FILED
January 20, 2022
INDIANA UTILITY
REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF NORTHERN INDIANA PUBLIC SERVICE COMPANY LLC FOR (1) AUTHORITY TO MODIFY ITS RATES AND CHARGES FOR GAS UTILITY SERVICE THROUGH A PHASE IN OF RATES; (2) APPROVAL OF NEW SCHEDULES OF RATES AND CHARGES, GENERAL RULES AND REGULATIONS, AND RIDERS; (3) APPROVAL OF REVISED DEPRECIATION RATES APPLICABLE TO ITS GAS PLANT IN SERVICE; (4) APPROVAL OF MECHANISM TO MODIFY RATES PROSPECTIVELY FOR CHANGES IN FEDERAL OR STATE INCOME TAX RATES, UTILITY RECEIPTS TAX RATES, AND PUBLIC UTILITY FEE RATES; (5) APPROVAL OF NECESSARY AND APPROPRIATE ACCOUNTING RELIEF; AND (6) AUTHORITY TO IMPLEMENT TEMPORARY RATES CONSISTENT WITH THE PROVISIONS OF IND. CODE § 8-1-2-42.7.	)	**CAUSE NO. 45621**

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR'S

PUBLIC'S EXHIBIT NO. 5 – TESTIMONY OF OUCC WITNESS LEJA D. COURTER

January 20, 2022

Respectfully submitted,

Scott C. Franson
Attorney No. 27839-49
Deputy Consumer Counselor

Public's Exhibit No. 5
Cause No. 45621

NORTHERN INDIANA PUBLIC SERVICE COMPANY, INC.
CAUSE NO. 45621
TESTIMONY OF OUCC WITNESS LEJA D. COURTER

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NORTHERN INDIANA PUBLIC SERVICE COMPANY, LLC
CAUSE NO. 45621
TESTIMONY OF OUCC WITNESS LEJA D. COURTER

I. INTRODUCTION

Q: Please state your name and business address.

A: My name is Leja D. Courter. My business address is 115 West Washington Street, Suite 1500 South, Indianapolis, IN 46204.

Q: By whom are you employed and in what capacity?

A: I am employed by the Indiana Office of Utility Consumer Counselor ("OUCC") as a Chief Technical Advisor. For a summary of my educational and professional experience, as well as my preparation for presenting testimony in this case, please see Appendix LDC-1 attached to my testimony. Appendix LDC-1 also includes the Discounted Cash Flow ("DCF") Model and Capital Asset Pricing Model ("CAPM") mechanics.

Q: What is the purpose of your testimony?

A: The purpose of my testimony is to discuss the cost of equity and capital structure proposed by Northern Indiana Public Service Company LLC ("NIPSCO" or "Petitioner"). My testimony addresses the OUCC's recommended cost of equity and capital structure. My testimony also addresses the OUCC's recommendations regarding the sharing of rate case expenses and customer bill transparency.

Q: To the extent you do not address a specific item or adjustment, should that be construed to mean you agree with Petitioner's proposal?

A: No. Not addressing a specific item or adjustment NIPSCO proposes does not indicate my agreement or approval. Rather, the scope of my testimony is limited to the specific items addressed herein.

Q: What are your recommendations in this Cause?

A: Based on the results of the DCF method, CAPM and macroeconomic analyses, I conclude a cost of equity of 9.30% would be a reasonable and appropriate cost of equity for NIPSCO. To further support the reasonableness of my proposed cost of equity, I address NIPSCO’s witness Mr. Vincent V. Rea’s cost of equity methodologies and use of a Non-Regulated proxy group. I propose a capital structure of 49.47% equity and 36.30% debt as reflected on Petitioner’s Exhibit No. 3, Attachment 3-A-S2, page 5. The capital structure will be updated to actual December 31, 2022, amounts in NIPSCO’s Step 2 compliance filing.

Q: What else are you addressing in your testimony?

A: I address Petitioner’s proposed rate case expense of $1,615,098 and recommend rate case expenses be equally shared between shareholders and NIPSCO’s customers. Finally, I recommend NIPSCO provide more transparency in its residential customer bills.

Q: Please summarize your cost of equity testimony.

My estimate of Petitioner's cost of equity is 9.30%. I use both a Discounted Cash Flow (“DCF”) and a Capital Asset Pricing Model (“CAPM”) analyses to estimate Petitioner's cost of equity. My DCF model produces a cost of equity range between 8.90% and 9.80%. My CAPM analysis produces a range of estimates from 9.29% to 9.46%. A cost of common equity of 9.30% results in a weighted cost of capital of 6.28%. (Public’s Exhibit No. 1, Attachment MHG-1, Schedule 8, sponsored by OUCC witness Mark Grosskopf). This resulting overall cost of capital, if adopted by the Indiana Utility Regulatory Commission (“Commission”), will allow NIPSCO to earn the prevailing opportunity cost of capital, maintain its financial integrity, and attract capital at reasonable terms.

II. NIPSCO'S PROPOSED COST OF EQUITY

Q: What is NIPSCO's current authorized cost of equity?

A: NIPSCO's current cost of equity is 9.85% as a result of a settlement agreement approved in the Commission's Order in Cause No. 44988. *In re NIPSCO,* Cause No. 44988, Final Order p. 9 (Ind. Util. Regul. Comm'n Sept. 19, 2018.)

Q: What is NIPSCO's proposed cost of equity?

A: NIPSCO's witness Rea recommends a cost of equity of 10.50%. (Petitioner's Exhibit No. 15, page 5, line 11.)

Q: Why does your proposed cost of equity differ from Petitioner's proposed cost of equity?

A: My estimate of NIPSCO's cost of equity is 120 basis points less than Mr. Rea's estimated cost of equity. Mr. Rea's use of 1) a CAPM with size adjustment, 2) an Empirical CAPM ("ECAPM"), 3) a Risk Premium Method ("RPM") using an historical return based solely on an arithmetic mean, 4) a flotation cost adjustment, and 5) a non-regulated proxy group, produces unreasonably high cost of equity results, which for the reasons I discuss, should be disregarded.

Data on bond yields, dividend yields, inflation and economic growth do not support projections of a 10.5% rate of return. Moreover, regulated public utilities tend to be less risky than the market, and are not comparable to the companies in Mr. Rea's Non-Regulated group.

Q: Does NIPSCO obtain capital financing under its own name or through its parent holding company, NiSource?

A: NIPSCO obtains its capital financing through NiSource. NiSource owns all the common stock of NIPSCO. NIPSCO is an Indiana corporation and a wholly owned subsidiary of NiSource. NiSource is a holding company whose stock is publicly traded and listed on the New York Stock Exchange.

Q: How does NiSource's financial strength compare to the proxy group?

A: Value Line grades NiSource's financial strength rating as B+. (Attachment LDC-1, page 1.) Value Line's financial strength ratings range from A++ to C. Value Line's financial strength ratings consider balance sheet leverage, business risk, the level and direction of profits, cash flow, earned returns, cash, corporate size, and stock price. All those factors contribute to a company's relative position on the scale. The amount of cash on hand, net of debt, is also an important consideration. I reviewed the Value Line financial strength ratings for the utilities in Mr. Rea's Combination Utility group. CMS Energy and Northwestern are rated B++. Alliant Energy, Black Hills, Eversource Energy, and Sempra Energy are rated A. Con. Ed., MGE Energy, and WEC Energy are rated A+. (Attachment LDC-2, pages 1-9.)

I also reviewed the Value Line financial strength ratings for the utilities in Mr. Rea's Gas LDC group. South Jersey Inds., ONE Gas, Inc., and Spire have B++ financial strength ratings. Northwest Natural and Southwest Gas are rated at A. Atmos Energy and New Jersey Res. are rated at A+. (Attachment LDC-3, pages 1-7.)

NiSource's ranking at the lower end of Value Line's range of ratings is not a concern for the Commission. NIPSCO has offered no evidence that NiSource is unable to access capital markets under reasonable terms. Furthermore, in July 2020, the

Commission approved NIPSCO's $949 million Transmission Distribution Storage System Improvement Charge ("TDSIC") plan, which provides NIPSCO with tracker recovery of 80% of approved costs. *In re NIPSCO*, Cause No. 45330, Final Order, pages 3, 29 (Ind. Util. Regulatory Comm'n, Jul. 22, 2020). This massive infrastructure program will be financed by customers without NIPSCO needing to access capital markets.

In December 2021, the Commission also approved NIPSCO's $76 million Federally Mandated Cost Adjustment ("FMCA") mechanism to recover federally mandated pipeline safety costs. *In re NIPSCO*, Cause No. 45560, Final Order, pages 4, 23-24, (Ind. Util. Regulatory Comm'n, Dec. 1, 2021). Similar to the TDSIC plan, the FMCA mechanism provides NIPSCO with tracker recovery of 80% of approved costs. Combined, the TDSIC and FMCA plans allow NIPSCO to recover over $1.2 billion in capital improvements, which will be financed by customers through six-month tracker filings.

Q: Why is a 9.3% cost of equity reasonable?

A: My DCF model indicates a cost of equity of 8.9% for the Combination Utility group and 9.8% for the Gas LDC group. (Attachment LDC-4, page 1; Attachment LDC-5, page 1.) Mr. Rea's unadjusted DCF for the Combination Utility group ranged between 8.4% and 8.8%. (Petitioner's Exhibit No. 15, page 60, lines 6-8.) Mr. Rea's unadjusted DCF for the Gas LDC group was 10.0%. (*Id*., page 59, lines 6-7.)

My CAPM analysis results indicate a cost of equity of 9.29% for the Combination Utility group. (Attachment LDC-6, page 1.) The cost of equity for the

Gas LDC group is 9.46%. (Attachment LDC-7, page 1.) Mr. Rea's CAPM results are considerably higher because he uses a 3.24% risk-free rate. (Petitioner's Exhibit No. 15, Schedule 7, page 4.)

Bond yields remain in a low range. My review of 5-year, 10-year, 20-year, and 30-year constant maturity Treasury bonds does not produce a CAPM risk-free rate above 2.03% for twelve months through December 2021. (Attachment LDC-6, page 2.) Therefore, I am using a 2.50% normalized risk-free rate based on calculations by Duff & Phelps (Attachment LDC-8, page 1). Also, Duff & Phelps' current recommended Equity Risk Premium ("ERP") is 5.5%. (*Id*.) Together the risk-free rate and the ERP yield a market return of 8.0%. Duff and Phelps' ERP and normalized risk-free rate applies across the U.S. equity markets and *includes companies* with *higher* business risks than those of a regulated gas utility.

