | 14.00 | 15.30 | 16.27 | 16.66 | 17.24 | 19.28 | 20.06 | 20.69 | 18.15 | *18.65* | *19.30* | Book Value per sh [C] | *22.25* |
| 181.20 | 182.40 | 183.60 | 187.00 | 194.00 | 195.20 | 196.20 | 197.60 | 198.50 | 199.40 | 199.70 | 199.70 | 199.70 | 199.70 | 200.10 | 200.10 | *200.10* | *200.10* | Common Shs Outst'g [D] | *200.10* |
| 14.9 | 13.7 | 13.8 | 12.4 | 10.8 | 13.3 | 14.4 | 15.2 | 17.7 | 18.3 | 17.7 | 17.7 | 18.3 | 16.5 | 19.0 | 16.2 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *17.0* |
| .79 | .74 | .73 | .75 | .72 | .85 | .90 | .97 | .99 | .96 | .89 | .93 | .92 | .89 | 1.01 | .84 | | | Relative P/E Ratio | *.95* |
| 4.9% | 4.0% | 3.8% | 4.5% | 5.0% | 3.7% | 3.1% | 2.9% | 2.5% | 2.6% | 3.5% | 3.9% | 3.6% | 4.0% | 3.5% | 4.7% | | | Avg Ann'l Div'd Yield | *4.0%* |
| 3915.9 | 3671.2 | 2867.7 | 2453.1 | 2196.9 | 2259.2 | 2261.1 | 2270.3 | 2231.6 | 2122.3 | *3600* | *2750* | Revenues ($mill) | *3350* |
| 342.9 | 355.0 | 387.6 | 395.8 | 337.6 | 338.2 | 384.3 | 425.5 | 449.6 | 415.9 | *440* | *480* | Net Profit ($mill) | *560* |
| 30.7% | 26.0% | 24.9% | 30.4% | 29.2% | 30.5% | 32.5% | 14.5% | 7.4% | 13.2% | *16.0%* | *14.0%* | Income Tax Rate | *14.0%* |
| 9.0% | 2.7% | 2.6% | 1.7% | 3.7% | 6.4% | 15.0% | 8.3% | 1.6% | 1.6% | *2.0%* | *1.0%* | AFUDC % to Net Profit | *1.0%* |
| 51.6% | 50.7% | 43.1% | 45.9% | 44.3% | 41.1% | 41.7% | 42.0% | 43.6% | 49.0% | *54.5%* | *48.5%* | Long-Term Debt Ratio | *47.5%* |
| 48.4% | 49.3% | 56.9% | 54.1% | 55.7% | 58.9% | 58.3% | 58.0% | 56.4% | 51.0% | *45.5%* | *51.5%* | Common Equity Ratio | *52.5%* |
| 5300.4 | 5615.8 | 5337.2 | 5999.7 | 5971.6 | 5849.6 | 6600.7 | 6902.0 | 7334.7 | 7126.2 | *8225* | *7505* | Total Capital ($mill) | *8275* |
| 7474.0 | 8344.8 | 6672.8 | 6979.9 | 7322.4 | 7696.2 | 8339.9 | 8643.8 | 9044.6 | 9374.6 | *9745* | *10105* | Net Plant ($mill) | *11175* |
| 7.8% | 7.7% | 8.6% | 7.8% | 6.9% | 7.0% | 7.0% | 7.3% | 7.1% | 6.9% | *6.0%* | *7.5%* | Return on Total Cap'l | *8.0%* |
| 13.4% | 12.8% | 12.8% | 12.2% | 10.2% | 9.8% | 10.0% | 10.6% | 10.9% | 11.5% | *12.0%* | *12.5%* | Return on Shr. Equity | *13.0%* |
| 13.4% | 12.8% | 12.8% | 12.2% | 10.2% | 9.8% | 10.0% | 10.6% | 10.9% | 11.5% | *12.0%* | *12.5%* | Return on Com Equity [E] | *13.0%* |
| 7.7% | 7.2% | 7.3% | 6.5% | 4.0% | 3.3% | 3.5% | 3.8% | 3.6% | 2.8% | *3.0%* | *3.5%* | Retained to Com Eq | *4.0%* |
| 43% | 44% | 43% | 47% | 61% | 67% | 64% | 64% | 67% | 76% | *74%* | *70%* | All Div'ds to Net Prof | *70%* |

**CAPITAL STRUCTURE as of 3/31/21**
**Total Debt** $4773.0 mill. **Due in 5 Yrs** $1278.0 mill.
**LT Debt** $3495.0 mill. **LT Interest** $152.5 mill.
(LT interest earned: 4.1x)

**Leases, Uncapitalized** Annual rentals $6.3 mill.

**Pension Assets-12/20** $570.3 mill.
**Oblig** $654.6 mill.

**Pfd Stock** None

**Common Stock** 200,173,981 shs.

**MARKET CAP: $6.9 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2018 | 2019 | 2020 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +6.8 | +1.1 | -4.9 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | 4.86 | 4.69 | 4.40 |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | 6863 | 6817 | 6437 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +.9 | +1.0 | +1.1 |
| Fixed Charge Cov. (%) | 292 | 335 | 326 |

**ANNUAL RATES** of change (per sh)

| | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | -5.0% | -2.5% | *7.0%* |
| "Cash Flow" | 4.0% | 3.0% | *6.0%* |
| Earnings | 4.5% | 3.0% | *4.0%* |
| Dividends | 7.5% | 9.5% | *4.5%* |
| Book Value | 6.0% | 4.0% | *1.5%* |

**QUARTERLY REVENUES ($ mill.)**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 492.7 | 567.0 | 698.8 | 511.8 | 2270.3 |
| 2019 | 490.0 | 513.7 | 755.4 | 472.5 | 2231.6 |
| 2020 | 431.3 | 503.5 | 702.1 | 485.4 | 2122.3 |
| 2021 | 1630.6 | *600* | *800* | *569.4* | *3600* |
| 2022 | *600* | *675* | *875* | *600* | *2750* |

**EARNINGS PER SHARE [A]**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .27 | .55 | 1.02 | .27 | 2.12 |
| 2019 | .24 | .50 | 1.25 | .26 | 2.24 |
| 2020 | .23 | .51 | 1.04 | .30 | 2.08 |
| 2021 | .26 | *.50* | *1.19* | *.25* | *2.20* |
| 2022 | *.25* | *.55* | *1.30* | *.30* | *2.40* |

**QUARTERLY DIVIDENDS PAID [B] ■**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .3025 | .3025 | .3025 | .3325 | 1.24 |
| 2018 | .3325 | .3325 | .3325 | .365 | 1.36 |
| 2019 | .365 | .365 | .365 | .3875 | 1.48 |
| 2020 | .3875 | .3875 | .3875 | .4025 | 1.57 |
| 2021 | .4025 | .4025 | | | |

**BUSINESS:** OGE Energy Corp. is a holding company for Oklahoma Gas and Electric Company (OG&E), which supplies electricity to 872,000 customers in Oklahoma (84% of electric revenues) and western Arkansas (8%); wholesale is (8%). Owns 25.5% of Enable Midstream Partners. Electric revenue breakdown: residential, 41%; commercial, 23%; industrial, 9%; oilfield, 8%; other, 19%. Generating sources: gas, 38%; coal, 15%; wind, 5%; purchased, 42%. Fuel costs: 30% of revenues. '20 reported depreciation rate (utility): 2.6%. Has 2,400 employees. Chairman, President and Chief Executive Officer: Sean Trauschke. Incorporated: Oklahoma. Address: 321 North Harvey, P.O. Box 321, Oklahoma City, Oklahoma 73101-0321. Telephone: 405-553-3000. Internet: www.oge.com.

**OGE Energy's utility subsidiary is dealing with the aftereffects of a cold spell in the region in February.** This caused Oklahoma Gas and Electric to incur $930 million of excess gas costs. (Because these will be passed through to most customers, the top line soared to an unusually high level in the first quarter.) OG&E had to absorb these costs for customers on a guaranteed flat-bill program. This hurt the bottom line by $0.06 a share. The company was concerned that costs associated with $1 billion of financing would amount to an additional $0.03-$0.04 a share, but OG&E got permission from the regulators in Oklahoma and Arkansas to defer these for future recovery. The utility plans to recover the costs in each state through the issuance of securitized bonds.

**Despite the aforementioned drag on the bottom line, first-quarter earnings easily topped our $0.15-a-share estimate.** The equity income from OGE's stake in Enable Midstream Partners was far greater than we had expected. Thus, we raised our 2021 estimate by $0.10 a share, to $2.20.

**Enable has agreed to be acquired by another natural gas master limited partnership in a deal that should close in 2021.** OGE will wind up with a 3% stake in the acquiring company, and plans to sell this. The poor performance of Enable units last year hurt OGE's stock price, so management wants the company to be a pure-play utility. Our estimates and projections include Enable for now.

**We look for a strong earnings increase in 2022.** OG&E plans to file a general rate case in Oklahoma this year, so the utility should benefit from rate relief for part of 2022. OG&E will get rider (surcharge) recovery of grid enhancement spending in Oklahoma until the general rate increase takes effect. In addition, the utility obtains additional revenues in Arkansas every year through the state's formula rate plan. Through this plan, an increase of $6.7 million took effect on April 1st.

**The stock is untimely, but attractive for income-oriented investors.** The dividend yield is more than one percentage point above the utility average. Total return potential is appealing for the 18-month span and the 3- to 5-year period.

*Paul E. Debbas, CFA* *June 11, 2021*

**(A)** Diluted EPS. Excl. nonrecurring gain (losses): '15, (33¢); '17, $1.18; '19, (8¢); '20, ($2.95); gains on discont. ops.: '05, 25¢; '06, 20¢. '18 & '19 EPS don't sum due to rounding. Next earnings report due early Aug. **(B)** Div'ds historically paid in late Jan., Apr., July, & Oct. ■ Div'd reinvestment plan avail. **(C)** Incl. deferred charges. In '20: $2.08/sh. **(D)** In mill., adj. for split. **(E)** Rate base: Net original cost. Rate allowed on com. eq. in OK in '19: 9.5%; in AR in '18: 9.5%; earned on avg. com. eq., '20: 9.9%. Regulatory Climate: Average.

| | |
|---|---|
| Company's Financial Strength | A |
| Stock's Price Stability | 80 |
| Price Growth Persistence | 25 |
| Earnings Predictability | 90 |

# OTTER TAIL CORP. NDQ-OTTR

RECENT PRICE **47.97** | P/E RATIO **18.5** (Trailing: 19.4 Median: 21.0) | RELATIVE P/E RATIO **0.87** | DIV'D YLD **3.3%** | **VALUE LINE**

**TIMELINESS** 3 Raised 5/14/21
**SAFETY** 2 Raised 6/17/16
TECHNICAL 3 Raised 5/21/21
**BETA** .90 (1.00 = Market)

**18-Month Target Price Range**

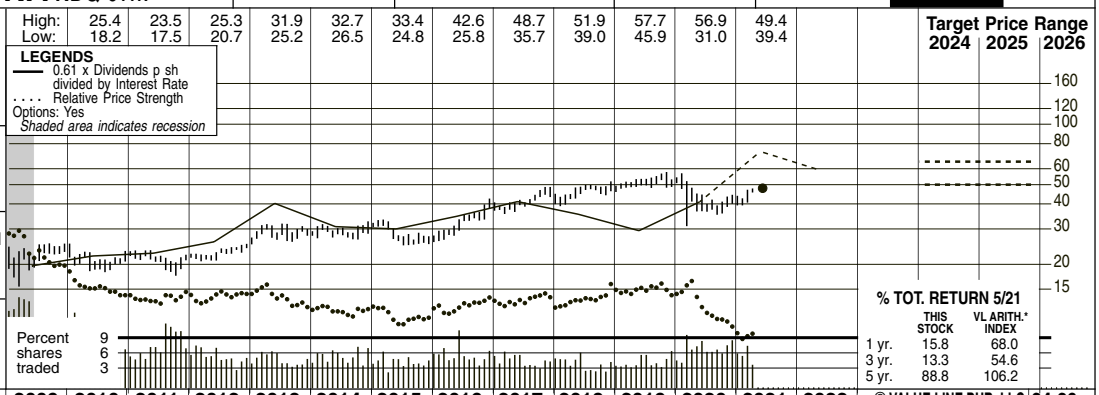
| Low-High | Midpoint (% to Mid) |
|---|---|
| $35-$70 | $53 (10%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 65 | (+35%) | *11%* |
| Low | 50 | (+5%) | *5%* |

**Institutional Decisions**

| | 3Q2020 | 4Q2020 | 1Q2021 |
|---|---|---|---|
| to Buy | 71 | 89 | 75 |
| to Sell | 74 | 63 | 75 |
| Hld's(000) | 19002 | 19252 | 19116 |




| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 35.59 | 37.43 | 41.50 | 37.06 | 29.03 | 31.08 | 29.86 | 23.76 | 24.63 | 21.48 | 20.60 | 20.42 | 21.47 | 23.10 | 22.90 | 21.46 | *23.30* | *24.45* | Revenues per sh | *28.50* |
| 3.35 | 3.39 | 3.55 | 2.81 | 2.76 | 2.60 | 2.36 | 2.71 | 3.02 | 3.09 | 3.14 | 3.44 | 3.70 | 3.96 | 4.11 | 4.29 | *4.65* | *4.95* | "Cash Flow" per sh | *6.00* |
| 1.78 | 1.69 | 1.78 | 1.09 | .71 | .38 | .45 | 1.05 | 1.37 | 1.55 | 1.56 | 1.60 | 1.86 | 2.06 | 2.17 | 2.34 | *2.60* | *2.75* | Earnings per sh A | *3.25* |
| 1.12 | 1.15 | 1.17 | 1.19 | 1.19 | 1.19 | 1.19 | 1.19 | 1.19 | 1.21 | 1.23 | 1.25 | 1.28 | 1.34 | 1.40 | 1.48 | *1.56* | *1.64* | Div'd Decl'd per sh B ■ | *1.95* |
| 2.04 | 2.35 | 5.43 | 7.51 | 4.95 | 2.38 | 2.04 | 3.20 | 4.53 | 4.40 | 4.23 | 4.10 | 3.36 | 2.66 | 5.16 | 8.96 | *3.20* | *5.55* | Cap'l Spending per sh | *2.75* |
| 15.80 | 16.67 | 17.55 | 19.14 | 18.78 | 17.57 | 15.83 | 14.43 | 14.75 | 15.39 | 15.98 | 17.03 | 17.62 | 18.38 | 19.46 | 21.00 | *22.00* | *23.05* | Book Value per sh C | *26.50* |
| 29.40 | 29.52 | 29.85 | 35.38 | 35.81 | 36.00 | 36.10 | 36.17 | 36.27 | 37.22 | 37.86 | 39.35 | 39.56 | 39.66 | 40.16 | 41.47 | *41.60* | *41.70* | Common Shs Outst'g D | *42.00* |
| 15.4 | 17.3 | 19.0 | 30.1 | 31.2 | NMF | NMF | 21.7 | 21.1 | 18.8 | 18.2 | 20.2 | 22.1 | 22.2 | 23.5 | 18.3 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *17.5* |
| .82 | .93 | 1.01 | 1.81 | 2.08 | NMF | NMF | 1.38 | 1.19 | .99 | .92 | 1.06 | 1.11 | 1.20 | 1.25 | .95 | | | Relative P/E Ratio | *.95* |
| 4.1% | 3.9% | 3.5% | 3.6% | 5.4% | 5.7% | 5.6% | 5.2% | 4.1% | 4.1% | 4.3% | 3.9% | 3.1% | 2.9% | 2.7% | 3.5% | | | Avg Ann'l Div'd Yield | *3.5%* |
| 1077.9 | 859.2 | 893.3 | 799.3 | 779.8 | 803.5 | 849.4 | 916.4 | 919.5 | 890.1 | *970* | *1020* | Revenues ($mill) | *1200* |
| 16.4 | 39.0 | 50.2 | 56.9 | 58.6 | 62.0 | 73.9 | 82.3 | 86.8 | 95.9 | *110* | *115* | Net Profit ($mill) | *140* |
| 14.5% | 5.2% | 21.3% | 22.5% | 27.0% | 24.5% | 25.5% | 15.0% | 16.7% | 17.4% | *15.0%* | *15.0%* | Income Tax Rate | *15.0%* |
| 3.8% | 1.7% | 5.6% | 3.9% | 3.5% | 2.2% | 2.3% | 4.1% | 4.9% | 6.4% | *4.0%* | *4.0%* | AFUDC % to Net Profit | *2.0%* |
| 44.6% | 44.0% | 42.1% | 46.5% | 42.4% | 43.0% | 41.3% | 44.7% | 46.9% | 41.8% | *44.5%* | *46.0%* | Long-Term Debt Ratio | *40.0%* |
| 54.0% | 54.4% | 57.9% | 53.5% | 57.6% | 57.0% | 58.7% | 55.3% | 53.1% | 58.2% | *55.5%* | *54.0%* | Common Equity Ratio | *60.0%* |
| 1058.9 | 959.2 | 924.4 | 1071.3 | 1051.0 | 1175.4 | 1187.3 | 1318.9 | 1471.1 | 1495.4 | *1650* | *1785* | Total Capital ($mill) | *1850* |
| 1077.5 | 1049.5 | 1167.0 | 1268.5 | 1387.8 | 1477.2 | 1539.6 | 1581.1 | 1753.8 | 2049.3 | *2095* | *2235* | Net Plant ($mill) | *2325* |
| 3.2% | 5.7% | 6.8% | 6.7% | 6.8% | 6.5% | 7.3% | 7.3% | 7.0% | 7.4% | *7.5%* | *7.5%* | Return on Total Cap'l | *8.5%* |
| 2.8% | 7.3% | 9.4% | 9.9% | 9.7% | 9.3% | 10.6% | 11.3% | 11.1% | 11.0% | *12.0%* | *12.0%* | Return on Shr. Equity E | *12.5%* |
| 2.7% | 7.3% | 9.3% | 9.9% | 9.7% | 9.3% | 10.6% | 11.3% | 11.1% | 11.0% | *12.0%* | *12.0%* | Return on Com Equity | *12.5%* |
| NMF | NMF | 1.2% | 2.2% | 2.0% | 2.1% | 3.3% | 4.0% | 4.0% | 4.1% | *4.5%* | *5.0%* | Retained to Com Eq | *5.0%* |
| NMF | 113% | 87% | 78% | 79% | 78% | 69% | 65% | 64% | 63% | *60%* | *59%* | All Div'ds to Net Prof | *59%* |

**CAPITAL STRUCTURE as of 3/31/21**
**Total Debt** $899.3 mill. **Due in 5 Yrs** $305.0 mill.
**LT Debt** $624.5 mill. **LT Interest** $35.1 mill.
(LT interest earned: 4.7x)

**Leases, Uncapitalized** Annual rentals $5.4 mill.
**Pension Assets-12/20** $360.7 mill.
**Oblig** $428.4 mill.

**Pfd Stock** None

**Common Stock** 41,538,084 shs.
**as of 4/30/21**

**MARKET CAP: $2.0 billion (Mid Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2018 | 2019 | 2020 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +3.4 | -.2 | -3.9 |
| Avg. Indust. Use (MWH) | NA | NA | NA |
| Avg. Indust. Revs. per KWH (¢) | 5.97 | NA | NA |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Winter (Mw) | 912 | NA | NA |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +.2 | +.1 | NA |
| Fixed Charge Cov. (%) | 409 | 407 | 405 |

**ANNUAL RATES** of change (per sh)

| | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | -3.5% | - - | *4.0%* |
| "Cash Flow" | 4.0% | 6.0% | *6.5%* |
| Earnings | 11.5% | 8.0% | *7.0%* |
| Dividends | 1.5% | 3.0% | *5.5%* |
| Book Value | .5% | 5.0% | *5.5%* |

**QUARTERLY REVENUES ($ mill.)**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 241.2 | 226.3 | 227.7 | 221.2 | 916.4 |
| 2019 | 246.0 | 229.2 | 228.6 | 215.7 | 919.5 |
| 2020 | 234.7 | 192.8 | 235.8 | 226.8 | 890.1 |
| 2021 | 261.7 | *233.3* | *245* | *230* | *970* |
| 2022 | *265* | *245* | *260* | *250* | *1020* |

**EARNINGS PER SHARE A**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .66 | .47 | .58 | .35 | 2.06 |
| 2019 | .66 | .39 | .62 | .51 | 2.17 |
| 2020 | .60 | .42 | .87 | .45 | 2.34 |
| 2021 | .73 | *.50* | *.87* | *.50* | *2.60* |
| 2022 | *.75* | *.55* | *.90* | *.55* | *2.75* |

**QUARTERLY DIVIDENDS PAID B ■**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .32 | .32 | .32 | .32 | 1.28 |
| 2018 | .335 | .335 | .335 | .335 | 1.34 |
| 2019 | .35 | .35 | .35 | .35 | 1.40 |
| 2020 | .37 | .37 | .37 | .37 | 1.48 |
| 2021 | .39 | .39 | | | |

**BUSINESS:** Otter Tail Corporation is the parent of Otter Tail Power Company, which supplies electricity to 133,000 customers in Minnesota (53% of retail electric revenues), North Dakota (38%), and South Dakota (9%). Electric rev. breakdown: residential, 32%; commercial & farms, 36%; industrial, 30%; other, 2%. Generating sources: coal, 38%; wind & other, 18%; purchased, 44%. Fuel costs: 12% of revenues. Also has operations in manufacturing and plastics (30% of '20 operating income). '20 deprec. rate: 2.7%. Has 2,100 employees. Chairman: Nathan I. Partain. President & CEO: Charles S. MacFarlane. Inc.: Minnesota. Address: 215 South Cascade St., P.O. Box 496, Fergus Falls, Minnesota 56538-0496. Tel.: 866-410-8780. Internet: www.ottertail.com.