In my DCF analysis I use Value Line's historical and forecasted growth rates in earnings per share ("EPS"), dividends per share ("DPS"), and book value per share ("BVPS") for the Combination Utility and Gas LDC groups. (Attachment LDC-4, page 3; Attachment LDC-5, page 3.) I considered the Congressional Budget Office's ("CBO") long-term growth rates in the U.S. economy to produce a reasonable growth rate for NIPSCO. Economic and financial trends do not justify a higher cost of equity.

III. MACROECONOMIC TRENDS

Q: Do macroeconomic factors and trends influence the cost of equity?

A: Yes. The most noteworthy of these factors are interest rates, economic growth, and inflation.

Q: How do inflation and interest rates influence cost of equity estimates?

A: Anticipated inflation influences interest rates. Interest rates influence the cost of equity. Interest rates have been increasing and forecasted inflation is expected to increase over the short term. Mr. Rea states, “…the strong GDP growth rates and higher actual and anticipated inflation rates witnessed by the U.S. economy are expected to put additional upward pressure on long-term interest rates going forward, which is consistent with a higher cost of equity.” (Petitioner’s Exhibit No. 15, page 16, lines 3-6.)

Q: Do you agree with Mr. Rea’s assessment of forecasted inflation and long-term interest rates going forward?

A: No. I examined historical and projected rates of inflation from government sources, including the CBO. The CBO is not forecasting high inflation through 2031. The CBO’s *Update to the Budget and Economic Outlook: 2021 to 2031*, forecasts Core PCE (“Personal Consumption Expenditures”) price inflation of 2.0% in 2022, 2.2% in 2023-2025, and 2.1% in 2026-2031. (Attachment LDC-9, page 4.)

Q: What is the Core PCE price index?

A: The Core PCE price index forecasts change in items individuals consume but excludes prices for food and energy. (*Id.*)

Q: Why is it important to consider the Core PCE price index when setting a cost of equity?

A: It is important because the Core PCE is one of the indices the Federal Reserve reviews when it attempts “to strip out some of that (price) volatility.” (Attachment LDC-10, page 1, *Forecasting Inflation*, Econ Focus, 4th Quarter, 2021.)

Q: Please discuss bond yields as an influencing factor on the cost of equity.

A: Bond yields are important factors influencing cost of equity. Yields on U.S. Treasury Bonds are commonly used to establish the risk-free rate of return in CAPM and other risk premium analyses. Changes in bond yields and interest rates affect investor expectations. Long-term Treasury bond yields were as high as 2.34% in April 2021 but have averaged less than 2.00% during the last 3 and 6 months. (Attachment LDC-6, page 2.)

Q: Have you reviewed information from the Federal Reserve regarding inflation?

A: Yes. The Federal Reserve Bank of Richmond recently published an article titled *Forecasting Inflation*. (Attachment LDC-10.) The article discusses the challenges of predicting inflation for policymakers and market participants.

Q: What rate of inflation does the Federal Reserve consider to be consistent with its monetary policy?

A: The Federal Reserve considers inflation that averages 2 percent over time to be consistent with its price stability mandate. (*Id*., page 1.)

Q: Is the Federal Reserve committed to maintaining inflation at 2 percent?

A: Yes. Federal Reserve Chair Jerome Powell stated in November 2021:

> We are committed to our longer-run goal of 2 percent inflation and to having longer-term inflation expectations well-anchored at this goal. If we were to see signs that the path of inflation or longer-term inflation expectations, was moving materially and persistently beyond levels consistent with our goal, *we would use our tools to preserve price stability*.

(*Id*. at 4, *emphasis* added.)

Q: What conclusions have you reached regarding the macroeconomic trends that influence cost of equity?

A: Short-term inflation expectations are high. However, "[i]n the end, it is policy that pins down inflation, *not expectations*." (*Id*., *emphasis* added.) The Federal Reserve is committed to maintaining long-run inflation at 2 percent. Trends in interest rates, inflation, and economic growth do not suggest a return to an inflationary economy.

The growth rate of 5.7%, which I use in my Combination Utility group DCF analysis, is lower than the 7.2% nominal gross domestic product ("GDP") growth rate forecast by the CBO for 2022. (Attachment LDC-9, page 4.) But the 5.7% growth rate is higher than the 3.4% to 3.8% nominal GDP growth rates the CBO forecasts for 2023-2031. (*Id*.) The CBO's forecasted inflation, as measured by the Core PCE index, at 2.2% or less through 2025, and at 2.1% for 2026-2031, is consistent with a lower cost of equity. Long-term Treasury bond rates also do not indicate a trend toward an inflationary economy. (Attachment LDC-6, page 2.) Consequently, my recommended cost of equity of 9.30% is in line with current and projected economic conditions.

IV. <u>PROXY GROUPS USED FOR THE OUCC'S COST OF EQUITY ANALYSES</u>

Q: Please describe how you derived the proxy groups for your DCF and CAPM studies.

A: My Gas LDC group and Combination Utility group comprise the same companies as Mr. Rea's proxy groups. Mr. Rea's testimony describes the Gas LDC and Combination Utility groups' selection criteria. (Petitioner's Exhibit No. 15, page 24, lines 3-14; page 36, line 15 to page 37, line 8.)

Q: Mr. Rea also used a third proxy group which he named the Non-Regulated group. Did you use the Non-Regulated group in your analysis?

A: No. Mr. Rea's Non-Regulated Group comprises eleven publicly traded companies, including Coca-Cola, Comcast, McDonald's, PepsiCo, and United Parcel Service. (*Id.*, Schedule 6, page 1.) These companies, and the rest of the companies in Mr. Rea's Non-Regulated group, face different risks than NIPSCO and the companies in the two regulated utility proxy groups. The utility industry has relatively low risk compared to the market. Mr. Rea's Non-Regulated group produces overstated cost of equity results, which the Commission should not consider.

Q: Please describe your approach to estimate NIPSCO's cost of equity.

A: I relied on the DCF model and CAPM analysis to estimate NIPSCO's cost of equity.

Q: Can you apply the DCF model and CAPM directly to NIPSCO?

A: No. NIPSCO is not publicly traded. As a result, much of the data that would be available for publicly traded companies is not available for NIPSCO. This fact makes it impractical to apply the DCF and CAPM directly to NIPSCO. Therefore, I calculated NIPSCO's cost of equity based on a proxy group of publicly traded utility companies.

V. DISCOUNTED CASH FLOW ANALYSIS

Q: Please describe DCF Analysis.

A: DCF analysis helps investors determine the appropriate price to pay for particular assets, such as utility stocks. The model has been adapted for regulatory proceedings to determine the cost of utility equity capital. The DCF model is a model which maintains that the value (price) of any security or commodity is the discounted present value of all future cash flows. This discount rate equals the cost of capital. With utility stocks and dividends as the relevant cash flows. A detailed description of the DCF mechanics is included in my Appendix LDC-1.

Q: What are the results of your forward dividend yield calculations for your proxy groups?

A: My calculation resulted in a 3.2% forward dividend yield for the Combination Utility group. (Attachment LDC-4, page 2.) My calculation resulted in a 3.8% forward dividend yield for the Gas LDC group. (Attachment LDC-5, page 2.) This forward dividend yield calculation applies the "half year method" to the data from Value Line.

Q: Please describe the results of your growth calculations.

A: I conclude 5.7% is a reasonable growth rate for the Combination Utility group and 6.0% is a reasonable growth rate for the Gas LDC group. (Attachment LDC-4, page 3; Attachment LDC-5, page 3.) These rates result from analyzing Value Line's historical and projected EPS, DPS, and BVPS growth rates for the proxy groups. My projected 5.7% and 6.0% growth rates are lower than the 7.2% nominal gross domestic product ("GDP") growth rate forecast by the CBO for 2022. (Attachment LDC-9, page 4.) The nominal GDP reflects the projected long-term growth rate of the whole U.S. economy. Both growth rates are higher than the 3.4% to 3.8% nominal GDP growth rates the CBO forecasts for 2023-2031. (*Id*.)

Q: Why have you listed two average forecasted EPS percentages on Attachment LDC-5, page 3?

A: The 7.4% average forecasted EPS is calculated using 7.0% for Atmos, 1.5% for New Jersey, 5.5% for N.W. Natural, 6.5% for ONE Gas, 11.5% for South Jersey, 9.5% for Southwest, and 10.0% for Spire. The high forecasted EPS for the last three utilities is unsustainable. These growth rates are higher than the CBO's forecasted nominal GDP growth rates for 2022 to 2031. (Attachment LDC-9, page 4.) EPS growth may be higher than nominal GDP growth for a short-term period. But in the long-term, the rate of growth of the equity investment will not exceed the rate of growth in the economy.

Q: Did you make an adjustment to the average forecasted EPS for the Gas LDC group?

A: Yes. I used a forecasted EPS of 7% for South Jersey, Southwest, and Spire. This is the same forecasted EPS as Atmos, which has the highest forecasted EPS of the four remaining utilities in the Gas LDC group. This percentage is higher than the 5-year and 10-year historical EPS results for South Jersey and Spire. It is also higher than the most recent 5-year historical EPS for Southwest. Therefore, I consider a 5.9% average forecasted EPS, and 6.0% average growth rate, to be reasonable.

Q: What have you concluded based on your DCF analysis?

A: My DCF calculations result in a cost of equity of 8.90% for the Combination Utility group, and 9.8% for the Gas LDC group. (Attachment LDC-4, page 1; Attachment LDC-5, page 1.)

VI. <u>CAPITAL ASSET PRICING MODEL</u>

Q: Please describe the CAPM.

A: The CAPM is another analysis frequently relied upon by this Commission to help determine a reasonable cost of utility equity capital. The CAPM's underlying assumption is the stock market compensates investors for risk that cannot be eliminated by means of a diversified stock portfolio. A detailed description of the CAPM mechanics is included in my Appendix LDC-1.

Q: Please describe the results of your CAPM analysis.

A: I used the Duff & Phelps normalized risk-free rate of 2.50%, which is 47 basis points above the average 30-year Treasury bond yield for the twelve months ended December

2021. (Attachment LDC-6, page 2.) I used the betas from *Value Line,* and balanced the weight given to the geometric mean and arithmetic mean approaches, consistent with prior Commission guidance. For the Combination Utility Group, my CAPM estimate is 9.29%. (*Id*., page 1.) For the Gas LDC group, my CAPM estimate is 9.46%. (Attachment LDC-7, page 1.)

VII. OUCC'S ESTIMATED COST OF EQUITY

Q: Please explain the estimation of your proxy groups' cost of equity.

A: My DCF analysis produces an 8.9% cost of equity for the Combination Utility group and 9.8% cost of equity for the Gas LDC group. My CAPM analysis produces a 9.29% for the Combination Utility group and 9.46% for the Gas LDC group. My DCF analysis, based on all estimators of growth, and my CAPM analysis, based on historical risk premiums, are consistent with past Commission orders determining the cost of equity. NIPSCO's parent company, NiSource, has a market capitalization of $10 billion. (Attachment LDC-1, page 1.) This capitalization amount is larger than three of the companies in the Combination Utility group, and larger than six of the seven companies in the Gas LDC group. Based on all the above, I recommend a 9.30% cost of equity.

Q: Do you have any company-specific information that supports the reasonableness of your proposed cost of equity?

A: Yes. The OUCC requested the following information from Petitioner:

> For the portion of NIPSCO/NiSource pension funds that are invested in equities, what rate of return does NIPSCO/NiSource assume the pension funds will earn over what period of time. Please explain why that rate of return was used. (Attachment LDC-11; NIPSCO Response to OUCC DR 12-21.)

Petitioner replied:

> **7.66%** *is the forward looking rate of return* for the pension assets invested in equities. The rate of return is for a 30 year time period. We use our investment consultant LCG Associates and our actuary AON as the basis for the estimate and compare it versus other actuaries and investment consultants for reasonableness. *The equity rate of return considers various economic inputs including interest rates, GDP growth estimates and inflation.* (*Emphasis* added.)

Q: Did the OUCC ask a similar question regarding Petitioner's OPEB funds?

A: Yes, and Petitioner provided a similar response:

> **7.50%*** is the *forward looking* rate of return for the NIPSCO Union OPEB assets invested in equities. The rate of return is for a 30 year time period.
> **7.57%*** is the *forward looking* rate of return for the Non Union OPEB assets invested in equities. The rate of return is for a 30 year time period.
> *The rate of return is a blended rate of return and the asset allocations of the OPEB pools differ slightly.

(Attachment LDC-12; NIPSCO Response to OUCC DR 12-22, *emphasis* added.)

Q: Why should Petitioner's assumed rate of return for these funds be considered?

A: Petitioner's response indicates its forecasted equity rate of return has considered various economic inputs including interest rates, GDP growth estimates and inflation. Those same economic inputs are considered by the Commission when setting cost of equity rates. The *forward-looking* rates of return are between 7.50% and 7.66% for a 30-year period. The Commission is setting the rate of return in this Cause for a future time period. Petitioner has made long-term investments in equities for the future benefit of its employees. These investments are forecast to provide rates of return almost 300 basis points less than Mr. Rea is recommending in this Cause. It is unreasonable for NIPSCO's customers to pay for a rate of return at 10.5%, when NIPSCO believes a rate of return of 7.66% is reasonable for its employees.

VIII. MR. REA'S COST OF EQUITY ANALYSIS

Q: Please summarize Mr. Rea's cost of equity analysis.

A: Mr. Rea's estimated cost of equity for Petitioner is 10.50%. Mr. Rea's analysis uses a DCF model, a CAPM, a CAPM with size adjustment, an Empirical CAPM ("ECAPM"), and a Risk Premium model. He applies each of his models to the Gas LDC, Combination Utility, and Non-Regulated proxy groups. (Petitioner's Exhibit No. 15, page 9, Table 2.)

Q: Do you agree with all the models Mr. Rea uses to determine NIPSCO's return on equity?

A: No. I agree with the use of the CAPM and DCF models, without Mr. Rea's proposed adjustments to those models. I do not agree with the size adjusted CAPM, ECAPM, and Risk Premium models.

Q: Why don't you agree with the last three models?

A: For decades, the Commission has consistently and primarily used the DCF and CAPM models when setting the cost of equity. Cost of equity testimony filed by utilities, intervenors, and the OUCC includes the DCF and CAPM models. Other models are presented in testimony, but I am not aware of Commission decisions setting cost of equity rates of return outside the recommended DCF range. As explained later in my testimony, these models, as presented by Mr. Rea, produce over-estimated costs of equity, and therefore, should not be used to determine Petitioner's reasonable cost of equity.

IX. MR. REA'S DCF ANALYSIS

Q: Please summarize your disagreements with Mr. Rea's DCF analysis.

A: Mr. Rea's DCF analysis produces an average unadjusted estimated cost of equity of 10.00%. This estimate is based on forecasted earnings from Yahoo Finance – 8.90%; Zacks – 9.20%; and Value Line – 11.80%. (Petitioner's Exhibit No. 15, page 58, Table 6.) Mr. Rea then adds a flotation cost adjustment of 7 basis points, and a Market Value-Book Value adjustment of 23 basis points to derive a new estimated cost of equity of 10.30%. (*Id.*)

I disagree with Mr. Rea's reliance on an historical return based on an arithmetic mean rather than an equal weight between the arithmetic and geometric means. It is more appropriate, and consistent with the Commission's established cost of equity analysis, to rely on both historical and forecasted growth rates in EPS, DPS, and BVPS, as I have done in my DCF analysis. I discuss later in my testimony, my disagreement with Mr. Rea's flotation cost and Market Value-Book Value adjustments.

Q: Please explain why the DCF model requires a long-term growth rate.

A: The equation used for the DCF model assumes an infinite time frame. Some investors may have short-term perspective on their investments, but this does not change the mathematics of the DCF model. I am familiar with multi-stage DCF analyses that include short or intermediate term growth rates for a portion of the calculation. While these types of DCF analyses can, if performed reasonably, offer an alternative to a classic DCF computation, my DCF analysis adheres to the traditional approach.

Q: Do any of the companies in Mr. Rea's Gas LDC group have forecasted EPS growth rates you would characterize as unsustainable?

A: Yes. As previously discussed, South Jersey Inds.' forecasted EPS is 11.50%, while it's 5-year average EPS is -1.50%, and 10-year average EPS is 1.50%. Spire Inc's. forecasted EPS is 10.00%, as compared to a 5-year average EPS of 4.5%, and 10-year average EPS of 1.50%. Southwest Gas has a forecasted EPS of 9.5%. Southwest Gas' 5-year average EPS is 5.50%, and 10-year average EPS is 7.50%. (Attachment LDC-5, page 3.) In the long-term, the rate of growth of the equity investment will not exceed the rate of growth in the economy. As previously discussed, the CBO has forecast the rate of growth in the U.S. economy, as reflected in the nominal GDP, at 7.2% in 2022, and between 3.4% and 3.8% for 2023 to 2031. (Attachment LDC-9, page 4.)

Q: Can a five-year growth rate be used and assume the stock will be sold after five years?

A: The assumption can be made. However, the price of the stock will need to be *estimated* at the end of the fifth year. Implicit in *any* estimated stock price at the end of the fifth year is growth in EPS, DPS, and BVPS that will take place after the fifth year. Therefore, using a five-year time frame in a DCF analysis does not avoid the need to use a growth rate in dividends that recognizes investor expectations beyond the fifth year. Regardless of the investor's investment horizon, the DCF model requires a long-term growth rate.

Q: What data should the Commission use to estimate growth (g) in a DCF analysis?

A: The Commission should follow its established practice, and review and give weight to *both* historical and forecasted data of growth rates in EPS, DPS, and BVPS.

Q: Please summarize your comments on Mr. Rea's estimates of growth (g).

A: The goal in estimating growth (g) in the DCF model is to derive a reasonable long-term or sustainable estimate of growth in dividends. Mr. Rea's DCF analysis relies heavily on intermediate-term forecasts in EPS to estimate the growth in his DCF model. Even assuming there is no upward bias in analysts' estimates, the estimates used by Mr. Rea are still intermediate-term (not long-term) forecasts and therefore, may not be sustainable over the long-term. Mr. Rea's optimistic growth rates (g) overstate the results of his DCF analysis.

As part of his analysis, Mr. Rea completes a similar DCF analysis on a proxy group of nine Combination Utility and eleven Non-Regulated companies. The concerns I have indicated above particularly apply to his DCF analysis for his Non-Regulated group. Several of the companies in his Non-Regulated group have forecasted growth rates in EPS above 10.0%. (Petitioner's Exhibit No. 15, Schedule 6, page 1.) As explained above, these high growth rates exceed the forecasted nominal GDP growth rate of the U.S. economy. (Attachment LDC-9, page 4.) The high forecasted EPS growth rates are not sustainable and should not be used in isolation in a DCF analysis to estimate cost of equity.

Q: Mr. Rea makes a financial leverage or market-to-book adjustment, which he discusses on page 59 of Petitioner's Exhibit No. 15, and Schedule 7, pages 4 and 5. Do you agree with this adjustment?

A: No. In most jurisdictions, including Indiana, rates of return are set on book value. Investors know this and take it into account when they determine the price they are willing to pay for a utility's stock. Investors do not need additional compensation because they have bid the price of the stock above its book value. Also, rating agencies, such as Standard & Poor's, assess financial risk based on the book value capital structure, not the market value capital structure. Financial publications, such as Value Line, use book values - not the market value - when they calculate long-term debt and common equity ratios. Three previous cases in which NIPSCO proposed a financial leverage adjustment were settled, and the Commission's Orders in those Causes did not address the reasonableness of the financial leverage adjustment. (Attachment LDC-13, NIPSCO Response to IG DR 8-20.)

X. MR. REA'S CAPM ANALYSIS

Q: Does the CAPM give a better indication of required returns than the DCF model?

A: Not necessarily. The CAPM is typically more controversial and less reliable than the DCF model. Eugene Brigham and Phillip Daves comment on the use of CAPM on pages 117-118 of their text Intermediate Financial Management (12th Edition):

> When applied in practice, the CAPM appears to provide neat, precise answers to important questions about risk and required rates of return. However, the answers are less clear than they seem. **The simple truth is that we do not know precisely how to measure any of the inputs required to implement the CAPM.** These inputs should all be ex ante, yet only *ex-post* data is available. Furthermore, historical data on $r_{M,}$ and $r_{RF,}$ and betas vary greatly depending on the time period studied and the methods used to estimate them. **Thus, even though the CAPM appears to be precise, estimates of r_i** found through its use are subject to potentially large errors. (**Emphasis** added, footnote omitted.)

Q: Does Mr. Rea use any other analyses in addition to the DCF and CAPM?