**Otter Tail Corporation raised its 2021 earnings guidance upon reporting first-quarter results.** The Plastics division fared much better than expected after the cold snap in the Gulf Coast disrupted the supply of PVC resin. This led to higher prices for PVC pipe, and thus higher margins for Otter Tail's subsidiary. Management expects high prices to persist over the remainder of the year, and thus raised its share-profit expectation for this segment from $0.52-$0.56 to $0.73-$0.77 (versus $0.67 in 2020). Otter Tail raised its share-net target for the entire company from $2.39-$2.54 to $2.47-$2.62, despite its expectation that utility income will be less than it expected due in part to first-quarter weather patterns. We lifted our estimate by $0.15, to $2.60. Because we now figure that income at the Plastics operation in 2022 will be better than we expected three months ago, we also boosted our share-net estimate for next year by $0.15, to $2.75.

**Otter Tail Power revised its rate case in Minnesota.** Initially, the utility filed for an increase of $14.5 million (6.8%). Due to the expectation of lower depreciation rates and lower pension expense, the company reduced its requested increase to $8.2 million (3.8%). The requested return on equity and common-equity ratio remain 10.2% and 52.5%, respectively. An interim hike of $6.9 million (3.2%) took effect at the start of 2021. An order is expected in late 2021 or early 2022.

**Despite the company's improved prospects, there are some causes for concern.** Conditions in the Plastics division can change quickly, and the possibility exists that resin availability eventually affects the company. The Manufacturing segment is facing rising steel prices and a labor shortage. Finally, a possible elimination of a half percentage point ROE "adder" by the Federal Energy Regulatory Commission would have a slight negative effect on Otter Tail's earning power.

**The stock has performed well of late.** The price is up nearly 16% since our mid-March report and 12% year to date. The dividend yield is about average for a utility. However, total return potential does not stand out for the 18-month or 3- to 5-year periods.

*Paul E. Debbas, CFA* *June 11, 2021*

**(A)** Dil. EPS. Excl. nonrec. gains (loss): '10, (44¢); '11, 26¢; '13, 2¢; gains (losses) from disc. ops.: '05, 33¢; '06, 1¢; '11, ($1.11); '12, ($1.22); '13, 2¢; '14, 2¢; '15, 2¢; '16, 1¢; '17, 1¢. '19 EPS don't sum due to rounding. Next earnings report due early Aug. **(B)** Div'ds histor. pd. in early Mar., Jun., Sept., & Dec. ■ Div'd reinv. plan avail. **(C)** Incl. intang. In '20: $5.21/sh. **(D)** In mill. **(E)** Rate all'd on com. eq. in MN in '17: 9.41%; in ND in '18: 9.77%; in SD in '19: 8.75%; earn. avg. com. eq., '20: 11.6%. Reg. Clim.: MN, ND, Avg.; SD, Above Avg.

| | |
|---|---|
| **Company's Financial Strength** | A |
| **Stock's Price Stability** | 100 |
| **Price Growth Persistence** | 65 |
| **Earnings Predictability** | 95 |

# PINNACLE WEST NYSE-PNW

RECENT PRICE **83.78** | P/E RATIO **16.4** (Trailing: 17.0 Median: 17.0) | RELATIVE P/E RATIO **0.83** | DIV'D YLD **4.1%** | **VALUE LINE**

**TIMELINESS** 3 Lowered 3/5/21
**SAFETY** 1 Raised 5/3/13
TECHNICAL 3 Raised 7/2/21
**BETA** .90 (1.00 = Market)

**18-Month Target Price Range**
**Low-High** **Midpoint (% to Mid)**
$59-$126 $93 (10%)

**2024-26 PROJECTIONS**

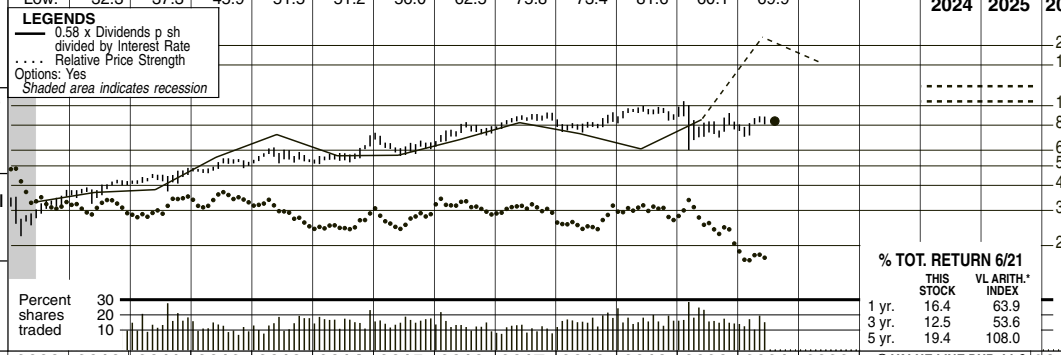
| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 125 | (+50%) | *14%* |
| Low | 105 | (+25%) | *10%* |

**Institutional Decisions**

| | 3Q2020 | 4Q2020 | 1Q2021 |
|---|---|---|---|
| to Buy | 237 | 238 | 230 |
| to Sell | 229 | 222 | 242 |
| Hld's(000) | 93145 | 93836 | 94642 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 42.7 | 48.9 | 54.7 | 61.9 | 71.1 | 73.3 | 82.8 | 92.5 | 92.6 | 99.8 | 105.5 | 88.5 | | | | | | |
| Low: | 32.3 | 37.3 | 45.9 | 51.5 | 51.2 | 56.0 | 62.5 | 75.8 | 73.4 | 81.6 | 60.1 | 69.9 | | | | | | |

LEGENDS
0.58 x Dividends p sh divided by Interest Rate
Relative Price Strength
Options: Yes
*Shaded area indicates recession*




**% TOT. RETURN 6/21**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 16.4 | 63.9 |
| 3 yr. | 12.5 | 53.6 |
| 5 yr. | 19.4 | 108.0 |

| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.16 | 34.03 | 35.07 | 33.37 | 32.50 | 30.01 | 29.67 | 30.09 | 31.35 | 31.58 | 31.50 | 31.42 | 31.90 | 32.93 | 30.87 | 31.81 | *31.85* | *31.80* | Revenues per sh | *35.00* |
| 5.76 | 9.70 | 9.29 | 8.13 | 8.08 | 6.85 | 7.52 | 7.92 | 8.15 | 8.09 | 9.09 | 9.39 | 9.79 | 11.41 | 11.13 | 10.86 | *11.50* | *11.90* | "Cash Flow" per sh | *14.50* |
| 2.24 | 3.17 | 2.96 | 2.12 | 2.26 | 3.08 | 2.99 | 3.50 | 3.66 | 3.58 | 3.92 | 3.95 | 4.43 | 4.54 | 4.77 | 4.87 | *5.10* | *5.45* | Earnings per sh A | *6.50* |
| 1.93 | 2.03 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.67 | 2.23 | 2.33 | 2.44 | 2.56 | 2.70 | 2.87 | 3.04 | 3.23 | *3.42* | *3.63* | Div'd Decl'd per sh B ■ | *4.25* |
| 6.39 | 7.59 | 9.37 | 9.46 | 7.64 | 7.03 | 8.26 | 8.24 | 9.36 | 8.38 | 9.84 | 11.64 | 12.80 | 10.73 | 10.76 | 11.93 | *13.90* | *13.30* | Cap'l Spending per sh | *12.00* |
| 34.57 | 34.48 | 35.15 | 34.16 | 32.69 | 33.86 | 34.98 | 36.20 | 38.07 | 39.50 | 41.30 | 43.15 | 44.80 | 46.59 | 48.30 | 49.96 | *51.55* | *54.35* | Book Value per sh C | *61.50* |
| 99.08 | 99.96 | 100.49 | 100.89 | 101.43 | 108.77 | 109.25 | 109.74 | 110.18 | 110.57 | 110.98 | 111.34 | 111.75 | 112.10 | 112.44 | 112.76 | *113.00* | *118.00* | Common Shs Outst'g D | *120.00* |
| 19.2 | 13.7 | 14.9 | 16.1 | 13.7 | 12.6 | 14.6 | 14.3 | 15.3 | 15.9 | 16.0 | 18.7 | 19.3 | 17.8 | 19.4 | 16.7 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *17.5* |
| 1.02 | .74 | .79 | .97 | .91 | .80 | .92 | .91 | .86 | .84 | .81 | .98 | .97 | .96 | 1.03 | .86 | | | Relative P/E Ratio | *.95* |
| 4.5% | 4.7% | 4.8% | 6.2% | 6.8% | 5.4% | 4.8% | 5.3% | 4.0% | 4.1% | 3.9% | 3.5% | 3.2% | 3.5% | 3.3% | 4.0% | | | Avg Ann'l Div'd Yield | *3.7%* |
| 3241.4 | 3301.8 | 3454.6 | 3491.6 | 3495.4 | 3498.7 | 3565.3 | 3691.2 | 3471.2 | 3587.0 | *3600* | *3750* | Revenues ($mill) | *4250* |
| 328.2 | 387.4 | 406.1 | 397.6 | 437.3 | 442.0 | 497.8 | 511.0 | 538.3 | 550.6 | *580* | *630* | Net Profit ($mill) | *775* |
| 34.0% | 36.2% | 34.4% | 34.2% | 34.3% | 33.9% | 32.5% | 20.2% | 20.2% | 12.1% | *12.0%* | *12.0%* | Income Tax Rate | *12.0%* |
| 12.8% | 9.7% | 10.0% | 11.6% | 11.8% | 14.1% | 13.9% | 15.2% | 9.3% | 9.5% | *12.0%* | *11.0%* | AFUDC % to Net Profit | *6.0%* |
| 44.1% | 44.6% | 40.0% | 41.0% | 43.0% | 45.6% | 48.9% | 47.0% | 47.1% | 52.8% | *55.0%* | *54.5%* | Long-Term Debt Ratio | *56.0%* |
| 55.9% | 55.4% | 60.0% | 59.0% | 57.0% | 54.4% | 51.1% | 53.0% | 52.9% | 47.2% | *45.0%* | *45.5%* | Common Equity Ratio | *44.0%* |
| 6840.9 | 7171.9 | 6990.9 | 7398.7 | 8046.3 | 8825.4 | 9796.4 | 9861.1 | 10263 | 11948 | *12975* | *14075* | Total Capital ($mill) | *16750* |
| 9962.3 | 10396 | 10889 | 11194 | 11809 | 12714 | 13445 | 14030 | 14523 | 15159 | *16000* | *16800* | Net Plant ($mill) | *18500* |
| 6.4% | 6.8% | 7.1% | 6.4% | 6.4% | 6.0% | 6.1% | 6.2% | 6.3% | 5.5% | *5.5%* | *5.5%* | Return on Total Cap'l | *5.5%* |
| 8.6% | 9.8% | 9.7% | 9.1% | 9.5% | 9.2% | 9.9% | 9.8% | 9.9% | 9.8% | *10.0%* | *10.0%* | Return on Shr. Equity | *10.5%* |
| 8.6% | 9.8% | 9.7% | 9.1% | 9.5% | 9.2% | 9.9% | 9.8% | 9.9% | 9.8% | *10.0%* | *10.0%* | Return on Com Equity E | *10.5%* |
| 2.8% | 4.1% | 4.1% | 3.5% | 3.9% | 3.5% | 4.2% | 3.9% | 3.8% | 3.5% | *3.5%* | *3.5%* | Retained to Com Eq | *3.5%* |
| 68% | 58% | 58% | 62% | 59% | 62% | 58% | 60% | 61% | 64% | *67%* | *66%* | All Div'ds to Net Prof | *65%* |

**CAPITAL STRUCTURE as of 3/31/21**
**Total Debt** $6679.8 mill. **Due in 5 Yrs** $1618.8 mill.
**LT Debt** $6465.0 mill. **LT Interest** $232.7 mill.
Incl. $13.4 mill. Palo Verde sale leaseback lessor notes.
(LT interest earned: 3.9x)
**Leases, Uncapitalized** Annual rentals $14.5 mill.
**Pension Assets-12/20** $3886.5 mill.
**Oblig** $3902.9 mill.
**Pfd Stock** None

**Common Stock** 112,750,962 shs.
**as of 4/28/21**
**MARKET CAP: $9.5 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2018 | 2019 | 2020 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -.3 | -.4 | +5.4 |
| Avg. Indust. Use (MWH) | 662 | 714 | 583 |
| Avg. Indust. Revs. per KWH (¢) | 8.40 | 7.88 | 7.49 |
| Capacity at Peak (Mw) | 8643 | 8241 | 9094 |
| Peak Load, Summer (Mw) | 7320 | 7115 | 7660 |
| Annual Load Factor (%) | 47.0 | 47.1 | 45.5 |
| % Change Customers (yr-end) | +2.0 | +2.0 | +2.1 |
| Fixed Charge Cov. (%) | 318 | 286 | 318 |

**ANNUAL RATES** of change (per sh)

| | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | -- | -- | *1.5%* |
| "Cash Flow" | 4.0% | 5.5% | *4.0%* |
| Earnings | 6.5% | 5.0% | *5.0%* |
| Dividends | 4.0% | 5.5% | *5.5%* |
| Book Value | 3.5% | 4.0% | *4.0%* |

**QUARTERLY REVENUES ($ mill.)**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 692.7 | 974.1 | 1268.0 | 756.4 | 3691.2 |
| 2019 | 740.5 | 869.5 | 1190.8 | 670.4 | 3471.2 |
| 2020 | 661.9 | 929.6 | 1254.5 | 741.0 | 3587.0 |
| 2021 | 696.5 | *903.5* | *1250* | *750* | *3600* |
| 2022 | *725* | *950* | *1300* | *775* | *3750* |

**EARNINGS PER SHARE A**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .03 | 1.48 | 2.80 | .23 | 4.54 |
| 2019 | .16 | 1.28 | 2.77 | .57 | 4.77 |
| 2020 | .27 | 1.71 | 3.07 | d.17 | 4.87 |
| 2021 | .32 | *1.50* | *2.93* | *.35* | *5.10* |
| 2022 | *.30* | *1.65* | *3.15* | *.35* | *5.45* |

**QUARTERLY DIVIDENDS PAID B ■**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .655 | .655 | .655 | .695 | 2.66 |
| 2018 | .695 | .695 | .695 | .737 | 2.82 |
| 2019 | .7375 | .7375 | .7375 | .7825 | 3.00 |
| 2020 | .7825 | .7825 | .7825 | .83 | 3.18 |
| 2021 | .83 | .83 | | | |

**BUSINESS:** Pinnacle West Capital Corporation is a holding company for Arizona Public Service Company (APS), which supplies electricity to 1.3 million customers in most of Arizona, except about half of the Phoenix metro area, the Tucson metro area, and Mohave County in northwestern Arizona. Discontinued SunCor real estate subsidiary in '10. Electric revenue breakdown: residential, 51%; commercial, 38%; industrial, 5%; other, 6%. Generating sources: gas & other, 33%; nuclear, 27%; coal, 19%; purchased, 21%. Fuel costs: 28% of revenues. '20 reported deprec. rate: 2.8%. Has 6,000 employees. Chairman, President & CEO: Jeffrey B. Guldner. Inc.: AZ. Address: 400 North Fifth St., P.O. Box 53999, Phoenix, AZ 85072-3999. Tel.: 602-250-1000. Internet: www.pinnaclewest.com.

**A decision on the rate case of Pinnacle West's utility subsidiary is possible this quarter.** The proceedings have been delayed since Arizona Public Service filed its application in October of 2019. The utility is requesting an increase of $169 million (5.1%), based on a 10% return on equity (the same as is currently allowed) and a 54.7% common-equity ratio (versus 55.8% currently). The staff of the Arizona Corporation Commission (ACC) is recommending a hike of $59.8 million (1.8%), based on a 9.4% ROE and a 54.7% common-equity ratio. The state's Residential Utility Consumer Office is proposing a *decrease* of $50.1 million (1.5%), based on an 8.72% ROE and a 54.7% common-equity ratio. An administrative law judge will make a recommendation, then the ACC will issue its order.

**Much will depend on the outcome of this rate case.** Pinnacle West hasn't provided earnings guidance because the case hasn't been concluded. The company's financing plans (both debt and equity) and the timing of APS next rate application will also depend on what the ACC does.

**We have raised our 2021 and 2022 earnings estimates by $0.05 a share each year.** First-quarter profits were better than we expected. The fourth-quarter comparison will be easy because a year ago the company booked a charge for the refund of previously collected revenues. We note that our 2021 estimate might well prove optimistic if new tariffs don't take effect until the seasonally strong third quarter is over. The utility is benefiting from solid economic growth in its service territory. Some customers are adding facilities that will begin operating as early as in 2022. Arizona has also become attractive for data centers.

**Finances are in good shape.** The fixed-charge coverage and common-equity ratio are superior to those of most utilities. Pinnacle West has a Financial Strength rating of A+, our second highest.

**This top-quality equity has an attractive dividend yield.** This is nearly one percentage point above the utility average. Total return potential to 2024-2026 is of note, especially for conservative investors. This issue doesn't stand out for the next 18 months, however.

*Paul E. Debbas, CFA* *July 23, 2021*

**(A)** Diluted EPS. Excl. nonrec. gain (loss): '09, ($1.45); '17, 8¢; gains (losses) from discont. ops.: '05, (36¢); '06, 10¢; '08, 28¢; '09, (13¢); '10, 18¢; '11, 10¢; '12, (5¢). '19, '20 EPS don't sum due to rounding. Next earnings report due early Aug. **(B)** Div'ds historically paid in early Mar., June, Sept., & Dec. There were 5 declarations in '12. ■ Div'd reinvestment plan avail. **(C)** Incl. deferred charges. In '20: $19.31/sh. **(D)** In mill. **(E)** Rate base: Fair value. Rate allowed on com. eq. in '17: 10.0%; earned on avg. com. eq., '20: 10.0%. Regul. Climate: Avg.

| | |
|---|---|
| **Company's Financial Strength** | A+ |
| **Stock's Price Stability** | 90 |
| **Price Growth Persistence** | 60 |
| **Earnings Predictability** | 100 |

# PORTLAND GENERAL NYSE-POR

RECENT PRICE **46.30** | P/E RATIO **17.5** (Trailing: 24.6 Median: 18.0) | RELATIVE P/E RATIO **0.88** | DIV'D YLD **3.7%** | **VALUE LINE**

**TIMELINESS** 3 Raised 6/18/21
**SAFETY** 3 Lowered 9/4/20
TECHNICAL 3 Lowered 6/25/21
**BETA** .90 (1.00 = Market)

**18-Month Target Price Range**

| Low-High | Midpoint (% to Mid) |
|---|---|
| $24-$63 | $44 (-5%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 70 | (+50%) | *14%* |
| Low | 45 | (-5%) | *4%* |

**Institutional Decisions**

| | 3Q2020 | 4Q2020 | 1Q2021 |
|---|---|---|---|
| to Buy | 147 | 165 | 165 |
| to Sell | 180 | 140 | 149 |
| Hld's(000) | 81534 | 82680 | 82978 |

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High: | 22.7 | 26.0 | 28.1 | 33.3 | 40.3 | 41.0 | 45.2 | 50.1 | 50.4 | 58.4 | 63.1 | 51.6 | | | | | | |
| Low: | 17.5 | 21.3 | 24.3 | 27.4 | 29.0 | 33.0 | 35.3 | 42.4 | 39.0 | 44.0 | 32.0 | 40.8 | | | | | | |

**LEGENDS**
0.63 x Dividends p sh divided by Interest Rate
Relative Price Strength
Options: Yes
*Shaded area indicates recession*

**Target Price Range** 2024 | 2025 | 2026
128 96 80 64 48 40 32 24 16 12

**% TOT. RETURN 6/21**

| | THIS STOCK | VL ARITH.* INDEX |
|---|---|---|
| 1 yr. | 14.6 | 63.9 |
| 3 yr. | 19.2 | 53.6 |
| 5 yr. | 22.8 | 108.0 |