A: Yes. In addition to his DCF and CAPM analyses, Mr. Rea uses an ECAPM and CAPM with size adjustment.

Q: Do you agree with Mr. Rea's ECAPM to estimate an appropriate cost of equity for NIPSCO?

A: No. Mr. Rea's ECAPM produced an estimated cost of equity, with a flotation cost adjustment, of 10.54% for his Gas LDC group. (Petitioner's Exhibit No. 15, page 84,

Table 11.) The ECAPM is designed to address a theoretical downward bias in risk by increasing the risk factor, called "beta." This is accomplished by giving a 25% weight to the Market Risk Premium and a 75% weight to a traditional CAPM risk premium for the proxy group. ECAPM essentially limits the impact of the beta calculated for the proxy group.

Q: Has the Commission expressed an opinion on the use and results of an ECAPM approach?

A: Yes. The Commission has rejected the use of ECAPM in at least two previous Causes (Cause Nos. 40003 and 42359). In its Final Order in Cause No. 42359, the Commission affirmed its previous finding the ECAPM is unreliable for ratemaking purposes:

> With respect to the ECAPM analysis performed by Dr. Morin we note that the Commission rejected this model in Cause No. 40003, and found that: "the Empirical CAPM is not sufficiently reliable for ratemaking purposes." Cause No. 40003 at 32. We went on to conclude that the ECAPM ". . . would adjust, in essence, future expectations with regard to investor perceptions of relative risks for further change which may occur years hence." The Commission concluded that ". . . we do not believe exercises in approximating future cost of capital are conducive to such precise estimation as the Empirical CAPM would suggest." Id. We find that nothing presented in this Cause has changed our prior determination that ECAPM is not sufficiently reliable for ratemaking purposes and hereby reject the model in this proceeding.

In re PSI Energy, Cause No. 42359, Final Order, p. 56 (Ind. Util. Regulatory Comm'n May 18, 2004.)

Q: Did Mr. Rea also estimate a cost of equity using a CAPM with size adjustment approach?

A: Yes, and it resulted in an estimated cost of equity of 11.15%, which includes a flotation cost adjustment adder. (Petitioner's Exhibit No. 15, page 58, Table 6.)

Q: Do you agree with Mr. Rea's CAPM with size adjustment to estimate an appropriate cost of equity for NIPSCO?

A: No. The applicability of a small size adjustment to regulated public utilities is questionable. Regulation reduces the financial risks faced by Petitioner. Annie Wong of Western Connecticut State University writes that business and financial risks are very similar among utilities regardless of size in *Utility Stock and the Size Effect: An Empirical Analysis:*

> The fact that the two samples show different, though weak, results indicates that utility and industrial stocks do not share the same characteristics. First, given firm size, utility stocks are consistently less risky than industrial stocks. Second, industrial betas tend to decrease with firm size, but utility betas do not. These findings may be attributed to the fact that all public utilities operate in an environment with regional monopolistic power and regulated financial structure. As a result, the business and financial risks are very similar among the utilities regardless of their size. Therefore, utility betas would not necessarily be related to firm size.
>
> The objective of this study is to examine if the size effect exists in the utility industry. After controlling for equity values, there is some weak evidence that firm size is a missing factor from the CAPM for industrial but not utility stocks. This implies that although the size phenomenon has been strongly documented for industrials, findings suggest that there is no need to adjust for the firm size in utility regulation. (Emphasis added.)

(Attachment LDC-14, page 4; Annie Wong, *"Utility Stock and the Size Effect: An Empirical Analysis,"* Journal of the Midwest Finance Association, 1993, page 98.)

Michael Paschall and George B. Hawkins, authors of *Do Smaller Companies Warrant a Higher Discount Rate for Risk?: The "Size Effect" Debate,* state that privately held companies should be analyzed individually to determine if a size premium is appropriate:

> A size premium does not automatically apply in every case. Each privately held company should be analyzed to determine if a size premium is appropriate in its particular case. There can be unusual

> circumstances where a small company has risk characteristics that make it far less risky than the average company, warranting the use of a very low risk premium. One possible example of this is a private water utility (monopoly situation, very low risk, near guarantee of payments).

Paschall and Hawkins, *Do Smaller Companies Warrant a Higher Discount Rate for Risk?: The "Size Effect" Debate*, CCH Business Valuation Alert, page 3, December 1999. (https://www.businessvalue.com/resources/Valuation-Articles/Small-Company-Cap-Rates.pdf)

Also, the Commission has found an application of Ibbotson's small company adjustment can ignore the fact that the risk of regulated utilities is not as great as small companies:

> We are familiar with the Ibbotson-derived 400 basis point small company risk premium used by Mr. Beatty. The rationale behind this approach is that, all other things being equal, the smaller the company, the greater the risk. However, to blindly apply this risk premium to Petitioner is to ignore the fact that Petitioner is a regulated utility. The risks from small size for a regulated water utility are not as great as those small companies facing competition in the open market.

In re South Haven Sewer, Cause No. 40398, Final Order, pp. 30-31 (Ind. Util. Regulatory Comm'n May 28, 1997.)

In an Indiana-American rate case order in Cause No. 43680, the Commission stated that regulated utilities have different risks than other small companies:

> The Commission rejects Petitioner's equity size premium adjustment because it cannot be directly applied to regulated water utilities. Regulated water utilities do not experience the same risks as other small companies.

In re Indiana-American Water, Cause No. 43680, Final Order, p. 47 (Ind. Util. Regulatory Comm'n Apr. 30, 2010.)

The Commission can apply the same rationale for rejecting equity size adjustments to the natural gas companies it regulates.

XI. MR. REA'S RISK PREMIUM METHOD ("RISK PREMIUM") ANALYSIS

Q: Please discuss Mr. Rea's Risk Premium model.

A: Mr. Rea uses a Risk Premium model with a Total Market Approach and Public Utility Approach. (Petitioner's Exhibit No. 15, Schedule 8, page 1.) His Total Market Approach uses a Historical Equity Risk Premium of 5.70% and a Prospective Equity Risk Premium of 7.14%. (*Id*., page 4.) He gives equal weight to each premium and calculates a Total Market Equity Risk Premium, adjusted for beta, of 5.97%. (*Id*.)

Mr. Rea's Public Utility Approach produces an Equity Risk Premium of 5.38%. (Petitioner's Exhibit No. 15, Schedule 8, page 5.) Mr. Rea averages the Total Market and Public Utility Risk Premiums to produce an Equity Risk Premium of 5.68%, and a cost of equity for the Gas LDC group of 10.36% and 10.29% for the Combination Utility group. (*Id*., pages 1 and 7.)

Q: Mr. Rea's Total Market Approach Risk Premium model uses an historical risk premium analysis. Do you have any concerns with Mr. Rea's historical risk premium analysis?

A: Yes. Mr. Rea's historical risk premium analysis uses the Ibbotson SBBI yearbook. This risk premium is based on the arithmetic mean historical monthly returns on large company common stocks from the *2021 SBBI Yearbook*. (*Id*., page 91, lines 16-19.) As explained previously in my testimony, the sole reliance on an arithmetic mean calculation overstates an equity risk premium and has been consistently rejected by the Commission.

Q: Do you agree with the other models Mr. Rea uses to estimate NIPSCO's cost of equity?

A: No. Mr. Rea's other models produce results above the DCF and CAPM results, which the Commission routinely considers when determining an appropriate cost of equity.

The other models' results also are above the cost of equity approved by other state utility commissions in 2021. (Attachment LDC-15, page 1.)

XII. REGULATORY AND BUSINESS RISKS

Q: Please discuss Mr. Rea's testimony of the various regulatory and business risks to consider when determining an appropriate cost of equity.

A: Mr. Rea considers small size risk, flotation costs, and financial leverage.

Q: Does Mr. Rea make an adjustment for small size risk?

A: Yes. As previously discussed, Mr. Rea proposes specific adjustments for small size. (Petitioner's Exhibit No. 15, Schedule 7, pages 2-3.) An adjustment for small size is not warranted. NIPSCO has approximately 850,000 customers, and is a subsidiary of a large holding company, NiSource. NiSource had net profits of $562.6 million in 2020 and estimated net profits of $525 million in 2021. NiSource had a market capitalization of $10 billion on October 25, 2021. (Attachment LDC-1, page 1.) As previously discussed, NiSource's market capitalization is larger than three of the companies in the Combination Utility group, and larger than six of the seven companies in the Gas LDC group.

Q: Does Mr. Rea make an adjustment for flotation costs?

A: Yes. Mr. Rea calculates a flotation cost adjustment of 7 basis points for the Gas LDC Group and 6 basis points for the Combination Utility Group. (Petitioner's Exhibit No. 15, page 84, Table 11.)

Q: Do you agree with Mr. Rea's flotation cost adjustments?

A: No. Mr. Rea has not provided evidence that his flotation cost adder is based on recovery of known and measurable flotation costs incurred by NIPSCO. Therefore, the Commission should reject NIPSCO's request for a flotation cost adder.

Q: Does Mr. Rea make an adjustment for financial leverage?

A: Yes. As previously discussed, I recommend Mr. Rea's financial leverage adjustment be rejected.

XIII. <u>CAPITAL STRUCTURE</u>

Q: Briefly explain NIPSCO's proposed December 31, 2022, capital structure as reflected on Petitioner's Exhibit No. 3, Attachment 3-B-S2, CS Module.

A: NIPSCO has proposed budget adjustments to all items in the capital structure except customer deposits. Column D on the referenced CS Module represents budget adjustments to move from the normalized twelve months ended December 31, 2020 amounts to the 2021 budget amounts. Column F on the referenced CS Module represents budget adjustments to move from the 2021 budget amounts to the 2022 budget amounts. I have not located any supporting documentation for these amounts to move between the budget numbers. NIPSCO then makes ratemaking adjustments in Column H for common equity, long-term debt, and deferred income taxes to arrive at the pro forma twelve months ending December 31, 2022 amount included in the capital structure.

Q: Do you agree with NIPSCO's proposed December 31, 2022, capital structure.

A; Conditionally. For Step 2 rates, NIPSCO proposes to update to the actual amounts for rate base, capital structure, and annualized depreciation expense as of December 31, 2022. (Verified Petition, page 11, paragraph 17.) The OUCC reserves the right to review and dispute the proposed actual amounts when NIPSCO makes the Step 2 filing.

XIV. RATE CASE EXPENSES

Q: How much is NIPSCO seeking to recover from its customers in rate case expenses?

A: NIPSCO wants its customers to pay $1,615,098 in rate case expenses. (Petitioner's Exhibit No. 19-S2, page 773, Workpaper AMTZ 7-22R, Page [.2].)

Q: Do you agree this entire amount should be paid by NIPSCO's customers?

A: No. Rate case expenses should be shared equally by NIPSCO's shareholders and its customers. NIPSCO shareholders benefit from rate cases as much as NIPSCO's customers.

Q: What benefits do NIPSCO's shareholders receive from rate cases?

A: Shareholders receive the benefit of an updated rate base, updated revenue requirements, and an updated cost of service. Shareholders also receive an updated and reasonable return on equity, which allows NIPSCO to attract capital and provide dividends to its shareholders.

Q: Does Indiana statute allow NIPSCO to recover rate case expenses from its customers?

A: Yes. However, Indiana statute does not prohibit the Commission from allowing rate case expenses to be shared between shareholders and utility customers. Ind. Code § 8-1-2-42.7 provides the Commission with jurisdiction over utility rate case proceedings. The language of the statute does not prohibit the Commission from requiring a utility's shareholders to pay an equitable portion of rate case expenses. Furthermore, Ind. Code § 8-1-2-4 states:

> The charge made by any public utility for any service rendered or to be rendered either directly or in connection therewith *shall be reasonable and just*, and every unjust or unreasonable charge for such service is prohibited and declared unlawful. (*Emphasis* added.)

Q: Are you aware of any cases where the Commission has specifically addressed the sharing of rate case expenses between a utility's shareholders and its customers?

A: Yes. In 1987, the Commission did not require the utility's shareholders to pay any rate case expenses. *In re Kokomo Gas and Fuel Co.*, Cause No. 38096, Final Order, p. 13 (Ind. Util. Regul. Comm'n July 29, 1987.) The Commission indicated the OUCC's proposal appeared to be peculiarly disadvantageous to the small public utilities in Indiana, which do not have in-house personnel and counsel to handle their rate cases. (*Id*.)

Also, the Commission did not require the utility's shareholders to pay any rate case expenses in a Community Natural Gas rate case, indicating rate case expense is a cost of doing business. *In re Community Nat. Gas Co. Inc.*, Cause No. 44768, Final Order, p. 22 (Ind. Util. Regul. Comm'n Mar. 22, 2017.)

Q: Do you agree sharing rate case expenses between shareholders and customers could be disadvantageous to small public utilities?

A: I agree small public utilities probably do not have the financial ability to have in-house counsel or some other experts required for presenting a rate case. However, that fact does not mean rate case expenses should not be shared between shareholders and customers. Rate case expenses must be reasonable regardless of who is responsible for paying those costs of doing business.

Q: You mentioned the reasonableness of rate case expenses. Did NIPSCO send requests for proposals ("RFP") to consultants for rate case expenses in this Cause?

A: No. NIPSCO did not solicit RFPs for this rate case. (Attachment LDC-16, page 1; NIPSCO response to OUCC DR 1.3.) Petitioner has not provided evidence of efforts at cost containment, and consequently that these rate case expenses have been prudently incurred. Indiana utilities should have the incentive to keep rate case expenses as low as reasonably possible. One way to do so is to solicit RFPs and receive competitive bids for legal expenses, cost of equity, cost of service and depreciation experts. Another way to control rate case expenses is to perform some of the work in-house. This is especially true for NIPSCO, which could have its legal work done within the NIPSCO/NiSource legal department. Finally, the best and most fair way to incentivize the utility to control rate case expenses is to allocate those expenses equally between shareholders and utility customers.

Q; Would NIPSCO be at a disadvantage compared to other large, regulated utilities in Indiana if NIPSCO’s shareholders were required to pay half of NIPSCO’s rate case expense?

A: No. As previously discussed, shareholders benefit from rate cases, and sharing the rate case expense will make rates more affordable for NIPSCO’s customers.

Q: Are you aware of any jurisdictions where the state commission has disallowed rate case expenses?

A: Yes. The Missouri Supreme Court on February 9, 2021, upheld a Missouri Public Service Commission (“MPSC”) decision to disallow certain rate case expenses claimed by Spire Missouri, Inc. (“Spire”). (Attachment LDC-17, page 2.) Spire is one of the utilities in the Gas LDC proxy group.

Q: What was the legal basis the MPSC used to disallow a portion of the rate case expenses?

A: The MPSC concluded that because it is required under section 393.130.13 to set rates that are “just and reasonable,” it had the broad discretion to determine whether it was just and reasonable for Spire’s shareholders to share the burden of rate case expenses with ratepayers. (*Id*., page 3.)

Q: Is there a similar legal standard in Indiana which the Commission must follow?

A: Yes. Ind. Code § 8-1-2-4 requires charges for utility service must be reasonable and just.

Q: Why did the MPSC disallow a portion of the rate case expenses?

A: The Missouri Supreme Court Opinion states:

> The PSC determined that approximately half the litigated issues in this case were driven by Spire and among these issues were the proposed use of various shareholder-favorable ratemaking tools, including a revenue stabilization mechanism, a rate of return on equity of 10.35 percent (which would have been the highest of any large utility in Missouri), tracking mechanisms to limit shareholder risk, and earnings-based incentive compensation. The PSC further determined Spire "padded" its revenue requirement by pursuing positions it did not expect to win.

(Attachment LDC-17, page 4, emphasis in original.)

The Opinion also states: "…the PSC concluded that including all of these expenditures in setting Spire's future rates was not ***just*** because some of the expenses were not fair to ratepayers in that they only were incurred to benefit (if anyone) Spire's shareholders." (*Id*. at 12, ***emphasis*** in original.)

Q: Are there issues in this Cause like the Missouri case?

A: Yes. Similar to Spire's 10.35% request, NIPSCO is proposing a rate of return of 10.50%, which would be higher than any cost of equity awarded to a natural gas utility in Indiana in over a decade. NIPSCO has capital and expense trackers that limit shareholder risk. NIPSCO concluded a 7-year TDSIC mechanism to track and recover capital costs from customers under Cause No. 44403. NIPSCO has a Federally Mandated Cost Adjustment ("FMCA") plan under Cause No. 45007, which concludes in 2023. NIPSCO has started a new 5-year TDSIC plan under Cause No. 45330, and a new FMCA plan under Cause No. 45560.

Q: Did the Missouri Supreme Court state that ratepayers benefit from rate cases?

A: Yes. The Opinion states:

> Generally, ratepayers benefit from rate cases because they have an interest in ensuring the financial well-being of the utilities that serve them. Therefore, ratepayers justly and reasonably can be expected to pay a utility's expenses in bringing such a case.

(Attachment LDC-17, page 12.)

However, the Opinion also states:

> *But this does not mean there cannot be limits*. A utility cannot spend any amount it pleases secure in the knowledge or expectation that ratepayers will foot the bill, particularly when those expenses include items seeking to subordinate ratepayers' interests to those of the utility's investors.

(*Id*. at 12-13, *emphasis* added.)

The Missouri Supreme Court concluded the MPSC did not err in its decision to exclude a portion of those expenses in setting "just and reasonable" rates because they served only to benefit shareholders and minimize shareholder risk with no accompanying benefit (or potential benefit) to ratepayers. (*Id*. at 13, emphasis in original.)

Q: Is there a State policy protecting the affordability of utility service?

A: Yes. Ind. Code § 8-1-2-.05 states:

> The general assembly declares that it is the continuing policy of the state, in cooperation with local governments and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to create and maintain conditions under which utilities plan for and invest in infrastructure necessary for operation and maintenance *while protecting the affordability of utility services for present and future generations of Indiana citizens*. (*Emphasis* added.)

Q: Will sharing the rate case expense help protect the affordability of utility services for NIPSCO's present and future customers?

A: Yes. A reduction of rate case expense that customers pay results in lower, more affordable utility service rates.

Q: What is your recommendation regarding rate case expenses?

A: Based on the reasonable and just standard of the Indiana Code, the State's statutory policy of protecting the affordability of utility services, and similar facts in this Cause to those presented in the Missouri case, I recommend rate case expenses be shared equally between NIPSCO's shareholders and customers. OUCC witness Poole uses my recommendation to share rate case expense in her discussion of NIPSCO's rate case amortization adjustment in her testimony.

XV. CUSTOMER BILL TRANSPARENCY

Q: How are NIPSCO's residential customer bills itemized?

A: Currently, NIPSCO's residential customer bills are itemized as follows: Gas Commodity Charge, Interstate Transportation and Storage Charges, Delivery Charges, and Sales Tax. (Attachment LDC-18, page 2.)

Q: Does this itemization provide sufficient transparency to residential customers?

A: No. The residential customer bill should be itemized to include the customer service charge, TDSIC charge, FMCA charge, and universal service fund charge. If other charges are included in the customer's bill, then those should be itemized as well.

Q: Is NIPSCO complying with the Commission's Administrative Code in the way Petitioner is submitting its bills to its customers?

A: Yes, in a literal sense NIPSCO is complying with the current requirements of 170 I.A.C. 5-1-13(A). However, further itemization is needed for transparency. The code section was approved in 1976 *prior* to the numerous trackers that now exist. The code section has not changed in the last 45 years. (Attachment LDC-19, pages 5-6; Cause No. 34613, current 170 I.A.C. 5-1-13(A).)

Q: Why is it necessary for NIPSCO to provide itemized bills to each residential customer?

A: The default (regular) customer bill should be an itemized bill, which is transparent and provides a thorough breakdown of the charges being paid. Customers should not have to contact NIPSCO customer service personnel to receive a transparent, itemized bill.

Q: What is your recommendation?

A: In addition to the charges currently indicated on the bill, I recommend the Commission order NIPSCO to provide its customers with itemized bills to include the customer service charge, TDSIC charge, FMCA charge, and universal service fund charge. If other charges are included in the customer's bill, then those should be itemized as well. Alternatively, the Commission should order NIPSCO to include a bold face notation on the bill that customers may call NIPSCO's customer service representatives if customers want an itemized breakdown of their bills. The itemized bills should be provided at no cost to NIPSCO's customers.

XVI. SUMMARY AND RECOMMENDATIONS

Q: Please summarize your testimony on DCF calculations for the proxy groups.