Percent shares traded 21 14 7

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 23.14 | 24.32 | 27.87 | 27.89 | 23.99 | 23.67 | 24.06 | 23.89 | 23.18 | 24.29 | 21.38 | 21.62 | 22.54 | 22.30 | 23.75 | 23.96 | *24.80* | *25.90* | Revenues per sh | *28.50* |
| | 4.75 | 4.64 | 5.21 | 4.71 | 4.07 | 4.82 | 4.96 | 5.15 | 4.93 | 6.08 | 5.37 | 5.78 | 6.16 | 6.65 | 6.97 | 6.80 | *7.35* | *7.70* | "Cash Flow" per sh | *9.00* |
| | 1.02 | 1.14 | 2.33 | 1.39 | 1.31 | 1.66 | 1.95 | 1.87 | 1.77 | 2.18 | 2.04 | 2.16 | 2.29 | 2.37 | 2.39 | 1.72 | *2.65* | *2.80* | Earnings per sh A | *3.50* |
| | - - | .68 | .93 | .97 | 1.01 | 1.04 | 1.06 | 1.08 | 1.10 | 1.12 | 1.18 | 1.26 | 1.34 | 1.43 | 1.52 | 1.59 | *1.70* | *1.80* | Div'd Decl'd per sh B ■ † | *2.10* |
| | 4.08 | 5.94 | 7.28 | 6.12 | 9.25 | 5.97 | 3.98 | 4.01 | 8.40 | 12.87 | 6.73 | 6.57 | 5.77 | 6.67 | 6.78 | 8.76 | *8.05* | *6.30* | Cap'l Spending per sh | *6.25* |
| | 19.15 | 19.58 | 21.05 | 21.64 | 20.50 | 21.14 | 22.07 | 22.87 | 23.30 | 24.43 | 25.43 | 26.35 | 27.11 | 28.07 | 28.99 | 29.18 | *30.10* | *31.05* | Book Value per sh C | *34.75* |
| | 62.50 | 62.50 | 62.53 | 62.58 | 75.21 | 75.32 | 75.36 | 75.56 | 78.09 | 78.23 | 88.79 | 88.95 | 89.11 | 89.27 | 89.39 | 89.54 | *89.65* | *89.80* | Common Shs Outst'g D | *90.00* |
| | - - | 23.4 | 11.9 | 16.3 | 14.4 | 12.0 | 12.4 | 14.0 | 16.9 | 15.3 | 17.7 | 19.1 | 20.0 | 18.4 | 22.3 | 26.6 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *16.0* |
| | - - | 1.26 | .63 | .98 | .96 | .76 | .78 | .89 | .95 | .81 | .89 | 1.00 | 1.01 | .99 | 1.19 | 1.36 | | | Relative P/E Ratio | *.90* |
| | - - | 2.5% | 3.3% | 4.3% | 5.4% | 5.2% | 4.4% | 4.1% | 3.7% | 3.3% | 3.3% | 3.1% | 2.9% | 3.3% | 2.8% | 3.5% | | | Avg Ann'l Div'd Yield | *3.7%* |
| | | | | | | | 1813.0 | 1805.0 | 1810.0 | 1900.0 | 1898.0 | 1923.0 | 2009.0 | 1991.0 | 2123.0 | 2145.0 | *2225* | *2325* | Revenues ($mill) | *2575* |
| | | | | | | | 147.0 | 141.0 | 137.0 | 175.0 | 172.0 | 193.0 | 204.0 | 212.0 | 214.0 | 155.0 | *240* | *255* | Net Profit ($mill) | *315* |
| | | | | | | | 28.3% | 31.4% | 23.2% | 26.0% | 20.7% | 20.6% | 25.3% | 7.4% | 11.2% | - - | *12.5%* | *12.5%* | Income Tax Rate | *12.5%* |
| | | | | | | | 5.4% | 7.1% | 14.6% | 33.7% | 19.8% | 16.6% | 8.8% | 8.0% | 7.0% | 15.5% | *8.0%* | *6.0%* | AFUDC % to Net Profit | *5.0%* |
| | | | | | | | 49.6% | 47.1% | 51.3% | 52.7% | 47.8% | 48.4% | 50.1% | 46.5% | 51.3% | 53.6% | *55.5%* | *55.5%* | Long-Term Debt Ratio | *54.0%* |
| | | | | | | | 50.4% | 52.9% | 48.7% | 47.3% | 52.2% | 51.6% | 49.9% | 53.5% | 48.7% | 46.4% | *44.5%* | *44.5%* | Common Equity Ratio | *46.0%* |
| | | | | | | | 3298.0 | 3264.0 | 3735.0 | 4037.0 | 4329.0 | 4544.0 | 4842.0 | 4684.0 | 5323.0 | 5628.0 | *6065* | *6255* | Total Capital ($mill) | *6800* |
| | | | | | | | 4285.0 | 4392.0 | 4880.0 | 5679.0 | 6012.0 | 6434.0 | 6741.0 | 6887.0 | 7161.0 | 7539.0 | *7840* | *7965* | Net Plant ($mill) | *8225* |
| | | | | | | | 6.2% | 5.9% | 5.1% | 5.8% | 5.4% | 5.6% | 5.5% | 5.8% | 5.1% | 4.0% | *5.0%* | *5.0%* | Return on Total Cap'l | *5.5%* |
| | | | | | | | 8.8% | 8.2% | 7.5% | 9.2% | 7.6% | 8.2% | 8.4% | 8.5% | 8.3% | 5.9% | *9.0%* | *9.0%* | Return on Shr. Equity | *10.0%* |
| | | | | | | | 8.8% | 8.2% | 7.5% | 9.2% | 7.6% | 8.2% | 8.4% | 8.5% | 8.3% | 5.9% | *9.0%* | *9.0%* | Return on Com Equity E | *10.0%* |
| | | | | | | | 4.1% | 3.5% | 2.9% | 4.6% | 3.3% | 3.5% | 3.6% | 3.5% | 3.1% | .6% | *3.0%* | *3.5%* | Retained to Com Eq | *4.0%* |
| | | | | | | | 54% | 57% | 61% | 50% | 56% | 57% | 58% | 59% | 63% | 90% | *64%* | *64%* | All Div'ds to Net Prof | *60%* |

**CAPITAL STRUCTURE as of 3/31/21**
**Total Debt** $3250 mill. **Due in 5 Yrs** $373 mill.
**LT Debt** $3014 mill. **LT Interest** $124 mill.
Incl. $128 mill. finance leases.
(LT interest earned: 2.0x)
**Leases, Uncapitalized** Annual rentals $8 mill.
**Pension Assets-12/20** $753 mill.
**Oblig** $1010 mill.
**Pfd Stock** None

**Common Stock** 89,605,758 shs.
**as of 4/26/21**

**MARKET CAP: $4.1 billion (Mid Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2018 | 2019 | 2020 |
|---|---|---|---|
| % Change Retail Sales (KWH) | -2.5 | +1.2 | +.4 |
| Avg. Indust. Use (MWH) | 16207 | 17827 | 18472 |
| Avg. Indust. Revs. per KWH (¢) | 4.79 | 4.75 | 4.99 |
| Capacity at Peak (Mw) | 4859 | NA | NA |
| Peak Load, Summer (Mw) | 3816 | 3765 | 3771 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +1.1 | +1.1 | +1.5 |
| Fixed Charge Cov. (%) | 266 | 265 | 187 |

**ANNUAL RATES** of change (per sh)

| | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | -1.0% | .5% | *3.0%* |
| "Cash Flow" | 4.0% | 4.5% | *5.0%* |
| Earnings | 4.0% | 1.5% | *8.5%* |
| Dividends | 4.0% | 6.0% | *5.5%* |
| Book Value | 3.0% | 3.5% | *3.0%* |

**QUARTERLY REVENUES ($ mill.)**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 493 | 449 | 525 | 524 | 1991 |
| 2019 | 573 | 460 | 542 | 548 | 2123 |
| 2020 | 573 | 469 | 547 | 556 | 2145 |
| 2021 | 609 | *475* | *566* | *575* | *2225* |
| 2022 | *625* | *495* | *600* | *605* | *2325* |

**EARNINGS PER SHARE A**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .72 | .51 | .59 | .55 | 2.37 |
| 2019 | .82 | .28 | .61 | .68 | 2.39 |
| 2020 | .91 | .43 | d.19 | .57 | 1.72 |
| 2021 | 1.07 | *.45* | *.60* | *.53* | *2.65* |
| 2022 | *.95* | *.48* | *.65* | *.72* | *2.80* |

**QUARTERLY DIVIDENDS PAID B ■ †**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .32 | .32 | .34 | .34 | 1.32 |
| 2018 | .34 | .34 | .3625 | .3625 | 1.41 |
| 2019 | .3625 | .3625 | .385 | .385 | 1.50 |
| 2020 | .385 | .385 | .385 | .4075 | 1.56 |
| 2021 | .4075 | .4075 | .43 | | |

**BUSINESS:** Portland General Electric Company (PGE) provides electricity to 908,000 customers in 51 cities in a 4,000-square-mile area of Oregon, including Portland and Salem. The company is in the process of decommissioning the Trojan nuclear plant, which it closed in 1993. Electric revenue breakdown: residential, 49%; commercial, 29%; industrial, 10%; other, 12%. Generating sources: gas, 33%; coal, 13%; wind, 9%; hydro, 5%; purchased, 40%. Fuel costs: 33% of revenues. '20 reported depreciation rate: 3.5%. Has 2,900 full-time employees. Chairman: Jack E. Davis. President and Chief Executive Officer: Maria M. Pope. Incorporated: Oregon. Address: 121 S.W. Salmon Street, Portland, Oregon 97204. Telephone: 503-464-8000. Internet: www.portlandgeneral.com.

**Portland General Electric has filed a general rate case.** The utility is seeking an increase of $99 million, based on a return on equity of 9.5% and a common-equity ratio of 50%. PGE is seeking to place its integrated operations center, scheduled for completion in the fourth quarter of 2021 at a cost of $200 million, in the rate base, effective on May 1st.

**Earnings will likely return to normal in 2021.** The bottom line fell into the red in the third quarter due to a trading loss that amounted to $1.03 a share. We assume no such loss this year. Another positive factor is a rise in kilowatt-hour sales. On the other hand, some tax credits that led to a zero tax rate in 2020 are not expected to recur this year. Also, last year was exceptionally good for wind production, which made power costs lower than normal. Putting it all together, we are sticking with our share-earnings estimate of $2.65, which is within PGE's targeted range of $2.55-$2.70.

**We expect modest profit growth in 2022.** A partial year of rate relief will help. Also, volume increases are likely as the economy continues to recover.

**The utility has deferred some expenses for future recovery.** In February, PGE's service area was hit by a severe winter storm. The utility incurred capital and operating costs. As of March 31st, $45 million of expenses were deferred, with more to come. The company will ask the Oregon commission for permission to recover these costs. Separately, PGE has deferred $22 million of wildfire-related expenses and $10 million of coronavirus-related costs (mostly bad-debt expense). When these will be recovered is to be determined.

**The board of directors raised the dividend, effective with the July payment.** The hike was $0.09 a share (5.5%) annually. PGE's goals are a payout ratio of 60%-70% and an annual growth rate of 5%-7%.

**This equity has a dividend yield that is about average for a utility.** The stock price has risen more than 40% from its 52-week low in September, when investor concern about the aforementioned trading loss weighed on the quotation. Total return potential to 2024-2026 is about average.

*Paul E. Debbas, CFA* *July 23, 2021*

**(A)** Diluted EPS. Excl. nonrecurring losses: '13, 42¢; '17, 19¢. Next earnings report due late July. **(B)** Div'ds paid mid-Jan., Apr., July, and Oct. ■ Div'd reinvestment plan avail. † Shareholder investment plan avail. **(C)** Incl. deferred charges. In '20: $569 mill., $6.35/sh. **(D)** In mill. **(E)** Rate base: Net orig. cost. Rate allowed on com. eq. in '19: 9.5%; earned on avg. com. eq., '20: 6.0%. Regulatory Climate: Average. **(F)** '05 per-share data are pro forma, based on shs. outstanding when stock began trading in '06.

| | |
|---|---|
| **Company's Financial Strength** | B++ |
| **Stock's Price Stability** | 90 |
| **Price Growth Persistence** | 65 |
| **Earnings Predictability** | 90 |

# XCEL ENERGY NDQ-XEL

RECENT PRICE 67.84 | P/E RATIO 23.0 (Trailing: 23.5 Median: 17.0) | RELATIVE P/E RATIO 1.16 | DIV'D YLD 2.8% | VALUE LINE

TIMELINESS 3 Lowered 3/19/21
SAFETY 1 Raised 5/1/15
TECHNICAL 3 Lowered 7/23/21
BETA .80 (1.00 = Market)

**18-Month Target Price Range**

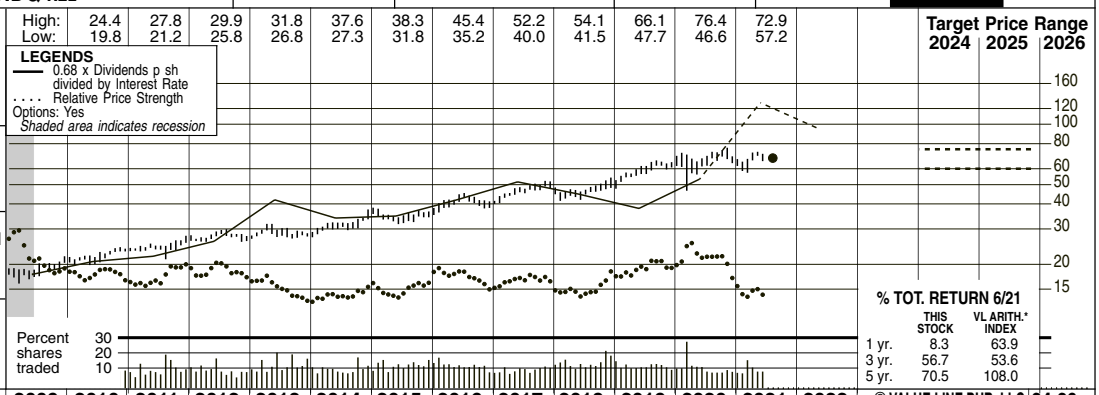
| Low-High | Midpoint (% to Mid) |
|---|---|
| $53-$110 | $82 (20%) |

**2024-26 PROJECTIONS**

| | Price | Gain | Ann'l Total Return |
|---|---|---|---|
| High | 75 | (+10%) | *5%* |
| Low | 60 | (-10%) | *Nil* |

**Institutional Decisions**

| | 3Q2020 | 4Q2020 | 1Q2021 |
|---|---|---|---|
| to Buy | 356 | 411 | 348 |
| to Sell | 362 | 350 | 396 |
| Hld's(000) | 407854 | 405434 | 405318 |




| 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | © VALUE LINE PUB. LLC | 24-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.86 | 24.16 | 23.40 | 24.69 | 21.08 | 21.38 | 21.90 | 20.76 | 21.92 | 23.11 | 21.72 | 21.90 | 22.46 | 22.44 | 21.98 | 21.45 | *23.15* | *23.00* | Revenues per sh | *25.25* |
| 3.28 | 3.61 | 3.45 | 3.50 | 3.48 | 3.51 | 3.79 | 4.00 | 4.10 | 4.28 | 4.56 | 5.04 | 5.47 | 5.92 | 6.25 | 6.61 | *7.10* | *7.55* | "Cash Flow" per sh | *9.00* |
| 1.20 | 1.35 | 1.35 | 1.46 | 1.49 | 1.56 | 1.72 | 1.85 | 1.91 | 2.03 | 2.10 | 2.21 | 2.30 | 2.47 | 2.64 | 2.79 | *2.95* | *3.10* | Earnings per sh A | *3.75* |
| .85 | .88 | .91 | .94 | .97 | 1.00 | 1.03 | 1.07 | 1.11 | 1.20 | 1.28 | 1.36 | 1.44 | 1.52 | 1.62 | 1.72 | *1.83* | *1.94* | Div'd Decl'd per sh B ■ | *2.30* |
| 3.25 | 4.00 | 4.89 | 4.66 | 3.91 | 4.60 | 4.53 | 5.27 | 6.82 | 6.33 | 7.26 | 6.42 | 6.54 | 7.70 | 8.05 | 9.99 | *8.30* | *8.70* | Cap'l Spending per sh | *8.50* |
| 13.37 | 14.28 | 14.70 | 15.35 | 15.92 | 16.76 | 17.44 | 18.19 | 19.21 | 20.20 | 20.89 | 21.73 | 22.56 | 23.78 | 25.24 | 27.12 | *28.45* | *29.85* | Book Value per sh C | *34.50* |
| 403.39 | 407.30 | 428.78 | 453.79 | 457.51 | 482.33 | 486.49 | 487.96 | 497.97 | 505.73 | 507.54 | 507.22 | 507.76 | 514.04 | 524.54 | 537.44 | *540.00* | *544.00* | Common Shs Outst'g D | *553.00* |
| 15.4 | 14.8 | 16.7 | 13.7 | 12.7 | 14.1 | 14.2 | 14.8 | 15.0 | 15.4 | 16.5 | 18.5 | 20.2 | 18.9 | 22.3 | 23.9 | *Bold figures are Value Line estimates* | | Avg Ann'l P/E Ratio | *18.0* |
| .82 | .80 | .89 | .82 | .85 | .90 | .89 | .94 | .84 | .81 | .83 | .97 | 1.02 | 1.02 | 1.19 | 1.23 | | | Relative P/E Ratio | *1.00* |
| 4.6% | 4.4% | 4.0% | 4.7% | 5.1% | 4.5% | 4.2% | 3.9% | 3.9% | 3.8% | 3.7% | 3.3% | 3.1% | 3.3% | 2.7% | 2.6% | | | Avg Ann'l Div'd Yield | *3.4%* |
| 10655 | 10128 | 10915 | 11686 | 11024 | 11107 | 11404 | 11537 | 11529 | 11526 | *12500* | *12500* | Revenues ($mill) | *14000* |
| 841.4 | 905.2 | 948.2 | 1021.3 | 1063.6 | 1123.4 | 1171.0 | 1261.0 | 1372.0 | 1473.0 | *1590* | *1690* | Net Profit ($mill) | *2080* |
| 35.8% | 33.2% | 33.8% | 33.9% | 35.8% | 34.1% | 30.7% | 12.6% | 8.5% | - - | *NMF* | *NMF* | Income Tax Rate | *NMF* |
| 9.4% | 10.8% | 13.4% | 12.5% | 7.7% | 7.8% | 9.4% | 12.4% | 8.3% | 10.7% | *7.0%* | *7.0%* | AFUDC % to Net Profit | *6.0%* |
| 51.1% | 53.3% | 53.3% | 53.0% | 54.1% | 56.3% | 55.9% | 56.4% | 56.8% | 57.4% | *58.0%* | *57.5%* | Long-Term Debt Ratio | *58.0%* |
| 48.9% | 46.7% | 46.7% | 47.0% | 45.9% | 43.7% | 44.1% | 43.6% | 43.2% | 42.6% | *42.0%* | *42.5%* | Common Equity Ratio | *42.0%* |
| 17331 | 19018 | 20477 | 21714 | 23092 | 25216 | 25975 | 28025 | 30646 | 34220 | *36425* | *38100* | Total Capital ($mill) | *45200* |
| 22353 | 23809 | 26122 | 28757 | 31206 | 32842 | 34329 | 36944 | 39483 | 42950 | *45175* | *47525* | Net Plant ($mill) | *53600* |
| 6.5% | 6.1% | 6.0% | 6.0% | 5.8% | 5.7% | 5.8% | 5.7% | 5.6% | 5.4% | *5.5%* | *5.5%* | Return on Total Cap'l | *5.5%* |
| 9.9% | 10.2% | 9.9% | 10.0% | 10.0% | 10.2% | 10.2% | 10.3% | 10.4% | 10.1% | *10.5%* | *10.5%* | Return on Shr. Equity | *11.0%* |
| 9.9% | 10.2% | 9.9% | 10.0% | 10.0% | 10.2% | 10.2% | 10.3% | 10.4% | 10.1% | *10.5%* | *10.5%* | Return on Com Equity E | *11.0%* |
| 4.3% | 4.7% | 4.5% | 4.5% | 4.3% | 4.0% | 3.9% | 4.3% | 4.4% | 4.2% | *4.0%* | *4.0%* | Retained to Com Eq | *4.0%* |
| 56% | 54% | 54% | 55% | 57% | 61% | 62% | 58% | 58% | 58% | *62%* | *62%* | All Div'ds to Net Prof | *61%* |

**CAPITAL STRUCTURE as of 3/31/21**
**Total Debt** $22968 mill. **Due in 5 Yrs** $4904 mill.
**LT Debt** $21470 mill. **LT Interest** $800 mill.
Incl. $73 mill. finance leases.
(LT interest earned: 2.8x)

**Leases, Uncapitalized** Annual rentals $273 mill.
**Pension Assets-12/20** $3599 mill.
**Oblig** $3964 mill.

**Pfd Stock** None

**Common Stock** 538,206,800 shs.
**as of 4/22/21**
**MARKET CAP: $37 billion (Large Cap)**

**ELECTRIC OPERATING STATISTICS**

| | 2018 | 2019 | 2020 |
|---|---|---|---|
| % Change Retail Sales (KWH) | +3.2 | -1.2 | -2.3 |
| Large C & I Use (MWH) | 23004 | NA | NA |
| Large C & I Revs. per KWH (¢) | 5.91 | 5.96 | 5.78 |
| Capacity at Peak (Mw) | NA | NA | NA |
| Peak Load, Summer (Mw) | 20293 | 20146 | 19665 |
| Annual Load Factor (%) | NA | NA | NA |
| % Change Customers (yr-end) | +1.1 | +1.0 | NA |
| Fixed Charge Cov. (%) | 281 | 272 | 252 |

**ANNUAL RATES** of change (per sh)

| | Past 10 Yrs. | Past 5 Yrs. | Est'd '18-'20 to '24-'26 |
|---|---|---|---|
| Revenues | - - | -.5% | *2.5%* |
| "Cash Flow" | 6.0% | 7.5% | *6.0%* |
| Earnings | 6.0% | 5.5% | *6.0%* |
| Dividends | 5.5% | 6.0% | *6.0%* |
| Book Value | 4.5% | 5.0% | *5.0%* |

**QUARTERLY REVENUES ($ mill.)**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | 2951 | 2658 | 3048 | 2880 | 11537 |
| 2019 | 3141 | 2577 | 3013 | 2798 | 11529 |
| 2020 | 2811 | 2586 | 3182 | 2947 | 11526 |
| 2021 | 3541 | *2700* | *3209* | *3050* | *12500* |
| 2022 | *3250* | *2750* | *3300* | *3200* | *12500* |

**EARNINGS PER SHARE A**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2018 | .57 | .52 | .96 | .42 | 2.47 |
| 2019 | .61 | .46 | 1.01 | .56 | 2.64 |
| 2020 | .56 | .54 | 1.14 | .54 | 2.79 |
| 2021 | .67 | *.55* | *1.15* | *.58* | *2.95* |
| 2022 | *.70* | *.55* | *1.20* | *.65* | *3.10* |

**QUARTERLY DIVIDENDS PAID B ■**

| Calendar | Mar.31 | Jun.30 | Sep.30 | Dec.31 | Full Year |
|---|---|---|---|---|---|
| 2017 | .34 | .36 | .36 | .36 | 1.42 |
| 2018 | .36 | .38 | .38 | .38 | 1.50 |
| 2019 | .38 | .405 | .405 | .405 | 1.60 |
| 2020 | .405 | .43 | .43 | .43 | 1.70 |
| 2021 | .43 | .4575 | .4575 | | |

**BUSINESS:** Xcel Energy Inc. is the parent of Northern States Power, which supplies electricity to Minnesota, Wisconsin, North Dakota, South Dakota & Michigan & gas to Minnesota, Wisconsin, North Dakota & Michigan; P.S. of Colorado, which supplies electricity & gas to Colorado; & Southwestern Public Service, which supplies electricity to Texas & New Mexico. Customers: 3.7 mill. elec., 2.1 mill. gas. Elec. rev. breakdown: res'l, 31%; sm. comm'l & ind'l, 36%; lg. comm'l & ind'l, 18%; other, 15%. Generating sources not avail. Fuel costs: 36% of revs. '20 reported depr. rate: 3.4%. Has 11,400 empls. Chairman & CEO: Ben Fowke. President & COO: Bob Frenzel. Inc.: MN. Address: 414 Nicollet Mall, Minneapolis, MN 55401. Tel.: 612-330-5500. Internet: www.xcelenergy.com.