A: I calculated a 3.2% forward dividend yield for the Combination Utility group. I also performed calculations and analyses in which I concluded a DCF growth rate, *g*, of 5.7% is reasonable. I calculated a 3.8% forward dividend yield and 6.0% growth rate for the Gas LDC group. These estimates were made using historical and projected growth rates from *Value Line*, and economic growth data from the CBO. I considered both projected and historical data. My DCF calculations results in an 8.9% cost of equity for the Combination Utility group and 9.8% for the Gas LDC group.

Q: Please summarize your testimony on CAPM calculations for the proxy groups.

A: Based on *Value Line* betas and using the same Combination Utility group as Mr. Rea, I calculated an average beta of 0.87 for the Combination Utility group. As the beta is less than 1.0, it also describes a relatively low-risk industry. I used the Duff & Phelps normalized risk-free rate of 2.5%. I reviewed 5-year, 10-year, 20-year, and 30-year Treasury bond yield data for 2021 in arriving at this estimate. The Duff & Phelps risk-free rate was higher than the Treasury bond yield data. Conservatively, I used the higher Duff & Phelps rate. Giving equal weight to both the geometric mean and arithmetic mean approaches, I calculated a market risk premium of 4.95%. This results in a CAPM cost of equity for the Combination Utility group of 9.29%. My CAPM analysis of the Gas LDC group resulted in a cost of equity of 9.46%.

Q: Please summarize your testimony on macroeconomic and capital market trends influencing cost of equity.

A: Short-term inflation expectations are high. However, the Federal Reserve is committed to maintaining long-run inflation at 2 percent. Trends in interest rates, inflation, and economic growth do not suggest a return to an inflationary economy.

Q: Please summarize your recommendation for NIPSCO's cost of equity.

A: I recommend the Commission authorize a 9.30% cost on equity for NIPSCO. This recommendation is higher than the range of my DCF and CAPM calculations for the Combination Utility group. The DCF calculation for the Gas LDC group was 9.8%. NIPSCO is a combination gas and electric utility, and therefore, more comparable to the utilities in the Combination Utility group. Therefore, I give more weight to the 8.9%

DCF result for the Combination Utility group, than the 9.8% DCF result for the Gas LDC group, and recommend a 9.3% cost of equity.

Q: Please summarize your recommendation regarding rate case expenses.

A: I recommend rate case expenses be shared equally, and affordably, between NIPSCO's shareholders and its customers.

Q: Please summarize your recommendation regarding residential customer bill transparency.

A: In addition to the charges currently indicated on the bill, I recommend the Commission order NIPSCO to provide its customers with itemized bills to include the customer service charge, TDSIC charge, FMCA charge, and universal service fund charge. If other charges are included in the customer's bill, then those should be itemized as well. Alternatively, the Commission should order NIPSCO to include a bold face notation on the bill that customers may call NIPSCO's customer service representatives if customers want an itemized breakdown of their bills. The itemized bills should be provided at no cost to NIPSCO's customers.

Q: Does this conclude your testimony?

A: Yes.

APPENDIX LDC-1 TO TESTIMONY OF OUCC WITNESS LEJA D. COURTER

Q: Please describe your educational background and experience.

A: I graduated from Ball State University in Muncie, Indiana with Bachelor of Science degrees in Finance and Economics. I received my Juris Doctorate from the University of Dayton. In previous years, I have been engaged in the private practice of law, and I also served as an in-house counsel at Indiana Gas Company. I have been an attorney at the OUCC for over twenty years. I was the Director of the OUCC's Natural Gas Division for twelve years. I became a Chief Technical Advisor at the OUCC in December 2021.

Q: Have you previously testified before the Indiana Utility Regulatory Commission?

A: Yes.

Q: Please describe the review and analysis you conducted to prepare your testimony.

A: I reviewed NIPSCO's petition, testimony, exhibits, and supporting documentation submitted in this Cause. I prepared and reviewed discovery requests, and reviewed NIPSCO's responses. I reviewed numerous financial reports and articles that discuss market returns. I reviewed the Final Order in NIPSCO's last base rate case, Cause No. 44988. I reviewed Commission Orders concerning cost of equity issues.

I. DISCOUNTED CASH FLOW ("DCF") ANALYSIS

A. Introduction to DCF Model

Q: Please describe the DCF model.

A: The DCF model is typically used by investors to determine the appropriate price to pay for a security. This model assumes the price of a security should be determined by its expected cash flows discounted by the company's cost of equity. On a one-year horizon, the price of a stock (P_0) is equal to the anticipated dividends paid during the year (D_1), plus the anticipated price of the stock at the end of the year (P_1) divided by one plus the company's cost of equity (k). In turn, this year's year-end price (P_1) is determined by next year's anticipated dividends (D_2) and next year's anticipated year-end price (P_2) divided by one plus the company's cost of equity (k).

Because investors may plan to hold securities for extended periods, the DCF equation can be restated for an infinite or unknown number of periods as follows:

$$P_0 = D_1/(k-g)$$

[Where the price of a security (P_0) equals the anticipated dividends paid over the current period (D_1) divided by the company's cost of equity (k) minus the expected growth rate of dividends (g)].

The company's cost of equity must be greater than its expected dividend growth rate of this model to be valid. By rearranging the model, the familiar DCF formula used in regulatory proceedings can be obtained.

$$k = (D_1/P_0) + g$$

[Where the cost of equity (k) equals the forward dividend yield (D1/P0) plus the expected growth rate in dividends per share (g). To estimate the cost of equity (k), the forward yield (D1/P_0) and the expected growth rate in dividends (g) must be estimated.]

B. <u>Dividend yield</u>

Q: How did you calculate the forward yields (D1/P0) in your analysis?

A: To calculate a forward yield (D_1/P_0), the current yield (D_0/P_0) must be calculated first. A company's current yield equals its current annual dividends (D_0) divided by its current stock price (P_0).

Q: How do you convert current yields (D_0/P_0) into forward yields (D_1/P_0)?

A: I use the following equation to convert a current yield to a forward yield:

$$D_1/P_0 = (D_0/P_0) * (1 + .5g)$$

For example, if Company N had a current dividend yield of 4.0% and an expected growth rate of 2%, I would multiply the 4% current dividend yield by 1 plus 2% or 1.01 (1% is one-half of the 2% expected growth rate). This results in a forward dividend yield of 4.04%, or an increase of 4 basis points over the current dividend yield. Mr. Rea also uses the one-half year's growth methodology. (Petitioner's Exhibit No. 15, Appendix A, DCF Analysis.)

Q: What dividend yields do you use in your DCF analyses?

A: Attachment LDC-4, page 2 and Attachment LDC-5, page 2, contain the average dividend yields for my proxy groups.

C. <u>Dividend growth rate</u>

Q: How did you estimate the long run dividend growth component (g) of the DCF model?

A: The DCF model assumes investors expect earnings per share (EPS), dividends per share (DPS), and book value per share (BVPS) to all grow at the constant long run growth rate (g). When the data is available, to estimate (g), I use both historical and forecasted growth rates of EPS, DPS, and BVPS. I use Value Line as my source of growth rates.

Q: What is your estimated long run dividend growth component (g) of the DCF model using Value Line growth rates in EPS, DPS, and BVPS?

A: My estimate of growth is 5.7% for the Combination Utility group and 6.0% for the Gas LDC group. (Attachment LDC-4, page 3; Attachment LDC-5, page 3.) To estimate growth for the Value Line data, I average the forecasted and historical growth rates of EPS, DPS, and BVPS.

Q: To estimate the dividend growth (g) for your DCF analysis, did you include negative growth rates or zero growth rates?

A: No. I excluded zero and negative growth rates to estimate (g) in my DCF analysis.

Q: Why haven't you eliminated low (positive) growth rates from your DCF analysis?

A: Low growth rates are not ignored by investors. While investors may not expect low growth rates to occur (especially in perpetuity), if a company has experienced low historical growth rates or is forecasted to experience low growth rates, then those low growth rates are considered by and relevant to investors when they estimate a company's future growth rate. The purpose in estimating a growth rate in the DCF model is to infer the investor's long-term (perpetual) forecast in growth of the company. Relevant factors are not ignored. Also, one should consistently use or reject, both high positive growth rates and low positive growth rates. While growth rates as high as 14.0% or as low as 1.0% by themselves may not reflect investor expectations, neither should be ignored - or alternatively, both should be disregarded.

D. <u>DCF Model conclusions</u>

Q: What do you conclude from your DCF study?

A: The results of my DCF analysis are 8.9% for the Combination Utility group, and 9.8% for the Gas LDC group. (Attachment LDC-4, page 1; Attachment LDC-5, page 1.) My DCF analysis uses both historical and forecasted growth rates in EPS, DPS, and BVPS. It is based on a broader review of growth rates, and it is most consistent with prior Commission decisions on how to estimate a growth rate in a DCF analysis. As discussed above, analysts' forecasts of intermediate term growth rates in EPS may be optimistic and should not be used by themselves to estimate long-term growth (g) in a DCF analysis.

II. CAPITAL ASSET PRICING MODEL (CAPM) ANALYSIS

Q: Please describe your CAPM analysis.

A: The Capital Asset Pricing Model, or CAPM, is a form of risk premium analysis used to estimate the cost of capital. The CAPM is based on the premise that investors require a higher return for assuming additional risk. Total risk is divisible into two categories: systematic risk and unsystematic risk. Systematic risk is risk that affects the entire market, including inflation, monetary policy, fiscal policy, or politics. Unsystematic risk is risk unique to the company, and may include strikes, management errors, merger activity, or individual financing policy.

Investors can eliminate unsystematic risk through diversification. Because returns on individual securities of a portfolio do not usually move in the same direction at the same time, the total risk of a portfolio is less than the risk of the individual securities that make up the portfolio. The market does not compensate investors for assuming unsystematic risk because investors can eliminate unsystematic risk through diversification. Conversely, systematic risk, also referred to as market risk, cannot be eliminated through diversification. However, because investments will move with different relationships to the market, investors can form a portfolio to assume the amount of market risk they wish. An investor's required return depends on the market risk that the investor assumes.

Q: How is systematic (market) risk measured?

A: Beta is the measurement of an investment's relationship to the market. More specifically, beta measures an asset's price volatility compared to the stock market. The market has a beta of one. The market refers to the returns on all assets. It is difficult to measure the return on all assets. Therefore, analysts typically rely on a market index, such as the Standard & Poor's 500 Index, as a proxy for the market. Assets more volatile than the market will have a beta greater than one, and thus, are considered riskier than the market. Assets that are less volatile will have a beta less than one and are considered less risky than the market.