**As usual, Xcel Energy has a lot of regulatory matters pending.** The company is awaiting orders on electric rate cases in Wisconsin, North Dakota, Texas, and New Mexico. In Wisconsin, Northern States Power reached a settlement calling for raises in electric rates of $35 million in 2022 and $18 million in 2023, respectively, and gas hikes of $10 million in 2022 and $3 million in 2023. The allowed return on equity would be 9.8% in 2022 and 10% in 2023. In North Dakota, NSP reached a settlement calling for an increase of $7 million, based on a 9.5% ROE. Orders are expected in the fourth quarter of 2021. Southwestern Public Service is asking the commissions in Texas and New Mexico for hikes of $143 million and $88 million, respectively, based on a 10.35% ROE. Orders are expected in the fourth quarter and first quarter in New Mexico and Texas, respectively. Public Service of Colorado filed for a $470 million base rate increase (including $127 million that is already being recovered through riders on customers' bills), based on a 10% ROE. The company is asking the regulators in Minnesota and Colorado to approve integrated resource plans. Xcel is asking regulators to approve the recovery of $936 million of higher gas costs stemming from a winter storm in February. The commissions in Wisconsin and New Mexico have already given their approval, and Xcel is waiting to hear from three other states. Finally, the company might file an electric rate case in Minnesota later this year.

**We expect a continuation of steady profit growth in 2021 and 2022.** Rate relief and effective expense control are key factors. The company got off to a good start in the March quarter. Our estimate remains at the midpoint of the company's targeted range of $2.90-$3.00 a share. We estimate a 5% increase, to $3.10 a share, in 2022. This can be considered conservative, as Xcel's goal for annual earnings growth is 5%-7%.

**Top-quality Xcel stock has a high valuation.** The dividend yield is below average for a utility. Total return potential is appealing for the next 18 months, but not for the 3- to 5-year period. The recent quotation is well within our 2024-2026 Target Price Range.

*Paul E. Debbas, CFA* *July 23, 2021*

**(A)** Diluted EPS. Excl. nonrecurring gain (losses): '10, 5¢; '15, (16¢); '17, (5¢); gains (loss) on discontinued ops.: '05, 3¢; '06, 1¢; '09, (1¢); '10, 1¢. '20 EPS don't sum due to rounding. Next earnings report due late July.
**(B)** Div'ds historically paid mid-Jan., Apr., July, and Oct. ■ Div'd reinvestment plan available.
**(C)** Incl. intangibles. In '20: $2373 mill., $4.42/sh.
**(D)** In mill.
**(E)** Rate base: Varies. Rate allowed on com. eq. (blended): 9.6%; earned on avg. com. eq., '20: 10.6%. Regulatory Climate: Average.

| | |
|---|---|
| Company's Financial Strength | A+ |
| Stock's Price Stability | 95 |
| Price Growth Persistence | 65 |
| Earnings Predictability | 100 |

Northern States Power Company
Summary of Risk Premium Models for the
Proxy Group of Thirteen Electric Companies

| | Proxy Group of Thirteen Electric Companies |
|---|---|
| Predictive Risk Premium Model (PRPM) (1) | 11.16 % |
| Risk Premium Using an Adjusted Total Market Approach (2) | 10.73 % |
| Average | 10.95 % |

Notes:
(1) From page 2 of this Schedule.
(2) From page 3 of this Schedule.

Northern States Power Company
Indicated ROE
Derived by the Predictive Risk Premium Model (1)

| Proxy Group of Thirteen Electric Companies | [1] LT Average Predicted Variance | [2] Spot Predicted Variance | [3] Recommended Variance (2) | [4] GARCH Coefficient | [5] Predicted Risk Premium (3) | [6] Risk-Free Rate (4) | [7] Indicated ROE (5) |
|---|---|---|---|---|---|---|---|
| Alliant Energy Corporation | 0.27% | 0.34% | 0.31% | 2.7403 | 10.59% | 2.70% | 13.29% |
| Ameren Corporation | 0.23% | 0.32% | 0.28% | 2.0383 | 6.98% | 2.70% | 9.68% |
| Duke Energy Corporation | 0.31% | 0.31% | 0.31% | 1.8669 | 7.19% | 2.70% | 9.89% |
| Edison International | 0.43% | 0.49% | 0.46% | 1.4734 | 8.44% | 2.70% | 11.14% |
| Entergy Corporation | 0.40% | 0.51% | 0.46% | 2.2355 | 13.00% | 2.70% | 15.70% |
| Evergy, Inc. | 0.36% | 0.37% | 0.36% | 1.5092 | 6.78% | 2.70% | 9.48% |
| IDACORP, Inc. | 0.29% | 0.41% | 0.35% | 2.2119 | 9.61% | 2.70% | 12.31% |
| NorthWestern Corporation | 0.34% | 0.26% | 0.30% | 2.3747 | 8.93% | 2.70% | 11.63% |
| OGE Energy Corporation | 0.31% | 0.24% | 0.28% | 2.1950 | 7.50% | 2.70% | 10.20% |
| Otter Tail Corporation | 0.37% | 0.26% | 0.32% | 1.7137 | 6.71% | 2.70% | 9.41% |
| Pinnacle West Capital Corporation | 0.60% | 0.34% | 0.47% | 1.2594 | 7.35% | 2.70% | 10.05% |
| Portland General Electric Company | 0.28% | 0.34% | 0.31% | 2.1651 | 8.28% | 2.70% | 10.98% |
| Xcel Energy, Inc. | 0.28% | 0.34% | 0.31% | 2.8250 | 10.91% | 2.70% | 13.61% |
| | | | | | | Average | 11.34% |
| | | | | | | Median | 10.98% |
| | | | | | | Average of Mean and Median | 11.16% |

Notes:
(1) The Predictive Risk Premium Model uses historical data to generate a predicted variance and a GARCH coefficient. The historical data used are the equity risk premiums for the first available trading month as reported by Bloomberg Professional Service.
(2) Average of Columns [1] and [2].
(3) (1+(Column [3] * Column [4])^12) - 1.
(4) From note 2 on page 2 of Exhibit_(DWD-1), Schedule 7.
(5) Column [5] + Column [6].

Northern States Power Company
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

| Line No. | | Proxy Group of Thirteen Electric Companies | |
|---|---|---|---|
| 1. | Prospective Yield on Aaa Rated Corporate Bonds (1) | 3.41 | % |
| 2. | Adjustment to Reflect Yield Spread Between Aaa Rated Corporate Bonds and A2 Rated Public Utility Bonds | 0.38 | (2) |
| 3. | Adjusted Prospective Yield on A2 Rated Public Utility Bonds | 3.79 | % |
| 4. | Adjustment to Reflect Bond Rating Difference of Proxy Group | 0.13 | (3) |
| 5. | Adjusted Prospective Bond Yield | 3.92 | % |
| 6. | Equity Risk Premium (4) | 6.81 | |
| 7. | Risk Premium Derived Common Equity Cost Rate | 10.73 | % |

Notes:
(1) Consensus forecast of Moody's Aaa Rated Corporate bonds from Blue Chip Financial Forecasts (see pages 10 and 11 of this Schedule).

(2) The average yield spread of A2 rated public utility bonds over Aaa rated corporate bonds of 0.38% from page 4 of this Schedule.

(3) Adjustment to reflect the A3/Baa1 Moody's LT issuer rating of the Utility Proxy Group as shown on page 5 of this Schedule. The 0.13% upward adjustment is derived by taking 1/2 of the spread between A2 and Baa2 Public Utility Bonds (1/2 * 0.25% = 0.13%) as derived from page 4 of this Schedule.

(4) From page 7 of this Schedule.

Northern States Power Company
Interest Rates and Bond Spreads for
Moody's Corporate and Public Utility Bonds

Selected Bond Yields

| | [1] Aaa Rated Corporate Bond | [2] A2 Rated Public Utility Bond | [3] Baa2 Rated Public Utility Bond |
|---|---|---|---|
| Aug-2021 | 2.55 % | 2.95 % | 3.19 % |
| Jul-2021 | 2.57 | 2.95 | 3.20 |
| Jun-2021 | 2.79 | 3.16 | 3.41 |
| Average | 2.64 % | 3.02 % | 3.27 % |

Selected Bond Spreads

A2 Rated Public Utility Bonds Over Aaa Rated Corporate Bonds: 0.38 % (1)

Baa2 Rated Public Utility Bonds Over A2 Rated Public Utility Bonds: 0.25 % (2)

Notes:
(1) Column [2] - Column [1].
(2) Column [3] - Column [2].

Source of Information:
Bloomberg Professional Service

Northern States Power Company
Comparison of Long-Term Issuer Ratings for
Proxy Group of Thirteen Electric Companies

| Proxy Group of Thirteen Electric Companies | Moody's Long-Term Issuer Rating August 2021 | | Standard & Poor's Long-Term Issuer Rating August 2021 | |
|---|---|---|---|---|
| | Long-Term Issuer Rating (1) | Numerical Weighting (2) | Long-Term Issuer Rating (1) | Numerical Weighting (2) |
| Alliant Energy Corporation | A3/Baa1 | 7.5 | A/A- | 6.5 |
| Ameren Corporation | A3 | 7.0 | BBB+ | 8.0 |
| Duke Energy Corporation | A3 | 7.0 | BBB+ | 8.0 |
| Edison International | Baa2 | 9.0 | BBB | 9.0 |
| Entergy Corporation | Baa1/Baa2 | 8.5 | BBB+ | 8.0 |
| Evergy, Inc. | Baa1 | 8.0 | A- | 7.0 |
| IDACORP, Inc. | A3 | 7.0 | BBB | 9.0 |
| NorthWestern Corporation | Baa2 | 9.0 | BBB | 9.0 |
| OGE Energy Corporation | A3 | 7.0 | A- | 7.0 |
| Otter Tail Corporation | A3 | 7.0 | BBB+ | 8.0 |
| Pinnacle West Capital Corporation | A2 | 6.0 | A- | 7.0 |
| Portland General Electric Company | A3 | 7.0 | BBB+ | 8.0 |
| Xcel Energy, Inc. | A3 | 7.0 | A- | 7.0 |
| Average | A3/Baa1 | 7.5 | BBB+ | 7.8 |

Notes:
(1) Ratings are that of the average of each company's utility operating subsidiaries.
(2) From page 6 of this Schedule.

Source Information: Moody's Investors Service
Standard & Poor's Global Utilities Rating Service

Numerical Assignment for
Moody's and Standard & Poor's Bond Ratings

| Moody's Bond Rating | Numerical Bond Weighting | Standard & Poor's Bond Rating |
|---|---|---|
| Aaa | 1 | AAA |
| Aa1 | 2 | AA+ |
| Aa2 | 3 | AA |
| Aa3 | 4 | AA- |
| A1 | 5 | A+ |
| A2 | 6 | A |
| A3 | 7 | A- |
| Baa1 | 8 | BBB+ |
| Baa2 | 9 | BBB |
| Baa3 | 10 | BBB- |
| Ba1 | 11 | BB+ |
| Ba2 | 12 | BB |
| Ba3 | 13 | BB- |
| B1 | 14 | B+ |
| B2 | 15 | B |
| B3 | 16 | B- |

Northern States Power Company
Judgment of Equity Risk Premium for
Proxy Group of Thirteen Electric Companies

| Line No. | | Proxy Group of Thirteen Electric Companies |
|---|---|---|
| 1. | Calculated equity risk premium based on the total market using the beta approach (1) | 9.01 % |
| 2. | Mean equity risk premium based on a study using the holding period returns of public utilities with A2 rated bonds (2) | 5.62 |
| 3. | Predicted Equity Risk Premium Based on Regression Analysis of 1,183 Fully-Litigated Electric Utility Rate Cases | 5.81 |
| 4. | Average equity risk premium | 6.81 % |

Notes: (1) From page 8 of this Schedule.
(2) From page 12 of this Schedule.
(3) From page 13 of this Schedule.

Northern States Power Company
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for the
Proxy Group of Thirteen Electric Companies

| Line No. | Equity Risk Premium Measure | Proxy Group of Thirteen Electric Companies |
|---|---|---|
| | Ibbotson-Based Equity Risk Premiums: | |
| 1. | Ibbotson Equity Risk Premium (1) | 5.92 % |
| 2. | Regression on Ibbotson Risk Premium Data (2) | 8.87 |
| 3. | Ibbotson Equity Risk Premium based on PRPM (3) | 7.88 |
| 4. | Equity Risk Premium Based on Value Line Summary and Index (4) | 5.53 |
| 5. | Equity Risk Premium Based on Value Line S&P 500 Companies (5) | 11.64 |
| 6. | Equity Risk Premium Based on Bloomberg S&P 500 Companies (6) | 14.76 |
| 7. | Conclusion of Equity Risk Premium | 9.10 % |
| 8. | Adjusted Beta (7) | 0.99 |
| 9. | Forecasted Equity Risk Premium | 9.01 % |

Notes provided on page 9 of this Schedule.

Northern States Power Company
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for the
Proxy Group of Thirteen Electric Companies

Notes:

(1) Based on the arithmetic mean historical monthly returns on large company common stocks from Ibbotson® SBBI® 2021 Market Report minus the arithmetic mean monthly yield of Moody's average Aaa and Aa2 corporate bonds from 1928-2020.

(2) This equity risk premium is based on a regression of the monthly equity risk premiums of large company common stocks relative to Moody's average Aaa and Aa2 rated corporate bond yields from 1928-2020 referenced in Note 1 above.

(3) The Predictive Risk Premium Model (PRPM) is discussed in the accompanying direct testimony. The Ibbotson equity risk premium based on the PRPM is derived by applying the PRPM to the monthly risk premiums between Ibbotson large company common stock monthly returns and average Aaa and Aa2 corporate monthly bond yields, from January 1928 through August 2021.

(4) The equity risk premium based on the Value Line Summary and Index is derived by subtracting the average consensus forecast of Aaa corporate bonds of 3.41% (from page 3 of this Schedule) from the projected 3-5 year total annual market return of 8.94% (described fully in note 1 on page 2 of Exhibit__(DWD-1), Schedule 7).

(5) Using data from Value Line for the S&P 500, an expected total return of 15.05% was derived based upon expected dividend yields and long-term earnings growth estimates as a proxy for capital appreciation. Subtracting the average consensus forecast of Aaa corporate bonds of 3.41% results in an expected equity risk premium of 11.64%.

(6) Using data from the Bloomberg Professional Service for the S&P 500, an expected total return of 18.17% was derived based upon expected dividend yields and long-term earnings growth estimates as a proxy for capital appreciation. Subtracting the average consensus forecast of Aaa corporate bonds of 3.41% results in an expected equity risk premium of 14.76%.

(7) Average of mean and median beta from Exhibit_(DWD-1), Schedule 7.

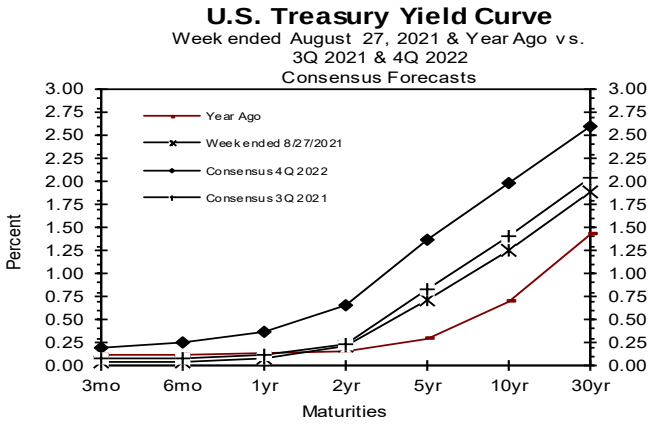
Sources of Information:

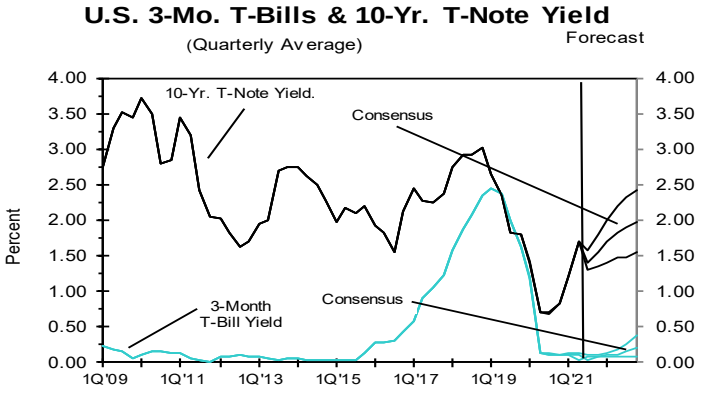
Stocks, Bonds, Bills, and Inflation - 2021 SBBI Yearbook, John Wiley & Sons, Inc.
Industrial Manual and Mergent Bond Record Monthly Update.
Value Line Summary and Index
Blue Chip Financial Forecasts, September 1, 2021 and June 1, 2021
Bloomberg Professional Service

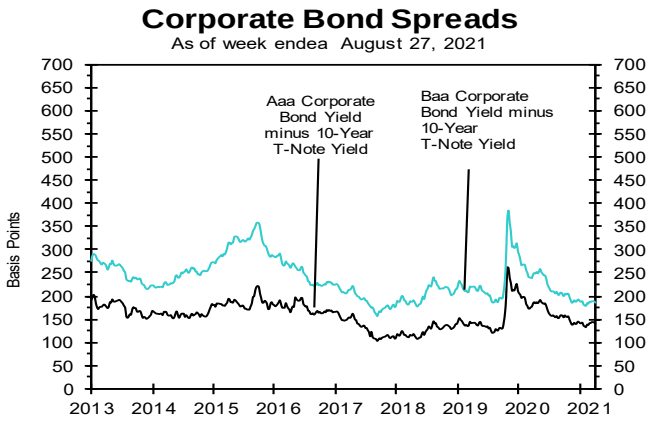
# Consensus Forecasts of U.S. Interest Rates and Key Assumptions

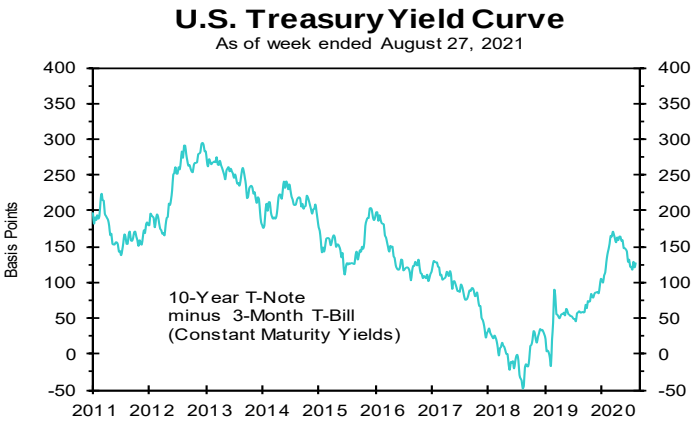
| | History | | | | | | | | Consensus Forecasts-Quarterly Avg. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Average For Week Ending | | | | Average For Month | | | *Latest Qtr* | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q |
| Interest Rates | Aug 27 | Aug 20 | Aug 13 | Aug 6 | Jul | Jun | May | 2Q 2021 | 2021 | 2021 | 2022 | 2022 | 2022 | 2022 |
| Federal Funds Rate | 0.09 | 0.10 | 0.10 | 0.09 | 0.10 | 0.08 | 0.06 | 0.07 | **0.1** | **0.1** | **0.1** | **0.1** | **0.1** | **0.1** |
| Prime Rate | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | 3.25 | **3.3** | **3.3** | **3.3** | **3.3** | **3.3** | **3.3** |
| LIBOR, 3-mo. | 0.12 | 0.13 | 0.12 | 0.12 | 0.13 | 0.13 | 0.15 | 0.16 | **0.2** | **0.2** | **0.2** | **0.3** | **0.3** | **0.3** |
| Commercial Paper, 1-mo. | 0.05 | 0.06 | 0.06 | 0.05 | 0.05 | 0.04 | 0.10 | 0.06 | **0.1** | **0.1** | **0.1** | **0.1** | **0.2** | **0.2** |
| Treasury bill, 3-mo. | 0.05 | 0.06 | 0.06 | 0.05 | 0.05 | 0.04 | 0.02 | 0.03 | **0.1** | **0.1** | **0.1** | **0.1** | **0.2** | **0.2** |
| Treasury bill, 6-mo. | 0.06 | 0.05 | 0.06 | 0.06 | 0.05 | 0.05 | 0.04 | 0.04 | **0.1** | **0.1** | **0.1** | **0.2** | **0.2** | **0.3** |
| Treasury bill, 1 yr. | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.07 | 0.05 | 0.06 | **0.1** | **0.1** | **0.2** | **0.2** | **0.3** | **0.4** |
| Treasury note, 2 yr. | 0.23 | 0.22 | 0.23 | 0.19 | 0.22 | 0.20 | 0.16 | 0.17 | **0.2** | **0.3** | **0.4** | **0.5** | **0.5** | **0.6** |
| Treasury note, 5 yr. | 0.81 | 0.78 | 0.81 | 0.69 | 0.76 | 0.84 | 0.82 | 0.84 | **0.8** | **0.9** | **1.1** | **1.2** | **1.3** | **1.4** |
| Treasury note, 10 yr. | 1.31 | 1.26 | 1.34 | 1.22 | 1.32 | 1.52 | 1.62 | 1.59 | **1.4** | **1.6** | **1.7** | **1.8** | **1.9** | **2.0** |
| Treasury note, 30 yr. | 1.92 | 1.90 | 1.98 | 1.87 | 1.94 | 2.16 | 2.32 | 2.26 | **2.1** | **2.2** | **2.3** | **2.5** | **2.5** | **2.6** |
| Corporate Aaa bond | 2.72 | 2.70 | 2.79 | 2.67 | 2.72 | 2.91 | 3.06 | 3.00 | **2.7** | **2.9** | **3.0** | **3.1** | **3.2** | **3.3** |
| Corporate Baa bond | 3.17 | 3.15 | 3.23 | 3.11 | 3.17 | 3.35 | 3.52 | 3.46 | **3.4** | **3.7** | **3.9** | **4.0** | **4.1** | **4.2** |
| State & Local bonds | 2.64 | 2.65 | 2.65 | 2.63 | 2.60 | 2.64 | 2.64 | 2.65 | **2.3** | **2.5** | **2.5** | **2.6** | **2.7** | **2.7** |
| Home mortgage rate | 2.87 | 2.86 | 2.87 | 2.77 | 2.87 | 2.98 | 2.96 | 3.00 | **3.0** | **3.1** | **3.2** | **3.3** | **3.5** | **3.5** |
| | History | | | | | | | | Consensus Forecasts-Quarterly | | | | | |
| | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q | 1Q | 2Q | 3Q | 4Q |
| Key Assumptions | 2019 | 2019 | 2020 | 2020 | 2020 | 2020 | 2021 | 2021 | 2021 | 2021 | 2022 | 2022 | 2022 | 2022 |
| Fed's AFE $ Index | 110.6 | 110.5 | 111.4 | 112.4 | 107.3 | 105.2 | 103.4 | 102.9 | **105.0** | **105.2** | **105.0** | **104.7** | **104.5** | **104.3** |
| Real GDP | 2.8 | 1.9 | -5.1 | -31.2 | 33.8 | 4.5 | 6.3 | 6.6 | **6.4** | **5.4** | **4.1** | **3.4** | **2.9** | **2.4** |
| GDP Price Index | 1.4 | 1.5 | 1.6 | -1.5 | 3.6 | 2.2 | 4.3 | 6.1 | **4.2** | **2.8** | **2.4** | **2.3** | **2.4** | **2.3** |
| Consumer Price Index | 1.3 | 2.6 | 1.0 | -3.1 | 4.7 | 2.4 | 3.7 | 8.4 | **5.5** | **2.4** | **2.2** | **2.3** | **2.4** | **2.2** |
| PCE Price Index | 1.1 | 1.7 | 1.3 | -1.6 | 3.7 | 1.5 | 3.8 | 6.5 | **4.3** | **2.3** | **2.1** | **2.1** | **2.2** | **2.2** |

Forecasts for interest rates and the Federal Reserve's Major Currency Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index, PCE Price Index and Consumer Price Index are seasonally-adjusted annual rates of change (saar). Individual panel members' forecasts are on pages 4 through 9. Historical data: Treasury rates from the Federal Reserve Board's H.15; AAA-AA and A-BBB corporate bond yields from Bank of America-Merrill Lynch and are 15+ years, yield to maturity; State and local bond yields from Bank of America-Merrill Lynch, A-rated, yield to maturity; Mortgage rates from Freddie Mac, 30-year, fixed; LIBOR quotes from Intercontinental Exchange. All interest rate data are sourced from Haver Analytics. Historical data for Fed's Major Currency Index are from FRSR H.10. Historical data for Real GDP, GDP Price Index and PCE Price Index are from the Bureau of Economic Analysis (BEA). Consumer Price Index history is from the Department of Labor's Bureau of Labor Statistics (BLS).



# Long-Range Survey:

The table below contains the results of our twice-annual long-range CONSENSUS survey. There are also Top 10 and Bottom 10 averages for each variable. Shown are consensus estimates for the years 2022 through 2027 and averages for the five-year periods 2023-2027 and 2028-2032. Apply these projections cautiously. Few if any economic, demographic and political forces can be evaluated accurately over such long time spans.

| | | Average For The Year | | | | | | Five-Year Averages | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2023-2027 | 2028-2032 |
| 1. Federal Funds Rate | CONSENSUS | **0.1** | **0.4** | **1.0** | **1.6** | **1.9** | **2.1** | **1.4** | **2.2** |
| | Top 10 Average | 0.2 | 0.7 | 1.6 | 2.4 | 2.6 | 2.7 | 2.0 | 2.7 |
| | Bottom 10 Average | 0.1 | 0.1 | 0.5 | 0.9 | 1.3 | 1.5 | 0.9 | 1.6 |
| 2. Prime Rate | CONSENSUS | **3.3** | **3.5** | **4.2** | **4.7** | **5.0** | **5.2** | **4.5** | **5.2** |
| | Top 10 Average | 3.4 | 3.8 | 4.7 | 5.4 | 5.7 | 5.8 | 5.1 | 5.8 |
| | Bottom 10 Average | 3.2 | 3.3 | 3.7 | 4.0 | 4.4 | 4.6 | 4.0 | 4.7 |
| 3. LIBOR, 3-Mo. | CONSENSUS | **0.4** | **0.6** | **1.3** | **1.8** | **2.1** | **2.3** | **1.6** | **2.4** |
| | Top 10 Average | 0.5 | 1.0 | 1.8 | 2.4 | 2.7 | 2.9 | 2.2 | 3.0 |
| | Bottom 10 Average | 0.2 | 0.4 | 0.8 | 1.2 | 1.6 | 1.7 | 1.1 | 1.8 |
| 4. Commercial Paper, 1-Mo | CONSENSUS | **0.2** | **0.6** | **1.3** | **1.8** | **2.1** | **2.3** | **1.6** | **2.4** |
| | Top 10 Average | 0.4 | 0.9 | 1.6 | 2.3 | 2.6 | 2.8 | 2.0 | 2.8 |
| | Bottom 10 Average | 0.1 | 0.3 | 0.9 | 1.3 | 1.8 | 1.9 | 1.2 | 2.0 |
| 5. Treasury Bill Yield, 3-Mo | CONSENSUS | **0.2** | **0.5** | **1.0** | **1.6** | **1.9** | **2.1** | **1.4** | **2.2** |
| | Top 10 Average | 0.3 | 0.8 | 1.6 | 2.2 | 2.5 | 2.7 | 1.9 | 2.7 |
| | Bottom 10 Average | 0.1 | 0.2 | 0.6 | 0.9 | 1.3 | 1.5 | 0.9 | 1.6 |
| 6. Treasury Bill Yield, 6-Mo | CONSENSUS | **0.2** | **0.5** | **1.1** | **1.6** | **2.0** | **2.2** | **1.5** | **2.3** |
| | Top 10 Average | 0.3 | 0.8 | 1.7 | 2.3 | 2.6 | 2.7 | 2.0 | 2.8 |
| | Bottom 10 Average | 0.1 | 0.3 | 0.6 | 1.0 | 1.4 | 1.6 | 1.0 | 1.7 |
| 7. Treasury Bill Yield, 1-Yr | CONSENSUS | **0.3** | **0.7** | **1.2** | **1.8** | **2.1** | **2.3** | **1.6** | **2.4** |
| | Top 10 Average | 0.5 | 1.0 | 1.8 | 2.4 | 2.8 | 2.9 | 2.2 | 3.0 |
| | Bottom 10 Average | 0.2 | 0.3 | 0.7 | 1.1 | 1.5 | 1.7 | 1.1 | 1.8 |
| 8. Treasury Note Yield, 2-Yr | CONSENSUS | **0.5** | **0.9** | **1.5** | **2.0** | **2.3** | **2.5** | **1.8** | **2.6** |
| | Top 10 Average | 0.7 | 1.3 | 2.1 | 2.7 | 3.0 | 3.1 | 2.5 | 3.3 |
| | Bottom 10 Average | 0.3 | 0.5 | 0.9 | 1.3 | 1.6 | 1.8 | 1.2 | 1.9 |
| 9. Treasury Note Yield, 5-Yr | CONSENSUS | **1.2** | **1.6** | **2.1** | **2.5** | **2.8** | **2.8** | **2.4** | **3.0** |
| | Top 10 Average | 1.5 | 2.0 | 2.8 | 3.3 | 3.5 | 3.5 | 3.0 | 3.6 |
| | Bottom 10 Average | 0.9 | 1.2 | 1.5 | 1.8 | 2.0 | 2.2 | 1.7 | 2.3 |
| 10. Treasury Note Yield, 10-Yr | CONSENSUS | **2.0** | **2.4** | **2.7** | **3.0** | **3.2** | **3.3** | **2.9** | **3.3** |
| | Top 10 Average | 2.3 | 2.8 | 3.4 | 3.8 | 4.0 | 3.9 | 3.6 | 4.0 |
| | Bottom 10 Average | 1.7 | 1.9 | 2.1 | 2.3 | 2.5 | 2.6 | 2.3 | 2.7 |
| 11. Treasury Bond Yield, 30-Yr | CONSENSUS | **2.6** | **2.9** | **3.3** | **3.6** | **3.8** | **3.8** | **3.5** | **3.9** |
| | Top 10 Average | 3.0 | 3.5 | 4.0 | 4.5 | 4.6 | 4.5 | 4.2 | 4.6 |
| | Bottom 10 Average | 2.3 | 2.4 | 2.5 | 2.7 | 2.9 | 3.1 | 2.7 | 3.2 |
| 12. Corporate Aaa Bond Yield | CONSENSUS | **3.3** | **3.7** | **4.1** | **4.5** | **4.7** | **4.7** | **4.3** | **4.8** |
| | Top 10 Average | 3.6 | 4.2 | 4.7 | 5.2 | 5.4 | 5.4 | 5.0 | 5.4 |
| | Bottom 10 Average | 3.1 | 3.2 | 3.4 | 3.7 | 3.9 | 4.1 | 3.7 | 4.2 |
| 13. Corporate Baa Bond Yield | CONSENSUS | **4.3** | **4.7** | **5.1** | **5.4** | **5.6** | **5.7** | **5.3** | **5.8** |
| | Top 10 Average | 4.6 | 5.1 | 5.6 | 6.1 | 6.3 | 6.2 | 5.9 | 6.4 |
| | Bottom 10 Average | 4.0 | 4.3 | 4.5 | 4.7 | 4.9 | 5.2 | 4.7 | 5.2 |
| 14. State & Local Bonds Yield | CONSENSUS | **2.9** | **3.2** | **3.6** | **3.9** | **4.1** | **4.2** | **3.8** | **4.2** |
| | Top 10 Average | 3.2 | 3.5 | 4.1 | 4.5 | 4.7 | 4.7 | 4.3 | 4.8 |
| | Bottom 10 Average | 2.6 | 2.9 | 3.1 | 3.4 | 3.7 | 3.7 | 3.3 | 3.8 |
| 15. Home Mortgage Rate | CONSENSUS | **3.6** | **4.0** | **4.4** | **4.7** | **4.9** | **5.0** | **4.6** | **5.0** |
| | Top 10 Average | 4.0 | 4.5 | 5.0 | 5.5 | 5.6 | 5.6 | 5.2 | 5.7 |
| | Bottom 10 Average | 3.2 | 3.6 | 3.8 | 4.0 | 4.2 | 4.3 | 4.0 | 4.4 |
| A. Fed's AFE Nominal $ Index | CONSENSUS | **103.7** | **103.7** | **104.0** | **103.7** | **103.6** | **103.3** | **103.7** | **103.1** |
| | Top 10 Average | 105.3 | 106.0 | 106.8 | 107.0 | 107.3 | 107.5 | 106.9 | 107.9 |
| | Bottom 10 Average | 102.0 | 101.5 | 101.4 | 100.8 | 100.4 | 100.0 | 100.8 | 99.4 |
| | | Year-Over-Year, % Change | | | | | | Five-Year Averages | |
| | | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2023-2027 | 2028-2032 |
| B. Real GDP | CONSENSUS | **4.2** | **2.6** | **2.3** | **2.2** | **2.1** | **2.1** | **2.2** | **2.1** |
| | Top 10 Average | 5.3 | 3.3 | 2.7 | 2.5 | 2.4 | 2.4 | 2.7 | 2.5 |
| | Bottom 10 Average | 2.9 | 2.0 | 1.9 | 1.8 | 1.8 | 1.7 | 1.8 | 1.7 |
| C. GDP Chained Price Index | CONSENSUS | **2.3** | **2.3** | **2.2** | **2.1** | **2.2** | **2.1** | **2.2** | **2.1** |
| | Top 10 Average | 2.6 | 2.6 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 |
| | Bottom 10 Average | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| D. Consumer Price Index | CONSENSUS | **2.4** | **2.4** | **2.2** | **2.2** | **2.2** | **2.2** | **2.2** | **2.2** |
| | Top 10 Average | 2.8 | 2.7 | 2.5 | 2.5 | 2.5 | 2.4 | 2.5 | 2.4 |
| | Bottom 10 Average | 2.1 | 2.1 | 1.9 | 1.9 | 2.0 | 1.9 | 2.0 | 1.9 |
| E. PCE Price Index | CONSENSUS | **2.3** | **2.2** | **2.1** | **2.1** | **2.1** | **2.1** | **2.1** | **2.1** |
| | Top 10 Average | 2.7 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 |
| | Bottom 10 Average | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |

Northern States Power Company
Derivation of Mean Equity Risk Premium Based Studies
Using Holding Period Returns and
Projected Market Appreciation of the S&P Utility Index

| Line No. | | Implied Equity Risk Premium |
|---|---|---|
| | Equity Risk Premium based on S&P Utility Index Holding Period Returns (1): | |
| 1. | Historical Equity Risk Premium | 4.16 % |
| 2. | Regression of Historical Equity Risk Premium (2) | 6.51 |
| 3. | Forecasted Equity Risk Premium Based on PRPM (3) | 4.94 |
| 4. | Forecasted Equity Risk Premium based on Projected Total Return on the S&P Utilities Index (Value Line Data) (4) | 7.15 |
| 5. | Forecasted Equity Risk Premium based on Projected Total Return on the S&P Utilities Index (Bloomberg Data) (5) | 5.32 |
| 6. | Average Equity Risk Premium (6) | 5.62 % |

Notes:
(1) Based on S&P Public Utility Index monthly total returns and Moody's Public Utility Bond average monthly yields from 1928-2020. Holding period returns are calculated based upon income received (dividends and interest) plus the relative change in the market value of a security over a one-year holding period.

(2) This equity risk premium is based on a regression of the monthly equity risk premiums of the S&P Utility Index relative to Moody's A2 rated public utility bond yields from 1928 - 2020 referenced in note 1 above.

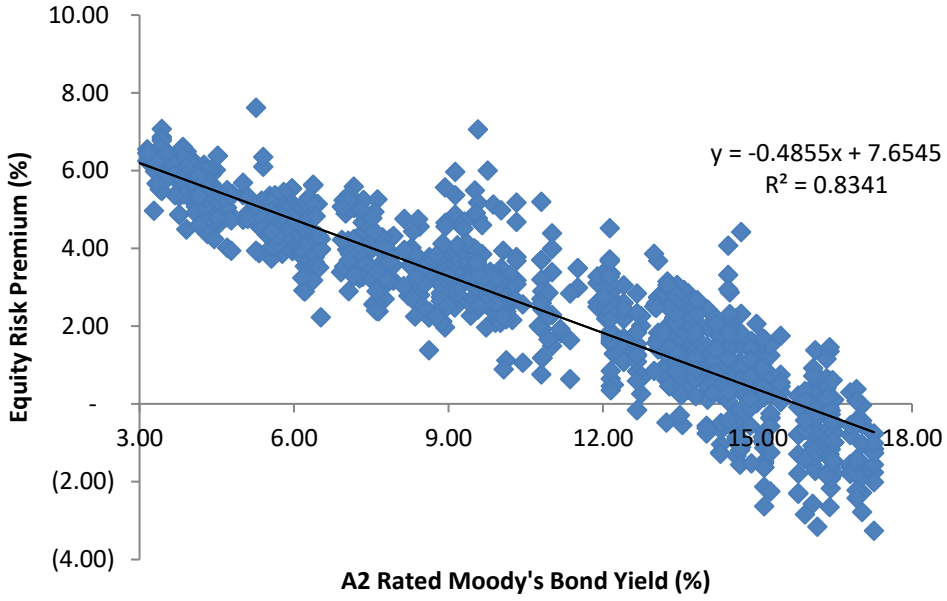
(3) The Predictive Risk Premium Model (PRPM) is applied to the risk premium of the monthly total returns of the S&P Utility Index and the monthly yields on Moody's A2 rated public utility bonds from January 1928 - August 2021.

(4) Using data from Value Line for the S&P Utilities Index, an expected return of 10.94% was derived based on expected dividend yields and long-term growth estimates as a proxy for market appreciation. Subtracting the expected A2 rated public utility bond yield of 3.79%, calculated on line 3 of page 3 of this Schedule results in an equity risk premium of 7.15%. (10.94% - 3.79% = 7.15%)

(5) Using data from Bloomberg Professional Service for the S&P Utilities Index, an expected return of 9.11% was derived based on expected dividend yields and long-term growth estimates as a proxy for market appreciation. Subtracting the expected A2 rated public utility bond yield of 3.79%, calculated on line 3 of page 3 of this Schedule results in an equity risk premium of 5.32%. (9.11% - 3.79% = 5.32%)

(6) Average of lines 1 through 5.

Northern States Power Company
Prediction of Equity Risk Premiums Relative to
Moody's A2 Rated Utility Bond Yields




| Constant | Slope | Prospective A2 Rated Utility Bond (1) | Prospective Equity Risk Premium |
|---|---|---|---|
| 7.654483 % | -0.48549 | 3.79 % | 5.81 % |

Notes:
(1) From line 3 of page 3 of this Schedule.