The CAPM formula can be stated as follows:

$$K = Rfc + B\ (Rm\text{-}Rf)$$

where,

K	Cost of Equity
Rfc	Current Risk-Free Rate of Return
B	Beta
Rm-Rf	Expected Market Equity Risk Premium
Rm	Market Equity Return
Rf	Risk Free Rate of Return

The return on an asset (K) equals the risk-free rate of return (Rfc) plus its beta (B) multiplied by the market equity risk premium (Rm - Rf). The market equity risk premium equals the market equity return minus the risk-free rate of return.

Q: Is the CAPM controversial?

A: The CAPM is typically more controversial and less reliable than the DCF model. Different applications of CAPM may result in vastly different cost of equity estimates. For example, the source of beta can influence the results of a CAPM analysis. If a market risk premium of 5.0% is used, a difference in beta of only 0.10 changes the results of a CAPM analysis by 50 basis points.

The method used to estimate the market risk premium can also be particularly controversial. An historical risk premium can be calculated, but a decision must be made between using a geometric mean or an arithmetic mean calculation. This decision is important because the use of the arithmetic mean can produce results that are over 140 basis points higher than the geometric mean. (Attachment LDC-6, page 1.) The geometric mean calculation is preferable over the arithmetic mean calculation because the geometric mean calculation more accurately measures the change in wealth over multiple periods. Selecting the appropriate period to calculate a historical risk premium is not only controversial, it also dramatically affects the results. When relying on a historical risk premium, the longest historical period for which accurate historical data exists should be used to estimate a risk premium.

A. <u>Geometric vs. Arithmetic Mean</u>

Q: In your CAPM analysis did you use a geometric mean risk premium or an arithmetic mean risk premium?

A: When relying on historical returns; I consider the geometric mean a better representation of expected returns than the arithmetic mean. However; both calculations can provide meaningful insight to estimate a market risk premium for a CAPM analysis. My CAPM analysis weighs both geometric and arithmetic mean risk premiums equally.

Q: How has the Commission ruled on the issue of arithmetic mean premiums versus geometric mean risk premiums?

A: For more than 25 years this Commission has consistently given weight to *both* the arithmetic mean risk premium and the geometric mean risk premium. In the *Peoples Gas and Power Company* case, the Commission stated:

> As in the Indiana Cities case, [Cause No. 39166, July 8, 1992] we find there is merit in using both the arithmetic and geometric means and that neither result should be relied upon to the exclusion of the other. *In re Peoples Gas and Power Company*, Cause No. 39315, Final Order p. 12 (Ind. Util. Regulatory Comm'n October 21, 1992.)

The Commission reaffirmed its position in *Indiana-American Water Company*:

> The debate over the proposed use of the arithmetic and geometric means is one we consider <u>resolved</u>. As we stated in *Indianapolis Water Company*, Cause No. 39713-39843, each method has its strengths and weaknesses, and neither is so clearly appropriate as to exclude consideration of the other. *In re Indiana-American Water Company*, Cause No. 40103, Final Order p. 41 (Ind. Util. Regulatory Comm'n May 30, 1996, <u>emphasis</u> added.)

The Commission also reaffirmed its position in another Indiana-American Water Company case in 2010 when it stated:

> Neither the arithmetic risk premium nor the geometric mean risk premium should be excluded in favor of the other, and nothing has caused us to change our opinion regarding the appropriate application of both arithmetic and geometric mean risk premiums. Therefore, the Commission will continue to give both the geometric and arithmetic mean risk premiums substantial weight. *In re Indiana-American Water Company*, Cause No. 43680, Final Order p. 48 (Ind. Util. Regulatory Comm'n April 30, 2010.)

Q: When calculating a market risk premium, do you use total returns or income returns?

A: I use total returns. Investors who buy long-term bonds (both risk-free and utility bonds) do not earn just income returns, but total returns. Therefore, a determination of the risk premium should be based on total returns for both equity and debt investments when estimating a risk premium. In Indiana-American Water Company Inc.'s, Cause No. 42520, the Commission agreed with the testimony of Intervenor witness Michael Gorman that total returns and not income returns should be used to estimate an historical risk premium. The Order states:

> Another area of disagreement in the CAPM analysis is whether the model should use total returns or income returns. We find Mr. Gorman's analysis in this area to be most persuasive. The income return on Treasury bonds is simply the average of Treasury bond yield quotes over the historical period, and this yield quote does not measure the actual return investors earn by making investments in Treasury bonds. Investors simply cannot invest only in Treasury bond income returns. Rather, investors must take the risk of variations in bond prices before they invest in treasury bonds. Therefore the actual return experienced by investors in Treasury securities is measured by total return, not simply the income return. *In re Indiana-American Water Company, Inc.*, Cause No. 45520, Final Order p. 59 (Ind. Util. Regulatory Comm'n Nov. 18, 2004.)

B. <u>Risk-free rate of return</u>

Q: Is the risk-free rate of return also controversial?

A: Yes. Aside from the market risk premium controversy, financial analysts do not agree on the determination of the risk-free rate. Theoretically, the risk-free rate is the rate of return on a completely risk-free asset. In practice, analysts typically use yields on United State Treasury securities as a proxy for the risk-free rate. An analyst could use the yield on 91-day Treasury Bills as a proxy for the theoretical risk-free rate of return. However, the volatility of 91-day Treasury Bills rates has led many analysts to use longer term Treasury instruments as an estimate of the risk-free rate.

Q; How did you estimate the risk-free rate?

A: I reviewed short, intermediate, and long-term risk-free rates. I used one-year Treasury securities as an estimate of short-term yields, the average of five-year and ten-year Treasury securities as an estimate of intermediate-term yields, and 30-year Treasury securities as an estimate of long-term yields. Although I reviewed short-term, intermediate-term and long-term interest rates, I give most of my emphasis to long-term interest rates, some emphasis to intermediate-term interest rates and no emphasis to the results generated from the use of short-term interest rates.

C. <u>Beta.</u>

Q: What source did you review to estimate beta?

A: I relied on Value Line as my source of beta. Based on Value Line, Combination Utility group produces an average beta of 0.87%. (Attachment LDC-6, page 3.) The Gas LDC group produces an average beta of 0.90. (Attachment LDC-7, page 3.)

D. <u>Conclusions on CAPM analysis</u>

Q: Please review the results of your CAPM analysis.

A: The cost of equity based on my CAPM analysis for the Combination Utility group is 9.29%. (Attachment LDC-6, page 1.) The cost of equity based on my CAPM analysis for the Gas LDC group is 9.46%. (Attachment LDC-7, page 1.)

To estimate cost of equity, I calculated both a geometric mean risk premium and an arithmetic mean risk premium. I averaged the risk premiums and combined the risk premiums with the risk-free interest rates described above. I used Duff and Phelps risk-fee rate of 2.50%. (Attachment LDC-8, page 1.)

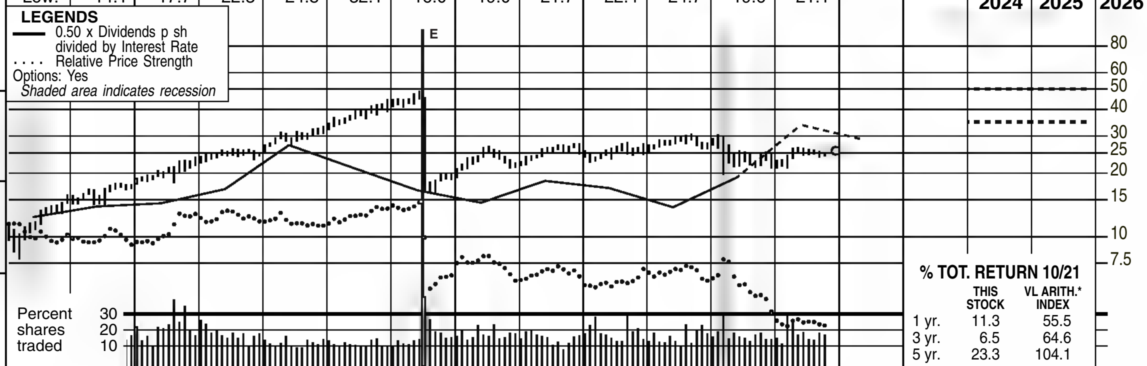
NISOURCE INC. NYSE-NI

RECENT PRICE	25.54	P/E RATIO	18.0 (Trailing: 18.9; Median: 21.0)	RELATIVE P/E RATIO	0.95	DIV'D YLD	3.4%	VALUE LINE

TIMELINESS 4 Lowered 6/4/21
SAFETY 3 Lowered 3/19/21
TECHNICAL 3 Lowered 10/15/21
BETA .85 (1.00 = Market)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
High:	18.0	24.0	26.2	33.5	44.9	49.2	26.9	27.8	28.1	30.7	30.5	26.6
Low:	14.1	17.7	22.3	24.8	32.1	16.0	19.0	21.7	22.4	24.7	19.6	21.1

Target Price Range 2024 | 2025 | 2026



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$18-$28	$23 (-10%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+95%)	20%
Low	35	(+35%)	11%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	198	252	256
to Sell	219	188	197
Hld's(000)	359962	361696	367884

% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	11.3	55.5
3 yr.	6.5	64.6
5 yr.	23.3	104.1

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
28.97	27.37	28.96	32.36	24.02	22.99	21.33	16.31	18.04	20.47	14.58	13.90	14.46	13.74	13.63	11.95	*12.65*	*13.50*	Revenues per sh	*15.95*
3.14	3.18	3.20	3.32	2.96	3.19	2.98	3.13	3.41	3.60	2.27	2.71	2.07	2.86	3.17	3.15	*3.10*	*3.30*	"Cash Flow" per sh	*4.10*
1.08	1.14	1.14	1.34	.84	1.06	1.05	1.37	1.57	1.67	.63	1.00	.39	1.30	1.31	1.32	*1.35*	*1.50*	Earnings per sh A	*2.15*
.92	.92	.92	.92	.92	.92	.92	.94	.98	1.02	.83	.64	.70	.78	.80	.84	*.88*	*.92*	Div'd Decl'd per sh B ■	*1.04*
2.17	2.33	2.88	3.54	2.81	2.88	3.99	4.83	5.99	6.42	4.26	4.57	5.03	4.88	4.72	4.49	*4.55*	*4.50*	Cap'l Spending per sh	*4.35*
18.09	18.32	18.52	17.24	17.54	17.63	17.71	17.90	18.77	19.54	12.04	12.60	12.82	13.08	13.36	12.66	*13.15*	*13.80*	Book Value per sh C	*16.80*
272.62	273.65	274.18	274.26	276.79	279.30	282.18	310.28	313.68	316.04	319.11	323.16	337.02	372.36	382.14	391.76	*395.00*	*400.00*	Common Shs Outst'g D	*415.00*
21.4	19.2	18.8	12.1	14.3	15.3	19.4	17.9	18.9	22.7	37.3	23.2	NMF	19.3	21.3	18.7	Bold figures are		Avg Ann'l P/E Ratio	*19.0*
1.14	1.04	1.00	.73	.95	.97	1.22	1.14	1.06	1.19	1.88	1.22	NMF	1.04	1.13	.96	Value Line		Relative P/E Ratio	*1.05*
4.0%	4.2%	4.3%	5.7%	7.6%	5.7%	4.5%	3.8%	3.3%	2.7%	3.5%	2.8%	2.8%	3.1%	2.9%	3.4%	estimates		Avg Ann'l Div'd Yield	*2.5%*

CAPITAL STRUCTURE as of 9/30/21
Total Debt $9623.9 mill. **Due in 5 Yrs** $2651 mill.
LT Debt $9188.2 mill. **LT Interest** $379 mill.
(Interest cov. earned: 2.2x) (58% of Cap'l)

Leases, Uncapitalized Annual rentals $32.7 mill.
Pension Assets-12/20 $2.1 bill. **Oblig.** $2.1 bill.