Source of Information: Regulatory Research Associates

Northern States Power Company
Indicated Common Equity Cost Rate Through Use
of the Traditional Capital Asset Pricing Model (CAPM) and Empirical Capital Asset Pricing Model (ECAPM)

| | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] |
|---|---|---|---|---|---|---|---|---|
| Proxy Group of Thirteen Electric Companies | Value Line Adjusted Beta | Bloomberg Adjusted Beta | Average Beta | Market Risk Premium (1) | Risk-Free Rate (2) | Traditional CAPM Cost Rate | ECAPM Cost Rate | Indicated Common Equity Cost Rate (3) |
| Alliant Energy Corporation | 0.85 | 1.03 | 0.94 | 9.93 % | 2.70 % | 12.03 % | 12.18 % | 12.11 % |
| Ameren Corporation | 0.80 | 0.95 | 0.88 | 9.93 | 2.70 | 11.44 | 11.73 | 11.58 |
| Duke Energy Corporation | 0.90 | 0.98 | 0.94 | 9.93 | 2.70 | 12.03 | 12.18 | 12.11 |
| Edison International | 0.95 | 1.10 | 1.02 | 9.93 | 2.70 | 12.83 | 12.78 | 12.80 |
| Entergy Corporation | 0.95 | 1.19 | 1.07 | 9.93 | 2.70 | 13.32 | 13.15 | 13.23 |
| Evergy, Inc. | 0.95 | 1.07 | 1.01 | 9.93 | 2.70 | 12.73 | 12.70 | 12.71 |
| IDACORP, Inc. | 0.85 | 1.04 | 0.95 | 9.93 | 2.70 | 12.13 | 12.25 | 12.19 |
| NorthWestern Corporation | 0.95 | 1.27 | 1.11 | 9.93 | 2.70 | 13.72 | 13.45 | 13.58 |
| OGE Energy Corporation | 1.05 | 1.28 | 1.16 | 9.93 | 2.70 | 14.22 | 13.82 | 14.02 |
| Otter Tail Corporation | 0.90 | 1.07 | 0.98 | 9.93 | 2.70 | 12.43 | 12.48 | 12.45 |
| Pinnacle West Capital Corporation | 0.90 | 1.16 | 1.03 | 9.93 | 2.70 | 12.92 | 12.85 | 12.89 |
| Portland General Electric Company | 0.90 | 1.06 | 0.98 | 9.93 | 2.70 | 12.43 | 12.48 | 12.45 |
| Xcel Energy, Inc. | 0.80 | 0.99 | 0.89 | 9.93 | 2.70 | 11.53 | 11.81 | 11.67 |
| Mean | | | 1.00 | | | 12.60 % | 12.60 % | 12.60 % |
| Median | | | 0.98 | | | 12.43 % | 12.48 % | 12.45 % |
| Average of Mean and Median | | | 0.99 | | | 12.52 % | 12.54 % | 12.53 % |

Notes on page 2 of this Schedule.

Northern States Power Company
Notes to Accompany the Application of the CAPM and ECAPM

Notes:

(1) The market risk premium (MRP) is derived by using six different measures from three sources: Ibbotson, Value Line, and Bloomberg as illustrated below:

Historical Data MRP Estimates:

Measure 1: Ibbotson Arithmetic Mean MRP (1926-2020)

| | |
|---|---|
| Arithmetic Mean Monthly Returns for Large Stocks 1926-2020: | 12.20 % |
| Arithmetic Mean Income Returns on Long-Term Government Bonds: | 5.05 |
| MRP based on Ibbotson Historical Data: | 7.15 % |

Measure 2: Application of a Regression Analysis to Ibbotson Historical Data (1926-2020) 9.57 %

Measure 3: Application of the PRPM to Ibbotson Historical Data: (January 1926 - August 2021) 8.77 %

Value Line MRP Estimates:

Measure 4: Value Line Projected MRP (Thirteen weeks ending September 03, 2021)

| | |
|---|---|
| Total projected return on the market 3-5 years hence*: | 8.94 % |
| Projected Risk-Free Rate (see note 2): | 2.70 |
| MRP based on Value Line Summary & Index: | 6.24 % |

*Forcasted 3-5 year capital appreciation plus expected dividend yield

Measure 5: Value Line Projected Return on the Market based on the S&P 500

| | |
|---|---|
| Total return on the Market based on the S&P 500: | 15.05 % |
| Projected Risk-Free Rate (see note 2): | 2.70 |
| MRP based on Value Line data | 12.35 % |

Measure 6: Bloomberg Projected MRP

| | |
|---|---|
| Total return on the Market based on the S&P 500: | 18.17 % |
| Projected Risk-Free Rate (see note 2): | 2.70 |
| MRP based on Bloomberg data | 15.47 % |

Average of Value Line, Ibbotson, and Bloomberg MRP: 9.93 %

(2) For reasons explained in the direct testimony, the appropriate risk-free rate for cost of capital purposes is the average forecast of 30 year Treasury Bonds per the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts. (See pages 10 and 11 of Exhibit_(DWD-1), Schedule 6.) The projection of the risk-free rate is illustrated below:

| | |
|---|---|
| Third Quarter 2021 | 2.10 % |
| Fourth Quarter 2021 | 2.20 |
| First Quarter 2022 | 2.30 |
| Second Quarter 2022 | 2.50 |
| Third Quarter 2022 | 2.50 |
| Fourth Quarter 2022 | 2.60 |
| 2023-2027 | 3.50 |
| 2028-2032 | 3.90 |
| | 2.70 % |

(3) Average of Column 6 and Column 7.

Sources of Information:

Value Line Summary and Index
Blue Chip Financial Forecasts, September 1, 2021 and June 1, 2021
Stocks, Bonds, Bills, and Inflation - 2021 SBBI Yearbook, John Wiley & Sons, Inc.
Bloomberg Professional Services

Northern States Power Company
Basis of Selection of the Group of Non-Price Regulated Companies
Comparable in Total Risk to the Utility Proxy Group

The criteria for selection of the proxy group of 50 non-price regulated companies was that the non-price regulated companies be domestic and reported in Value Line Investment Survey (Standard Edition).

The Non-Price Regulated Proxy Group were then selected based on the unadjusted beta range of 0.68 – 0.96 and residual standard error of the regression range of 2.5491 – 3.0403 of the Utility Proxy Group.

These ranges are based upon plus or minus two standard deviations of the unadjusted beta and standard error of the regression. Plus or minus two standard deviations captures 95.50% of the distribution of unadjusted betas and residual standard errors of the regression.

The standard deviation of the Utility Proxy Group's residual standard error of the regression is 0.1228. The standard deviation of the standard error of the regression is calculated as follows:

$$\text{Standard Deviation of the Std. Err. of the Regr.} = \frac{\text{Standard Error of the Regression}}{\sqrt{2N}}$$

where: N = number of observations. Since Value Line betas are derived from weekly price change observations over a period of five years, N = 259

$$\text{Thus, } 0.1228 = \frac{2.7947}{\sqrt{518}} = \frac{2.7947}{22.7596}$$

Source of Information: Value Line, Inc., June 2021
Value Line Investment Survey (Standard Edition)

Northern States Power Company
Basis of Selection of Comparable Risk
Domestic Non-Price Regulated Companies

| Proxy Group of Thirteen Electric Companies | [1] Value Line Adjusted Beta | [2] Unadjusted Beta | [3] Residual Standard Error of the Regression | [4] Standard Deviation of Beta |
|---|---|---|---|---|
| Alliant Energy Corporation | 0.85 | 0.72 | 2.7798 | 0.0694 |
| Ameren Corporation | 0.80 | 0.69 | 2.6359 | 0.0658 |
| Duke Energy Corporation | 0.85 | 0.77 | 2.7562 | 0.0688 |
| Edison International | 0.95 | 0.91 | 3.2779 | 0.0818 |
| Entergy Corporation | 0.95 | 0.88 | 2.7090 | 0.0676 |
| Evergy, Inc. | 0.95 | 0.90 | 3.2697 | 0.0861 |
| IDACORP, Inc. | 0.85 | 0.70 | 2.5983 | 0.0648 |
| NorthWestern Corporation | 0.95 | 0.89 | 2.8009 | 0.0699 |
| OGE Energy Corporation | 1.05 | 1.06 | 2.7189 | 0.0678 |
| Otter Tail Corporation | 0.90 | 0.79 | 2.4385 | 0.0608 |
| Pinnacle West Capital Corporation | 0.90 | 0.84 | 2.7822 | 0.0694 |
| Portland General Electric Company | 0.90 | 0.79 | 2.8356 | 0.0707 |
| Xcel Energy, Inc. | 0.80 | 0.66 | 2.7280 | 0.0681 |
| Average | 0.90 | 0.82 | 2.7947 | 0.0701 |

| | | |
|---|---|---|
| Beta Range (+/- 2 std. Devs. of Beta) | 0.68 | 0.96 |
| 2 std. Devs. of Beta | 0.14 | |
| Residual Std. Err. Range (+/- 2 std. Devs. of the Residual Std. Err.) | 2.5491 | 3.0403 |
| Std. dev. of the Res. Std. Err. | 0.1228 | |
| 2 std. devs. of the Res. Std. Err. | 0.2456 | |

Source of Information: Valueline Proprietary Database, June 2021

Northern States Power Company
Proxy Group of Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Group of Thirteen Electric Companies

| Proxy Group of Fifty Non-Price Regulated Companies | [1] VL Adjusted Beta | [2] Unadjusted Beta | [3] Residual Standard Error of the Regression | [4] Standard Deviation of Beta |
|---|---|---|---|---|
| Agilent Technologies | 0.90 | 0.79 | 2.5758 | 0.0643 |
| Abbott Labs. | 0.90 | 0.84 | 2.7516 | 0.0687 |
| Analog Devices | 0.95 | 0.87 | 2.7247 | 0.0680 |
| Assurant Inc. | 0.90 | 0.84 | 2.8245 | 0.0705 |
| Smith (A.O.) | 0.85 | 0.75 | 2.7193 | 0.0678 |
| Air Products & Chem. | 0.90 | 0.79 | 2.6162 | 0.0653 |
| Brown-Forman 'B' | 0.90 | 0.81 | 2.7054 | 0.0675 |
| Broadridge Fin'l | 0.80 | 0.69 | 2.7697 | 0.0691 |
| Brady Corp. | 1.00 | 0.94 | 2.9465 | 0.0735 |
| CACI Int'l | 0.95 | 0.89 | 2.9930 | 0.0747 |
| Cerner Corp. | 0.90 | 0.82 | 2.6729 | 0.0667 |
| Chemed Corp. | 0.85 | 0.70 | 2.6649 | 0.0665 |
| Cooper Cos. | 0.95 | 0.90 | 2.6935 | 0.0672 |
| CSW Industrials | 0.90 | 0.82 | 2.8095 | 0.0701 |
| Quest Diagnostics | 0.80 | 0.69 | 2.9288 | 0.0731 |
| Dolby Labs. | 0.95 | 0.90 | 2.6027 | 0.0649 |
| Lauder (Estee) | 0.95 | 0.91 | 2.8562 | 0.0713 |
| Exponent, Inc. | 0.90 | 0.81 | 2.9605 | 0.0739 |
| FactSet Research | 1.00 | 0.95 | 2.6488 | 0.0661 |
| Gentex Corp. | 0.95 | 0.92 | 2.7712 | 0.0691 |
| Hershey Co. | 0.85 | 0.74 | 2.6733 | 0.0667 |
| Ingredion Inc. | 0.90 | 0.84 | 2.8771 | 0.0718 |
| Hunt (J.B.) | 0.95 | 0.87 | 2.8702 | 0.0716 |
| J&J Snack Foods | 0.95 | 0.86 | 2.9559 | 0.0738 |
| Henry (Jack) & Assoc | 0.85 | 0.71 | 2.8328 | 0.0707 |
| L3Harris Technologie | 1.00 | 0.93 | 2.7401 | 0.0772 |
| Lennox Int'l | 1.00 | 0.92 | 2.6639 | 0.0665 |
| McCormick & Co. | 0.80 | 0.68 | 2.7869 | 0.0695 |
| Monster Beverage | 0.85 | 0.76 | 3.0195 | 0.0753 |
| Altria Group | 0.95 | 0.86 | 2.9525 | 0.0737 |
| MSA Safety | 1.00 | 0.94 | 3.0342 | 0.0757 |
| MSCI Inc. | 0.95 | 0.87 | 2.9742 | 0.0742 |
| Motorola Solutions | 0.90 | 0.79 | 2.7312 | 0.0681 |
| Mettler-Toledo Int'l | 0.95 | 0.90 | 2.6192 | 0.0653 |
| Northrop Grumman | 0.85 | 0.72 | 2.8865 | 0.0720 |
| Old Dominion Freight | 0.90 | 0.86 | 2.9913 | 0.0746 |
| Packaging Corp. | 1.00 | 0.92 | 2.8690 | 0.0716 |
| Post Holdings | 0.95 | 0.87 | 2.9481 | 0.0736 |
| Rollins, Inc. | 0.85 | 0.73 | 2.9580 | 0.0738 |
| Service Corporation International | 0.95 | 0.91 | 2.5560 | 0.0638 |
| Sherwin-Williams | 0.95 | 0.85 | 2.6598 | 0.0664 |
| Selective Ins. Group | 0.90 | 0.80 | 2.9918 | 0.0746 |
| Sirius XM Holdings | 0.95 | 0.88 | 2.8551 | 0.0712 |
| Synopsys, Inc. | 0.95 | 0.91 | 2.8936 | 0.0722 |
| Texas Instruments Inc. | 0.85 | 0.76 | 2.6736 | 0.0667 |
| AMERCO | 0.95 | 0.89 | 2.6678 | 0.0666 |
| UniFirst Corp. | 0.95 | 0.92 | 2.7694 | 0.0691 |
| VeriSign Inc. | 0.90 | 0.79 | 2.6717 | 0.0667 |
| Waters Corp. | 0.95 | 0.87 | 2.7917 | 0.0697 |
| Watsco, Inc. | 0.85 | 0.73 | 2.7408 | 0.0684 |
| Average | 0.92 | 0.83 | 2.7978 | 0.0700 |
| Proxy Group of Thirteen Electric Companies | 0.90 | 0.82 | 2.7947 | 0.0701 |

Source of Information: Valueline Proprietary Database, June 2021

Northern States Power Company
Summary of Cost of Equity Models Applied to
Proxy Group of Fifty Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Group of Fifty Non-Price Regulated Companies

| Principal Methods | | Proxy Group of Fifty Non-Price Regulated Companies | |
|---|---|---|---|
| Discounted Cash Flow Model (DCF) (1) | | 12.19 | % |
| Risk Premium Model (RPM) (2) | | 12.64 | % |
| Capital Asset Pricing Model (CAPM) (3) | | 12.01 | % |
| | Mean | 12.28 | % |
| | Median | 12.19 | % |
| | Average of Mean and Median | 12.24 | % |

Notes:
(1) From page 2 of this Schedule.
(2) From page 4 of this Schedule.
(3) From page 7 of this Schedule.

Northern States Power Company
DCF Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Fifty Non-Price Regulated Companies

| | [1] | [2] | [3] | [4] | [5] | [6] | [7] |
|---|---|---|---|---|---|---|---|
| Proxy Group of Fifty Non-Price Regulated Companies | Average Dividend Yield | Value Line Projected Five Year Growth in EPS | Zack's Five Year Projected Growth Rate in EPS | Yahoo! Finance Projected Five Year Growth in EPS | Average Projected Five Year Growth Rate in EPS | Adjusted Dividend Yield | Indicated Common Equity Cost Rate (1) |
| Agilent Technologies | 0.51 % | 11.50 % | 13.00 % | 53.30 % | 25.93 % | 0.57 % | 26.50 % |
| Abbott Labs. | 1.52 | 11.50 | 11.90 | 12.53 | 11.98 | 1.61 | 13.59 |
| Analog Devices | 1.66 | 8.50 | 12.30 | 13.52 | 11.44 | 1.75 | 13.19 |
| Assurant Inc. | 1.66 | 11.50 | 17.90 | 17.90 | 15.77 | 1.79 | 17.56 |
| Smith (A.O.) | 1.48 | 9.50 | 9.00 | 8.00 | 8.83 | 1.54 | 10.37 |
| Air Products & Chem. | 2.10 | 12.00 | 10.50 | 11.96 | 11.49 | 2.22 | 13.71 |
| Brown-Forman 'B' | 1.00 | 13.00 | NA | 8.44 | 10.72 | 1.05 | 11.77 |
| Broadridge Fin'l | 1.52 | 8.50 | NA | 11.80 | 10.15 | 1.60 | 11.75 |
| Brady Corp. | 1.61 | 7.50 | 7.00 | 7.00 | 7.17 | 1.66 | 8.83 |
| CACI Int'l | - | 13.50 | 5.40 | 1.44 | 6.78 | - | NA |
| Cerner Corp. | 1.11 | 9.00 | 12.30 | 11.81 | 11.04 | 1.18 | 12.22 |
| Chemed Corp. | 0.30 | 9.00 | 7.50 | 7.55 | 8.02 | 0.32 | 8.34 |
| Cooper Cos. | 0.01 | 14.50 | 10.00 | 10.00 | 11.50 | 0.02 | 11.52 |
| CSW Industrials | 0.49 | 11.50 | NA | 12.00 | 11.75 | 0.52 | 12.27 |
| Quest Diagnostics | 1.78 | 7.00 | 26.50 | (8.60) | 16.75 | 1.93 | 18.68 |
| Dolby Labs. | 0.89 | 9.50 | 13.00 | 16.00 | 12.83 | 0.95 | 13.78 |
| Lauder (Estee) | 0.66 | 11.00 | 11.30 | 18.71 | 13.67 | 0.71 | 14.38 |
| Exponent, Inc. | 0.80 | 12.00 | NA | 15.00 | 13.50 | 0.86 | 14.36 |
| FactSet Research | 0.94 | 9.50 | 8.00 | 6.29 | 7.93 | 0.98 | 8.91 |
| Gentex Corp. | 1.47 | 12.00 | 10.50 | 15.80 | 12.77 | 1.56 | 14.33 |
| Hershey Co. | 2.04 | 5.50 | 7.70 | 8.82 | 7.34 | 2.12 | 9.46 |
| Ingredion Inc. | 2.87 | 7.50 | NA | 1.90 | 4.70 | 2.93 | 7.63 |
| Hunt (J.B.) | 0.72 | 8.00 | 15.00 | 20.50 | 14.50 | 0.77 | 15.27 |
| J&J Snack Foods | 1.50 | 10.00 | NA | 6.00 | 8.00 | 1.56 | 9.56 |
| Henry (Jack) & Assoc | 1.08 | 9.50 | 11.00 | 9.64 | 10.05 | 1.14 | 11.19 |
| L3Harris Technologie | 1.81 | NA | 8.60 | 10.21 | 9.41 | 1.89 | 11.30 |
| Lennox Int'l | 1.11 | 9.00 | NA | 16.72 | 12.86 | 1.18 | 14.04 |
| McCormick & Co. | 1.57 | 6.00 | 6.80 | 6.50 | 6.43 | 1.62 | 8.05 |
| Monster Beverage | - | 11.50 | 14.70 | 14.85 | 13.68 | - | NA |
| Altria Group | 7.19 | 6.00 | 4.00 | 4.67 | 4.89 | 7.36 | 12.25 |
| MSA Safety | 1.08 | 6.50 | NA | 18.00 | 12.25 | 1.15 | 13.40 |
| MSCI Inc. | 0.73 | 16.00 | NA | 17.79 | 16.90 | 0.79 | 17.69 |
| Motorola Solutions | 1.27 | 7.00 | 9.00 | 13.73 | 9.91 | 1.33 | 11.24 |
| Mettler-Toledo Int'l | - | 12.00 | 17.00 | 17.80 | 15.60 | - | NA |
| Northrop Grumman | 1.72 | 7.00 | 9.00 | 6.66 | 7.55 | 1.78 | 9.33 |
| Old Dominion Freight | 0.30 | 9.50 | 22.70 | 22.70 | 18.30 | 0.33 | 18.63 |
| Packaging Corp. | 2.86 | 5.00 | 5.00 | 16.86 | 8.95 | 2.98 | 11.93 |
| Post Holdings | - | 9.50 | NA | 28.20 | 18.85 | - | NA |
| Rollins, Inc. | 0.88 | 11.50 | NA | 8.20 | 9.85 | 0.93 | 10.78 |
| Service Corporation International | 1.58 | 8.00 | 17.40 | 4.11 | 9.84 | 1.66 | 11.50 |
| Sherwin-Williams | 0.77 | 10.50 | 12.60 | 11.87 | 11.66 | 0.81 | 12.47 |
| Selective Ins. Group | 1.25 | 9.50 | 12.40 | 10.00 | 10.63 | 1.31 | 11.94 |
| Sirius XM Holdings | 0.91 | 31.50 | 12.20 | 10.05 | 17.92 | 0.99 | 18.91 |
| Synopsys, Inc. | - | 13.00 | 16.00 | 16.00 | 15.00 | - | NA |
| Texas Instruments Inc. | 2.16 | 8.50 | 9.30 | 10.00 | 9.27 | 2.26 | 11.53 |
| AMERCO | - | 13.50 | NA | 15.00 | 14.25 | - | NA |
| UniFirst Corp. | 0.45 | 5.50 | NA | 10.00 | 7.75 | 0.47 | 8.22 |
| VeriSign Inc. | - | 8.50 | NA | 8.00 | 8.25 | - | NA |
| Waters Corp. | - | 6.00 | 9.40 | 9.30 | 8.23 | - | NA |
| Watsco, Inc. | 2.77 | 8.00 | NA | 15.00 | 11.50 | 2.92 | 14.42 |
| | | | | | | Mean | 12.78 % |
| | | | | | | Median | 12.08 % |
| | | | | | | Average of Mean and Median | 12.43 % |
| | | | | | | Excl. 7% or less: | 12.43 % |

NA= Not Available
NMF= Not Meaningful Figure

(1) The application of the DCF model to the domestic, non-price regluated comparable risk companies is identical to the application of the DCF to the Utility Proxy Group. The dividend yield is derived by using the 60 day average price and the spot indicated dividend as of August 31, 2021. The dividend yield is then adjusted by 1/2 the average projected growth rate in EPS, which is calculated by averaging the 5 year projected growth in EPS provided by Value Line, www.zacks.com, and www.yahoo.com (excluding any negative growth rates) and then adding that growth rate to the adjusted dividend yield.

Source of Information:
Value Line Investment Survey
www.zacks.com Downloaded on 08/31/2021
www.yahoo.com Downloaded on 08/31/2021

Northern States Power Company
Indicated Common Equity Cost Rate Using the Two Growth Discounted Cash Flow Model for the
Proxy Group of Fifty Non-Price Regulated Companies

| | [1] | [2] | [3] | [4] | [5] | [7] | [8] | [9] | [10] |
|---|---|---|---|---|---|---|---|---|---|
| Proxy Group of Fifty Non-Price Regulated Companies | Stock Price | Annualized Dividend | Dividend Yield (1) | Value Line Projected Five Year Growth in EPS | Zack's Five Year Projected Growth Rate in EPS | Yahoo! Finance Projected Five Year Growth in EPS | Average Projected Five Year Growth in EPS (2) | Adjusted Dividend Yield (3) | Indicated Common Equity Cost Rate (4) |
| Agilent Technologies | $ 175.47 | $ 0.78 | 0.44 % | 11.50 % | 13.00 % | 53.30 % | 25.93 % | 0.50 % | 11.60 %(5) |
| Abbott Labs. | 126.37 | 1.80 | 1.42 | 11.50 | 11.90 | 12.53 | 11.98 | 1.51 | 13.49 |
| Analog Devices | 162.95 | 2.76 | 1.69 | 8.50 | 12.30 | 13.52 | 11.44 | 1.79 | 13.23 |
| Assurant Inc. | 170.11 | 2.64 | 1.55 | 11.50 | 17.90 | 17.90 | 15.77 | 1.67 | 12.81 (5) |
| Smith (A.O.) | 72.72 | 1.04 | 1.43 | 9.50 | 9.00 | 8.00 | 8.83 | 1.49 | 10.32 |
| Air Products & Chem. | 269.51 | 6.00 | 2.23 | 12.00 | 10.50 | 11.96 | 11.49 | 2.36 | 13.85 |
| Brown-Forman 'B' | 70.22 | 0.72 | 1.03 | 13.00 | NA | 8.44 | 10.72 | 1.09 | 11.81 |
| Broadridge Fin'l | 172.22 | 2.56 | 1.49 | 8.50 | NA | 11.80 | 10.15 | 1.57 | 11.72 |
| Brady Corp. | 53.33 | 0.88 | 1.65 | 7.50 | 7.00 | 7.00 | 7.17 | 1.71 | 12.24 (5) |
| CACI Int'l | 257.54 | - | - | 13.50 | 5.40 | 1.44 | 6.78 | 0.00 | NA |
| Cerner Corp. | 76.35 | 0.88 | 1.15 | 9.00 | 12.30 | 11.81 | 11.04 | 1.21 | 12.25 |
| Chemed Corp. | 476.70 | 1.44 | 0.30 | 9.00 | 7.50 | 7.55 | 8.02 | 0.31 | 8.33 |
| Cooper Cos. | 450.71 | 0.06 | 0.01 | 14.50 | 10.00 | 10.00 | 11.50 | 0.01 | 11.51 |
| CSW Industrials | 132.79 | 0.60 | 0.45 | 11.50 | NA | 12.00 | 11.75 | 0.48 | 12.23 |
| Quest Diagnostics | 152.83 | 2.48 | 1.62 | 7.00 | 26.50 | (8.60) | 8.30 | 1.69 | 9.99 |
| Dolby Labs. | 99.11 | 0.88 | 0.89 | 9.50 | 13.00 | 16.00 | 12.83 | 0.95 | 13.78 |
| Lauder (Estee) | 340.49 | 2.12 | 0.62 | 11.00 | 11.30 | 18.71 | 13.67 | 0.66 | 14.33 |
| Exponent, Inc. | 116.90 | 0.80 | 0.68 | 12.00 | NA | 15.00 | 13.50 | 0.73 | 14.23 |
| FactSet Research | 380.22 | 3.28 | 0.86 | 9.50 | 8.00 | 6.29 | 7.93 | 0.89 | 8.82 |
| Gentex Corp. | 30.80 | 0.48 | 1.56 | 12.00 | 10.50 | 15.80 | 12.77 | 1.66 | 14.43 |
| Hershey Co. | 177.70 | 3.60 | 2.03 | 5.50 | 7.70 | 8.82 | 7.34 | 2.10 | 9.44 |
| Ingredion Inc. | 87.86 | 2.56 | 2.91 | 7.50 | NA | 1.90 | 4.70 | 2.98 | 13.15 (5) |
| Hunt (J.B.) | 177.40 | 1.20 | 0.68 | 8.00 | 15.00 | 20.50 | 14.50 | 0.73 | 15.23 |
| J&J Snack Foods | 163.76 | 2.53 | 1.55 | 10.00 | NA | 6.00 | 8.00 | 1.61 | 9.61 |
| Henry (Jack) & Assoc | 176.38 | 1.84 | 1.04 | 9.50 | 11.00 | 9.64 | 10.05 | 1.09 | 11.14 |
| L3Harris Technologie | 233.01 | 4.08 | 1.75 | NA | 8.60 | 10.21 | 9.41 | 1.83 | 11.24 |
| Lennox Int'l | 335.18 | 3.68 | 1.10 | 9.00 | NA | 16.72 | 12.86 | 1.17 | 14.03 |
| McCormick & Co. | 86.29 | 1.36 | 1.58 | 6.00 | 6.80 | 6.50 | 6.43 | 1.63 | 12.12 (5) |
| Monster Beverage | 97.57 | - | - | 11.50 | 14.70 | 14.85 | 13.68 | 0.00 | 13.68 |
| Altria Group | 50.23 | 3.44 | 6.85 | 6.00 | 4.00 | 4.67 | 4.89 | 7.02 | 16.64 (5) |
| MSA Safety | 162.84 | 1.76 | 1.08 | 6.50 | NA | 18.00 | 12.25 | 1.15 | 13.40 |
| MSCI Inc. | 634.58 | 4.16 | 0.66 | 16.00 | NA | 17.79 | 16.90 | 0.72 | 11.63 (5) |
| Motorola Solutions | 244.22 | 2.84 | 1.16 | 7.00 | 9.00 | 13.73 | 9.91 | 1.22 | 11.13 |
| Mettler-Toledo Int'l | 1,552.83 | - | - | 12.00 | 17.00 | 17.80 | 15.60 | 0.00 | NA |
| Northrop Grumman | 367.70 | 6.28 | 1.71 | 7.00 | 9.00 | 6.66 | 7.55 | 1.77 | 9.32 |
| Old Dominion Freight | 288.72 | 0.80 | 0.28 | 9.50 | 22.70 | 22.70 | 18.30 | 0.31 | 11.11 (5) |
| Packaging Corp. | 151.70 | 4.00 | 2.64 | 5.00 | 5.00 | 16.86 | 8.95 | 2.76 | 11.71 |
| Post Holdings | 111.91 | - | - | 9.50 | NA | 28.20 | 18.85 | 0.00 | NA |
| Rollins, Inc. | 38.92 | 0.32 | 0.82 | 11.50 | NA | 8.20 | 9.85 | 0.86 | 10.71 |
| Service Corporation International | 62.76 | 0.92 | 1.47 | 8.00 | 17.40 | 4.11 | 9.84 | 1.54 | 11.38 |
| Sherwin-Williams | 303.67 | 2.20 | 0.72 | 10.50 | 12.60 | 11.87 | 11.66 | 0.76 | 12.42 |
| Selective Ins. Group | 83.57 | 1.00 | 1.20 | 9.50 | 12.40 | 10.00 | 10.63 | 1.26 | 11.89 |
| Sirius XM Holdings | 6.27 | 0.06 | 0.93 | 31.50 | 12.20 | 10.05 | 17.92 | 1.01 | 12.09 (5) |
| Synopsys, Inc. | 332.24 | - | - | 13.00 | 16.00 | 16.00 | 15.00 | 0.00 | 15.00 |
| Texas Instruments Inc. | 190.91 | 4.08 | 2.14 | 8.50 | 9.30 | 10.00 | 9.27 | 2.24 | 11.51 |
| AMERCO | 661.15 | - | - | 13.50 | NA | 15.00 | 14.25 | 0.00 | 14.25 |
| UniFirst Corp. | 229.07 | 1.00 | 0.44 | 5.50 | NA | 10.00 | 7.75 | 0.46 | 8.21 |
| VeriSign Inc. | 216.26 | - | - | 8.50 | NA | 8.00 | 8.25 | 0.00 | 8.25 |
| Waters Corp. | 414.02 | - | - | 6.00 | 9.40 | 9.30 | 8.23 | 0.00 | 8.23 |
| Watsco, Inc. | 278.42 | 7.80 | 2.80 | 8.00 | NA | 6.30 | 7.15 | 2.90 | 13.34 (5) |
| | | | | | | Average | 11.23 | Average | 11.98 % |
| | | | | | 1 Standard Deviation Below Mean | | 7.27 | | |
| | | | | | 1 Standard Deviation Above Mean | | 15.20 | Median | 11.89 % |
| | | | | | | | | Average of Mean and Median | 11.94 % |
| | | | | | | | | Excl. 7% or less: | 11.94 % |

NA= Not Available
NMF= Not Meaningful Figure

Notes:

(1) Indicated dividend at 08/31/2021 divided by the average closing price of the last 60 trading days ending 08/31/2021 for
(2) Average of columns 4 through 7 excluding negative growth rates.
(3) This reflects a growth rate component equal to one-half the conclusion of growth rate (from column 8) x column 3 to reflect the periodic payment of dividends (Gordon Model) as opposed to the continuous payment. Thus, for Agilent Technologies, 0.44% x
(4) Column 8 + column 9.
(5) The Two Growth Method was applied to Companies with short-term EPS growth rates greater than one standard deviation from the overall Utility Proxy Group mean growth rate. The mean of all Utility Proxy Group Companies with growth rates are within one standard deviation of the overall mean growth rate was applied as the long-term growth rate for these Companies.

Source of Information:
Value Line Investment Survey
www.zacks.com Downloaded on 08/31/2021
www.yahoo.com Downloaded on 08/31/2021

Northern States Power Company
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

| Line No. | | Proxy Group of Fifty Non-Price Regulated Companies |
|---|---|---|
| 1. | Prospective Yield on Baa2 Rated Corporate Bonds (1) | 4.30 % |
| 2. | Adjustment to Reflect Proxy Group Bond Rating (2) | (0.12) |
| 3. | Prospective Bond Rating | 4.18 |
| 4. | Equity Risk Premium (3) | 8.46 |
| 5 | Risk Premium Derived Common Equity Cost Rate | 12.64 % |

Notes: (1) Average forecast of Baa2 corporate bonds based upon the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated September 1, 2021 and June 1, 2021 (see pages 10 and 11 of Exhibit_(DWD-1), Schedule 6). The estimates are detailed below.

| | |
|---|---|
| Third Quarter 2021 | 3.40 % |
| Fourth Quarter 2021 | 3.70 |
| First Quarter 2022 | 3.90 |
| Second Quarter 2022 | 4.00 |
| Third Quarter 2022 | 4.10 |
| Fourth Quarter 2022 | 4.20 |
| 2023-2027 | 5.30 |
| 2028-2032 | 5.80 |
| Average | 4.30 % |

(2) To reflect the Baa1 average rating of the non-utility proxy group, the prosepctive yield on Baa2 corporate bonds must be adjusted downward by 1/3 of the spread between A2 and Baa2 corporate bond yields as shown below:

| | A2 Corp. Bond Yield | Baa2 Corp. Bond Yield | Spread |
|---|---|---|---|
| Aug-2021 | 2.89 % | 3.24 % | 0.35 % |
| Jul-2021 | 2.89 | 3.24 | 0.35 |
| Jun-2021 | 3.10 | 3.45 | 0.35 |
| | Average yield spread | | 0.35 % |
| | | 1/3 of spread | 0.12 % |

(3) From page 5 of this Schedule.

Northern States Power Company
Comparison of Long-Term Issuer Ratings for the
Proxy Group of Fifty Non-Price Regulated Companies of Comparable risk to the
Proxy Group of Fifty Non-Price Regulated Companies

| | Moody's Long-Term Issuer Rating August 2021 | | Standard & Poor's Long-Term Issuer Rating August 2021 | |
|---|---|---|---|---|
| Proxy Group of Fifty Non-Price Regulated Companies | Long-Term Issuer Rating | Numerical Weighting (1) | Long-Term Issuer Rating | Numerical Weighting (1) |
| Agilent Technologies | Baa2 | 9.0 | BBB+ | 8.0 |
| Abbott Labs. | A2 | 6.0 | A+ | 5.0 |
| Analog Devices | Baa1 | 8.0 | BBB+ | 8.0 |
| Assurant Inc. | Baa3 | 10.0 | BBB | 9.0 |
| Smith (A.O.) | NA | -- | NA | -- |
| Air Products & Chem. | A2 | 6.0 | A | 6.0 |
| Brown-Forman 'B' | A1 | 5.0 | A- | 7.0 |
| Broadridge Fin'l | Baa1 | 8.0 | BBB+ | 8.0 |
| Brady Corp. | NA | -- | NA | -- |
| CACI Int'l | NA | -- | BB+ | 11.0 |
| Cerner Corp. | NA | -- | NA | -- |
| Chemed Corp. | WR | -- | NR | -- |
| Cooper Cos. | WR | -- | NR | -- |
| CSW Industrials | NA | -- | NA | -- |
| Quest Diagnostics | Baa2 | 9.0 | BBB+ | 8.0 |
| Dolby Labs. | NA | -- | NA | -- |
| Lauder (Estee) | A1 | 5.0 | A+ | 5.0 |
| Exponent, Inc. | NA | -- | NA | -- |
| FactSet Research | NA | -- | NA | -- |
| Gentex Corp. | NA | -- | NA | -- |
| Hershey Co. | A1 | 5.0 | A | 6.0 |
| Ingredion Inc. | Baa1 | 8.0 | BBB | 9.0 |
| Hunt (J.B.) | Baa1 | 8.0 | BBB+ | 8.0 |
| J&J Snack Foods | NA | -- | NA | -- |
| Henry (Jack) & Assoc | NA | -- | NA | -- |
| L3Harris Technologie | Baa2 | 9.0 | BBB | 9.0 |
| Lennox Int'l | Baa2 | 9.0 | BBB | 9.0 |
| McCormick & Co. | Baa2 | 9.0 | BBB | 9.0 |
| Monster Beverage | NA | -- | NA | -- |
| Altria Group | A3 | 7.0 | BBB | 9.0 |
| MSA Safety | NA | -- | NA | -- |
| MSCI Inc. | Ba1 | 11.0 | BB+ | 11.0 |
| Motorola Solutions | Baa3 | 10.0 | BBB- | 10.0 |
| Mettler-Toledo Int'l | WR | -- | NR | -- |
| Northrop Grumman | Baa1 | 8.0 | BBB+ | 8.0 |
| Old Dominion Freight | NA | -- | NA | -- |
| Packaging Corp. | Baa2 | 9.0 | BBB | 9.0 |
| Post Holdings | B2 | 15.0 | B+ | 14.0 |
| Rollins, Inc. | NA | -- | NA | -- |
| Service Corporation International | Ba2 | 12.0 | BB+ | 11.0 |
| Sherwin-Williams | Baa2 | 9.0 | BBB | 9.0 |
| Selective Ins. Group | Baa2 | 9.0 | BBB | 9.0 |
| Sirius XM Holdings | NA | -- | BB | 12.0 |
| Synopsys, Inc. | NA | -- | NA | -- |
| Texas Instruments Inc. | A1 | 5.0 | A+ | 5.0 |
| AMERCO | WR | -- | NR | -- |
| UniFirst Corp. | NA | -- | NA | -- |
| VeriSign Inc. | Baa3 | 10.0 | BBB | 9.0 |
| Waters Corp. | NA | | NA | |
| Watsco, Inc. | NA | -- | NA | -- |
| Average | Baa1 | 8.4 | BBB | 8.6 |

Notes:
(1) From page 6 of Exhibit_(DWD-1), Schedule 6.

Source of Information:
Bloomberg Professional Services

Northern States Power Company
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for
Proxy Group of Fifty Non-Price Regulated Companies of Comparable risk to the
Proxy Group of Fifty Non-Price Regulated Companies

| Line No. | Equity Risk Premium Measure | Proxy Group of Fifty Non-Price Regulated Companies |
|---|---|---|
| | Ibbotson-Based Equity Risk Premiums: | |
| 1. | Ibbotson Equity Risk Premium (1) | 5.92 % |
| 2. | Regression on Ibbotson Risk Premium Data (2) | 8.87 |
| 3. | Ibbotson Equity Risk Premium based on PRPM (3) | 7.88 |
| 4. | Equity Risk Premium Based on Value Line Summary and Index (4) | 5.53 |
| 5 | Equity Risk Premium Based on Value Line S&P 500 Companies (5) | 11.64 |
| 6. | Equity Risk Premium Based on Bloomberg S&P 500 Companies (6) | 14.76 |
| 7. | Conclusion of Equity Risk Premium | 9.10 % |
| 8. | Adjusted Beta (7) | 0.93 |
| 9. | Forecasted Equity Risk Premium | 8.46 % |

Notes:
(1) From note 1 of page 9 of Exhibit_(DWD-1), Schedule 6.
(2) From note 2 of page 9 of Exhibit_(DWD-1), Schedule 6.
(3) From note 3 of page 9 of Exhibit_(DWD-1), Schedule 6.
(4) From note 4 of page 9 of Exhibit_(DWD-1), Schedule 6.
(5) From note 5 of page 9 of Exhibit_(DWD-1), Schedule 6.
(6) From note 6 of page 9 of Exhibit_(DWD-1), Schedule 6.
(7) Average of mean and median beta from page 7 of this Schedule.

Sources of Information:
Stocks, Bonds, Bills, and Inflation - 2021 SBBI Yearbook, John Wiley & Sons, Inc.
Value Line Summary and Index
Blue Chip Financial Forecasts, September 1, 2021 and June 1, 2021
Bloomberg Professional Services

Northern States Power Company
Traditional CAPM and ECAPM Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Fifty Non-Price Regulated Companies

| | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] |
|---|---|---|---|---|---|---|---|---|
| Proxy Group of Fifty Non-Price Regulated Companies | Value Line Adjusted Beta | Bloomberg Beta | Average Beta | Market Risk Premium (1) | Risk-Free Rate (2) | Traditional CAPM Cost Rate | ECAPM Cost Rate | Indicated Common Equity Cost Rate (3) |
| Agilent Technologies | 0.90 | 0.86 | 0.88 | 9.93 % | 2.70 % | 11.44 % | 11.73 % | 11.58 % |
| Abbott Labs. | 0.90 | 0.84 | 0.87 | 9.93 | 2.70 | 11.34 | 11.66 | 11.50 |
| Analog Devices | 0.95 | 1.02 | 0.98 | 9.93 | 2.70 | 12.43 | 12.48 | 12.45 |
| Assurant Inc. | 0.90 | 1.01 | 0.95 | 9.93 | 2.70 | 12.13 | 12.25 | 12.19 |
| Smith (A.O.) | 0.85 | 1.00 | 0.93 | 9.93 | 2.70 | 11.93 | 12.11 | 12.02 |
| Air Products & Chem. | 0.90 | 0.90 | 0.90 | 9.93 | 2.70 | 11.63 | 11.88 | 11.76 |
| Brown-Forman 'B' | 0.90 | 0.97 | 0.93 | 9.93 | 2.70 | 11.93 | 12.11 | 12.02 |
| Broadridge Fin'l | 0.85 | 0.83 | 0.84 | 9.93 | 2.70 | 11.04 | 11.44 | 11.24 |
| Brady Corp. | 1.00 | 1.07 | 1.04 | 9.93 | 2.70 | 13.02 | 12.92 | 12.97 |
| CACI Int'l | 0.95 | 1.00 | 0.98 | 9.93 | 2.70 | 12.43 | 12.48 | 12.45 |
| Cerner Corp. | 0.90 | 0.89 | 0.89 | 9.93 | 2.70 | 11.53 | 11.81 | 11.67 |
| Chemed Corp. | 0.85 | 0.92 | 0.89 | 9.93 | 2.70 | 11.53 | 11.81 | 11.67 |
| Cooper Cos. | 0.95 | 0.94 | 0.95 | 9.93 | 2.70 | 12.13 | 12.25 | 12.19 |
| CSW Industrials | 0.90 | 1.05 | 0.98 | 9.93 | 2.70 | 12.43 | 12.48 | 12.45 |
| Quest Diagnostics | 0.80 | 0.97 | 0.88 | 9.93 | 2.70 | 11.44 | 11.73 | 11.58 |
| Dolby Labs. | 0.95 | 0.94 | 0.94 | 9.93 | 2.70 | 12.03 | 12.18 | 12.11 |
| Lauder (Estee) | 0.95 | 1.01 | 0.98 | 9.93 | 2.70 | 12.43 | 12.48 | 12.45 |
| Exponent, Inc. | 0.90 | 0.96 | 0.93 | 9.93 | 2.70 | 11.93 | 12.11 | 12.02 |
| FactSet Research | 1.00 | 0.98 | 0.99 | 9.93 | 2.70 | 12.53 | 12.55 | 12.54 |
| Gentex Corp. | 0.95 | 1.07 | 1.01 | 9.93 | 2.70 | 12.73 | 12.70 | 12.71 |
| Hershey Co. | 0.85 | 0.85 | 0.85 | 9.93 | 2.70 | 11.14 | 11.51 | 11.32 |
| Ingredion Inc. | 0.90 | 0.93 | 0.91 | 9.93 | 2.70 | 11.73 | 11.96 | 11.85 |
| Hunt (J.B.) | 0.95 | 0.94 | 0.94 | 9.93 | 2.70 | 12.03 | 12.18 | 12.11 |
| J&J Snack Foods | 0.95 | 0.81 | 0.88 | 9.93 | 2.70 | 11.44 | 11.73 | 11.58 |
| Henry (Jack) & Assoc | 0.85 | 0.88 | 0.87 | 9.93 | 2.70 | 11.34 | 11.66 | 11.50 |
| L3Harris Technologie | 1.00 | 1.00 | 1.00 | 9.93 | 2.70 | 12.63 | 12.63 | 12.63 |
| Lennox Int'l | 1.00 | 1.04 | 1.02 | 9.93 | 2.70 | 12.83 | 12.78 | 12.80 |
| McCormick & Co. | 0.80 | 0.70 | 0.75 | 9.93 | 2.70 | 10.15 | 10.77 | 10.46 |
| Monster Beverage | 0.85 | 0.97 | 0.91 | 9.93 | 2.70 | 11.73 | 11.96 | 11.85 |
| Altria Group | 0.95 | 0.91 | 0.93 | 9.93 | 2.70 | 11.93 | 12.11 | 12.02 |
| MSA Safety | 1.00 | 1.00 | 1.00 | 9.93 | 2.70 | 12.63 | 12.63 | 12.63 |
| MSCI Inc. | 0.95 | 0.93 | 0.94 | 9.93 | 2.70 | 12.03 | 12.18 | 12.11 |
| Motorola Solutions | 0.90 | 0.96 | 0.93 | 9.93 | 2.70 | 11.93 | 12.11 | 12.02 |
| Mettler-Toledo Int'l | 0.95 | 0.90 | 0.93 | 9.93 | 2.70 | 11.93 | 12.11 | 12.02 |
| Northrop Grumman | 0.85 | 0.79 | 0.82 | 9.93 | 2.70 | 10.84 | 11.29 | 11.06 |
| Old Dominion Freight | 0.90 | 0.98 | 0.94 | 9.93 | 2.70 | 12.03 | 12.18 | 12.11 |
| Packaging Corp. | 1.00 | 0.79 | 0.90 | 9.93 | 2.70 | 11.63 | 11.88 | 11.76 |
| Post Holdings | 0.95 | 0.90 | 0.92 | 9.93 | 2.70 | 11.83 | 12.03 | 11.93 |
| Rollins, Inc. | 0.85 | 0.69 | 0.77 | 9.93 | 2.70 | 10.34 | 10.91 | 10.63 |
| Service Corporation International | 0.95 | 1.08 | 1.02 | 9.93 | 2.70 | 12.83 | 12.78 | 12.80 |
| Sherwin-Williams | 0.95 | 0.99 | 0.97 | 9.93 | 2.70 | 12.33 | 12.40 | 12.37 |
| Selective Ins. Group | 0.90 | 0.99 | 0.94 | 9.93 | 2.70 | 12.03 | 12.18 | 12.11 |
| Sirius XM Holdings | 0.95 | 1.12 | 1.04 | 9.93 | 2.70 | 13.02 | 12.92 | 12.97 |
| Synopsys, Inc. | 0.95 | 1.02 | 0.98 | 9.93 | 2.70 | 12.43 | 12.48 | 12.45 |
| Texas Instruments Inc. | 0.85 | 0.89 | 0.87 | 9.93 | 2.70 | 11.34 | 11.66 | 11.50 |
| AMERCO | 0.95 | 1.08 | 1.01 | 9.93 | 2.70 | 12.73 | 12.70 | 12.71 |
| UniFirst Corp. | 0.95 | 1.13 | 1.04 | 9.93 | 2.70 | 13.02 | 12.92 | 12.97 |
| VeriSign Inc. | 0.90 | 0.77 | 0.84 | 9.93 | 2.70 | 11.04 | 11.44 | 11.24 |
| Waters Corp. | 0.95 | 0.85 | 0.90 | 9.93 | 2.70 | 11.63 | 11.88 | 11.76 |
| Watsco, Inc. | 0.85 | 0.80 | 0.83 | 9.93 | 2.70 | 10.94 | 11.36 | 11.15 |
| Mean | | | 0.93 | | | 11.91 % | 12.09 % | 12.00 % |
| Median | | | 0.93 | | | 11.93 % | 12.11 % | 12.02 % |
| Average of Mean and Median | | | 0.93 | | | 11.92 % | 12.10 % | 12.01 % |

Notes:
(1) From note 1 of page 2 of Exhibit_(DWD-1), Schedule 7.
(2) From note 2 of page 2 of Exhibit_(DWD-1), Schedule 7.
(3) Average of CAPM and ECAPM cost rates.

Northern States Power Company
Derivation of Investment Risk Adjustment Based upon
Ibbotson Associates' Size Premia for the Decile Portfolios of the NYSE/AMEX/NASDAQ

| Line No. | | [1] Market Capitalization on August 31, 2021 (1) ( millions ) | | [2] Applicable Decile of the NYSE/AMEX/ NASDAQ (2) | [3] Applicable Size Premium (3) | [4] Spread from Applicable Size Premium (4) |
|---|---|---|---|---|---|---|
| 1. | Northern States Power Company | $ 11,194.007 | | 3 | 0.71% | |
| 2. | Proxy Group of Thirteen Electric Companies | $ 15,189.501 | 1.4 x | 2 | 0.49% | 0.22% |
| | | | [A] | [B] | [C] | [D] |

| | Decile | Market Capitalization of Smallest Company ( millions ) | Market Capitalization of Largest Company ( millions ) | Size Premium (Return in Excess of CAPM)* |
|---|---|---|---|---|
| Largest | 1 | $ 29,025.803 | $ 1,966,078.882 | -0.22% |
| | 2 | 13,178.743 | 28,808.073 | 0.49% |
| | 3 | 6,743.361 | 13,177.828 | 0.71% |
| | 4 | 3,861.858 | 6,710.676 | 0.75% |
| | 5 | 2,445.693 | 3,836.536 | 1.09% |
| | 6 | 1,591.865 | 2,444.745 | 1.37% |
| | 7 | 911.586 | 1,591.765 | 1.54% |
| | 8 | 451.955 | 911.103 | 1.46% |
| | 9 | 190.019 | 451.800 | 2.29% |
| Smallest | 10 | 2.194 | 189.831 | 5.01% |

*From 2021 Duff & Phelps Cost of Capital Navigator

Notes:

(1) From page 2 of this Schedule.

(2) Gleaned from Columns [B] and [C] on the bottom of this page. The appropriate decile (Column [A]) corresponds to the market capitalization of the proxy group, which is found in Column [1].

(3) Corresponding risk premium to the decile is provided in Column [D] on the bottom of this page.

(4) Line No. 1 Column [3] – Line No. 2 Column [3]. For example, the 0.22% in Column [4], Line No. 2 is derived as follows 0.22% = 0.71% - 0.49%.

Northern States Power Company
Market Capitalization of Northern States Power Company and the
Proxy Group of Thirteen Electric Companies

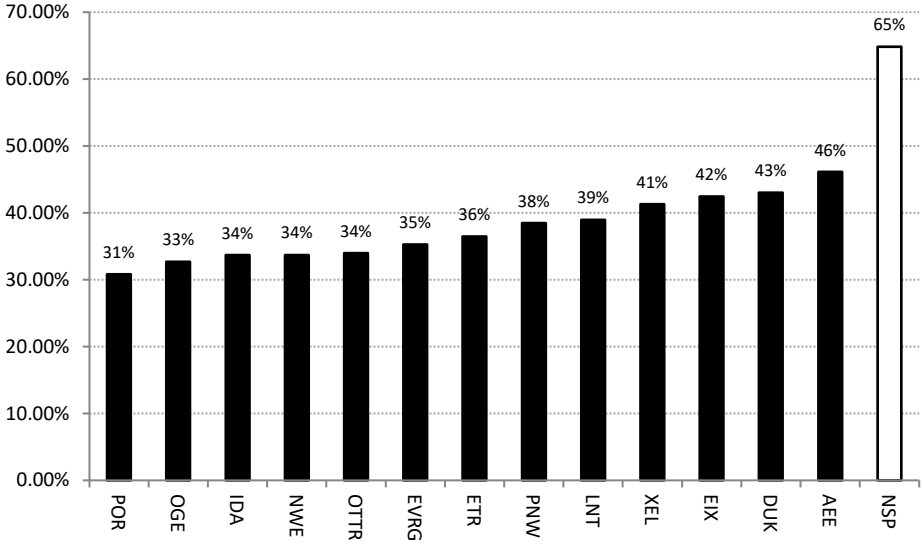
| Company | Exchange | [1] Common Stock Shares Outstanding at Fiscal Year End 2020 ( millions ) | [2] Book Value per Share at Fiscal Year End 2020 (1) | [3] Total Common Equity at Fiscal Year End 2020 ( millions ) | [4] Closing Stock Market Price on August 31, 2021 | [5] Market-to-Book Ratio on August 31, 2021 (2) | [6] Market Capitalization on August 31, 2021 (3) ( millions ) |
|---|---|---|---|---|---|---|---|
| Northern States Power Company | | NA | NA | 5,740.516 (4) | NA | | |
| Based upon Proxy Group of Thirteen Electric Companies | | | | | | 195.0 (5) | $ 11,194.007 (6) |
| Proxy Group of Thirteen Electric Companies | | | | | | | |
| Alliant Energy Corporation | NASDAQ | 249.868 | $ 22.764 | $ 5,688.000 | $ 60.790 | 267.0 % | $ 15,189.501 |
| Ameren Corporation | NYSE | 253.355 | 35.279 | 8,938.000 | 87.720 | 248.6 | 22,224.310 |
| Duke Energy Corporation | NYSE | 769.000 | 59.821 | 46,002.000 | 104.660 | 175.0 | 80,483.540 |
| Edison International | NYSE | 378.907 | 37.075 | 14,048.000 | 57.840 | 156.0 | 21,915.989 |
| Entergy Corporation | NYSE | 200.245 | 54.564 | 10,926.142 | 110.610 | 202.7 | 22,149.081 |
| Evergy, Inc. | NYSE | 226.837 | 38.501 | 8,733.400 | 68.450 | 177.8 | 15,526.970 |
| IDACORP, Inc. | NYSE | 50.469 | 50.724 | 2,559.980 | 105.350 | 207.7 | 5,316.934 |
| NorthWestern Corporation | NASDAQ | 54.145 | 38.399 | 2,079.095 | 63.600 | 165.6 | 3,443.608 |
| OGE Energy Corporation | NYSE | 200.021 | 18.157 | 3,631.800 | 35.410 | 195.0 | 7,082.749 |
| Otter Tail Corporation | NASDAQ | 41.470 | 21.002 | 870.966 | 54.870 | 261.3 | 2,275.452 |
| Pinnacle West Capital Corporation | NYSE | 112.760 | 49.960 | 5,633.503 | 76.900 | 153.9 | 8,671.248 |
| Portland General Electric Company | NYSE | 89.537 | 29.183 | 2,613.000 | 51.350 | 176.0 | 4,597.742 |
| Xcel Energy, Inc. | NASDAQ | 537.438 | 27.119 | 14,575.000 | 68.750 | 253.5 | 36,948.890 |
| Median | | 200.245 | $ 37.075 | $ 5,688.000 | $ 68.450 | 195.0 % | $ 15,189.501 |

NA= Not Available

Notes: (1) Column 3 / Column 1.
(2) Column 4 / Column 2.
(3) Column 1 * Column 4.
(4) Requested rate base multiplied by the requested common equity ratio.
(5) The market-to-book ratio of Northern States Power Company on August 31, 2021 is assumed to be equal to the market-to-book ratio of Proxy
(6) Column [3] multiplied by Column [5].

Source of Information: 2020 Annual Forms 10K
www.yahoo.finance.com Downloaded on 08/31/2021
Bloomberg Professional

Northern States Power Company
Comparison of Projected Capital Expenditures Relative to Net Plant




Sources of Information: Value Line
Company provided data

Northern States Power Company
Derivation of the Flotation Cost Adjustment to the Cost of Common Equity

Equity Issuances

| | | [Column 1] | [Column 2] | [Column 3] | [Column 4] | [Column 5] | [Column 6] | [Column 7] | [Column 8] | [Column 9] | [Column 10] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date of Offering | Transaction (1) | Shares Issued (1) | Market Price per Share (1) | Average Offering Price per Share (1) | Underwriting Discount (1) | Total Offering Expense per Share (1) | Net Proceeds per Share (2) | Total Flotation Costs (3) | Gross Equity Issue before Costs (4) | Net Proceeds (5) | Flotation Cost Percentage (6) |
| 11/16/1949 | Northern States Power | 1,584,238 | $10.75 | $10.25 | $0.12 | $0.137 | $ 9.9890 | $ 1,205,605 | $ 17,030,559 | $ 15,824,953 | 7.079% |
| 6/4/1952 | Northern States Power | 1,108,966 | $10.50 | $10.50 | $0.10 | $0.162 | $ 10.2400 | $ 288,331 | $ 11,644,143 | $ 11,355,812 | 2.476% |
| 4/14/1954 | Northern States Power | 1,219,856 | $15.25 | $14.00 | $0.06 | $0.124 | $ 13.8160 | $ 1,749,274 | $ 18,602,804 | $ 16,853,530 | 9.403% |
| 2/29/1956 | Northern States Power | 670,920 | $17.83 | $16.75 | $0.05 | $0.221 | $ 16.4790 | $ 903,058 | $ 11,959,149 | $ 11,056,091 | 7.551% |
| 7/22/1959 | Northern States Power | 952,033 | $23.38 | $22.00 | $0.07 | $0.191 | $ 21.7400 | $ 1,556,574 | $ 22,253,771 | $ 20,697,197 | 6.995% |
| 7/28/1965 | Northern States Power | 772,008 | $35.25 | $33.00 | $0.09 | $0.225 | $ 32.6830 | $ 1,981,745 | $ 27,213,282 | $ 25,231,537 | 7.282% |
| 1/22/1969 | Northern States Power | 1,080,811 | $29.00 | $27.00 | $0.12 | $0.187 | $ 26.6940 | $ 2,492,350 | $ 31,343,519 | $ 28,851,169 | 7.952% |
| 10/21/1970 | Northern States Power | 1,729,298 | $23.13 | $21.50 | $0.18 | $0.149 | $ 21.1760 | $ 3,370,402 | $ 39,990,016 | $ 36,619,614 | 8.428% |
| 7/26/1972 | Northern States Power | 1,902,228 | $25.00 | $23.50 | $0.13 | $0.166 | $ 23.2050 | $ 3,414,499 | $ 47,555,700 | $ 44,141,201 | 7.180% |
| 10/10/1973 | Northern States Power | 2,092,451 | $25.83 | $24.50 | $0.13 | $0.153 | $ 24.2190 | $ 3,360,476 | $ 54,037,547 | $ 50,677,071 | 6.219% |
| 11/20/1974 | Northern States Power | 2,300,000 | $17.63 | $17.50 | $0.91 | $0.069 | $ 16.5210 | $ 2,539,200 | $ 40,537,500 | $ 37,998,300 | 6.264% |
| 8/14/1975 | Northern States Power | 1,750,000 | $23.00 | $23.00 | $0.74 | $0.077 | $ 22.1830 | $ 1,429,750 | $ 40,250,000 | $ 38,820,250 | 3.552% |
| 6/3/1976 | Northern States Power | 2,000,000 | $24.00 | $24.00 | $0.72 | $0.064 | $ 23.2160 | $ 1,568,000 | $ 48,000,000 | $ 46,432,000 | 3.267% |
| 5/31/1993 | Northern States Power | 3,041,955 | $44.13 | $43.63 | $1.20 | $0.048 | $ 42.3770 | $ 5,317,337 | $ 134,226,264 | $ 128,908,927 | 3.961% |
| 9/23/1997 | Northern States Power | 4,500,000 | $49.94 | $49.56 | $1.23 | $0.133 | $ 48.2000 | $ 7,821,000 | $ 224,721,000 | $ 216,900,000 | 3.480% |
| 9/29/1997 | Northern States Power | 400,000 | $50.50 | $49.56 | $1.23 | $0.133 | $ 48.2000 | $ 920,000 | $ 20,200,000 | $ 19,280,000 | 4.554% |
| 2/25/2002 | Xcel Energy, Inc. | 20,000,000 | $22.95 | $22.50 | $0.73 | $0.015 | $ 21.7550 | $ 23,900,000 | $ 459,000,000 | $ 435,100,000 | 5.207% |
| 9/9/2008 | Xcel Energy, Inc. | 17,250,000 | $20.86 | $20.20 | $0.10 | $0.006 | $ 20.0937 | $ 13,218,352 | $ 359,835,000 | $ 346,616,648 | 3.673% |
| 8/3/2010 | Xcel Energy, Inc. | 21,850,000 | $22.10 | $21.50 | $0.65 | $0.013 | $ 20.5710 | $ 33,407,927 | $ 482,885,000 | $ 449,477,073 | 6.918% |
| March 2013 | Xcel Energy, Inc. | 7,757,449 | $29.06 | $29.06 | $0.29 | $0.052 | $ 28.7143 | $ 2,657,558 | $ 225,407,642 | $ 222,750,085 | 1.179% |
| June 2014 | Xcel Energy, Inc. | 5,693,946 | $30.66 | $30.66 | $0.31 | $0.030 | $ 30.3264 | $ 1,915,210 | $ 174,592,340 | $ 172,677,130 | 1.097% |
| September 2018 | Xcel Energy, Inc. | 4,733,435 | $47.89 | $47.89 | $0.41 | $0.073 | $ 47.4054 | $ 2,271,040 | $ 226,661,287 | $ 224,390,247 | 1.002% |
| 8/29/2019 | Xcel Energy, Inc. | 9,359,103 | $48.42 | $48.42 | $0.16 | $0.041 | $ 48.2147 | $ 1,886,029 | $ 453,132,797 | $ 451,246,767 | 0.416% |
| 11/30/2020 | Xcel Energy, Inc. | 11,845,000 | $60.86 | $60.86 | $0.66 | $0.025 | $ 60.1750 | $ 8,168,737 | $ 720,941,187 | $ 712,772,450 | 1.133% |
| | | | | | | | | $ 127,342,454 | $ 3,892,020,508 | $ 3,764,678,054 | 3.272% |

Flotation Cost Adjustment

| | [Column 11] | [Column 12] | [Column 13] | [Column 14] | [Column 15] | [Column 16] |
|---|---|---|---|---|---|---|
| | Average Dividend Yield (7) | Average Projected EPS Growth Rate (7) | Adjusted Dividend Yield (8) | Average DCF Cost Rate Unadjusted for Flotation (9) | DCF Cost Rate Adjusted for Flotation (10) | Flotation Cost Adjustment (11) |
| Proxy Group of Thirteen Electric Companies | 3.49 % | 5.20 % | 3.58 % | 8.78 % | 8.90 % | 0.12 % |

Notes:
(1) Company provided
(2) Col. 3 - Col. 4 - Col. 5
(3) (Col. 2 - Col. 6) x Col. 1
(4) Col. 1 x Col. 2
(5) Col. 1 x Col. 6
(6) Col. 7 / Col. 8
(7) Exhibit__(DWD-1). Schedule 5
(8) Col. 11 x (1 + 0.5 x Col. 12)
(9) Col. 12 + Col. 13
(10) (Col. 13 / (1 - Col. 10)) + Col. 12
(11) Col. 15 - Col. 14