Pfd Stock $880 mill. **Pfd Div'd** $28.5 mill.

Common Stock 392,704,679 shs.
as of 10/25/21
MARKET CAP: $10.0 billion (Large Cap)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
6019.1	5061.2	5657.3	6470.6	4651.8	4492.5	4874.6	5114.5	5208.9	4681.7	*5000*	*5400*	Revenues ($mill)	*6620*
303.8	410.6	490.9	530.7	198.6	328.1	128.6	478.3	549.8	562.6	*525*	*595*	Net Profit ($mill)	*880*
35.0%	34.4%	34.8%	36.9%	41.6%	35.7%	71.0%	19.7%	17.0%	18.3%	*19.0%*	*19.0%*	Income Tax Rate	*19.0%*
- -	- -	- -	- -	- -	- -	- -	- -	2.9%	2.0%	*2.0%*	*2.0%*	AFUDC % to Net Profit	*2.0%*
55.6%	55.1%	56.3%	56.9%	60.7%	59.8%	63.5%	55.3%	56.8%	61.2%	*60.0%*	*60.0%*	Long-Term Debt Ratio	*60.0%*
44.4%	44.9%	43.7%	43.1%	39.3%	40.2%	36.5%	37.9%	36.9%	32.9%	*40.0%*	*40.0%*	Common Equity Ratio	*40.0%*
11264	12373	13480	14331	9792.0	10129	11832	12856	13843	15058	*16200*	*16585*	Total Capital ($mill)	*18180*
11800	12916	14365	16017	12112	13068	14360	15543	16912	16620	*16750*	*17000*	Net Plant ($mill)	*17500*
4.4%	5.0%	5.2%	5.3%	4.0%	5.0%	2.6%	5.1%	5.3%	5.0%	*3.5%*	*3.5%*	Return on Total Cap'l	*5.0%*
6.1%	7.4%	8.3%	8.6%	5.2%	8.1%	3.0%	8.3%	9.2%	9.6%	*8.5%*	*9.5%*	Return on Shr. Equity	*11.0%*
6.1%	7.4%	8.3%	8.6%	5.2%	8.1%	3.0%	9.6%	9.7%	10.5%	*8.5%*	*9.5%*	Return on Com Equity	*11.0%*
.9%	2.5%	3.1%	3.4%	NMF	3.0%	NMF	4.0%	3.8%	3.7%	*2.5%*	*3.0%*	Retained to Com Eq	*5.5%*
85%	67%	62%	61%	NMF	63%	NMF	60%	64%	67%	*71%*	*67%*	All Div'ds to Net Prof	*52%*

CURRENT POSITION ($MILL.)	2019	2020	9/30/21
Cash Assets	139.3	116.5	38.5
Other	1714.6	1542.9	1432.9
Current Assets	1853.9	1659.4	1471.4
Accts Payable	666.0	589.0	487.2
Debt Due	1783.6	526.3	435.7
Other	1296.2	1164.1	1323.7
Current Liab.	3745.8	2279.4	2246.6
Fix. Chg. Cov.	250%	250%	255%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	-7.0%	-6.0%	*3.5%*
"Cash Flow"	-.5%	- -	*5.5%*
Earnings	2.0%	.5%	*8.5%*
Dividends	-1.5%	-3.0%	*4.5%*
Book Value	-3.0%	-5.0%	*4.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	1750.8	1007.0	895.0	1461.7	5114.5
2019	1869.8	1010.4	931.5	1397.2	5208.9
2020	1605.5	962.7	902.5	1211.0	4681.7
2021	1545.6	986.0	959.4	*1509*	*5000*
2022	*1645*	*1085*	*1060*	*1610*	*5400*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.77	.07	.10	.38	1.30
2019	.82	.05	- -	.45	1.31
2020	.76	.13	.09	.34	1.32
2021	.77	.13	.11	*.34*	*1.35*
2022	*.80*	*.17*	*.15*	*.38*	*1.50*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.175	.175	.175	.175	.70
2018	.195	.195	.195	.195	.78
2019	.200	.200	.200	.200	.80
2020	.21	.21	.21	.21	.84
2021	.22	.22	.22	.22	

BUSINESS: NiSource Inc. is a holding company for Northern Indiana Public Service Company (NIPSCO), which supplies electricity and gas to the northern third of Indiana. Customers: 479,185 electric in Indiana, 3,200,000 million gas in Indiana, Ohio, Pennsylvania, Kentucky, Virginia, Maryland, through its Columbia subsidiaries. Revenue breakdown, 2020: electrical, 31%; gas, 69%; other, less than 1%. Generating sources, coal, 69.4%; purchased & other, 30.6%. 2020 reported depreciation rates: 2.9% electric, 2.2% gas. Has 7,304 employees. Chairman: Richard L. Thompson. President & Chief Executive Officer: Joseph Hamrock. Incorporated: Indiana. Address: 801 East 86th Avenue, Merrillville, Indiana 46410. Telephone: 877-647-5990. Internet: www.nisource.com.

NiSource Inc. recently posted solid September-period financial results. Revenues advanced 6.3%, to $959.4 million, thanks primarily to a 10.8% uptick in volumes at the Northern Indiana Public Service Company (NIPSCO) electric utility. At the same time, the Gas Distribution arm registered a low single-digit percentage increase in volumes. On the profitability front, overall expenses decreased 500 basis points as a percentage of the top line. Combined, these factors drove the bottom line 22% higher, to $0.11 a share. This was in line with our earlier call.

We have left our 2021 earnings outlook unchanged at the moment. The holding company of NIPSCO appears well positioned to log a nearly 7% rise in revenues this year, to $5.0 billion. This ought to be supported by continually increasing contributions from both the Electricity and the Gas Distribution segments. NIPSCO filed for a gas base-rate increase of $115 million annually. That rate hike would go towards infrastructure modernization and reliability upgrades. Elsewhere, Columbia Gas of Ohio, Pennsylvania, Kentucky, and Maryland all have rate cases that are progressing nicely and augur well for prospects in this year and beyond. Once approved, these efforts should help NiSource achieve a healthy return on capital growth projects. In fact, management has roughly $10 billion earmarked for expansion initiatives through 2024.

The balance sheet is in decent shape. Although cash reserves fell about 65% so far this year, that cushion still sits at $38.5 million. And the long-term debt load remains at 58% of total capital, which is in line with the industry.

These shares are not attractive in the short term. Indeed, our Timeliness Ranking System has NI stock ranked to underperform the broader market averages in the coming year (Timeliness: 4). That said, patient accounts could utilize a near-term correction to afford them an attractive entry point. NI does offer well above-average capital appreciation potential for the pull to 2024-2026. What's more, income-seeking accounts may be drawn by the attractive dividend yield, which is above the *Value Line* median, if on par for this industry.

Bryan J. Fong *November 26, 2021*

(A) Dil. EPS. Excl. nonrec. gains (losses): '05, (4¢); gains (losses) on disc. ops.: '05, 10¢; '06, (11¢); '07, 3¢; '08, ($1.14); '15, (30¢); '18, ($1.48). Next egs. report due late Jan. Qtl'y egs. may not sum to total due to rounding.
(B) Div'ds historically paid in mid-Feb., May, Aug., Nov. ■ Div'd reinv. avail.
(C) Incl. intang in '20: $1485.9 million, $3.79/sh.
(D) In mill.
(E) Spun off Columbia Pipeline Group (7/15)

Company's Financial Strength	B+
Stock's Price Stability	100
Price Growth Persistence	20
Earnings Predictability	45

ALLIANT ENERGY NDQ-LNT

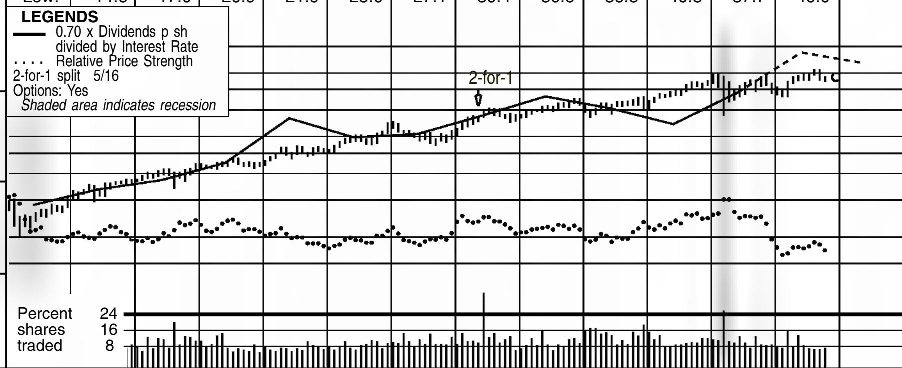
RECENT PRICE	P/E RATIO		RELATIVE P/E RATIO	DIV'D YLD
57.28	21.6	(Trailing: 22.6; Median: 19.0)	1.19	3.0%

VALUE LINE

TIMELINESS 3 Raised 10/29/21
SAFETY 2 Raised 9/28/07
TECHNICAL 3 Lowered 12/10/21
BETA .85 (1.00 = Market)

High:	18.8	22.2	23.8	27.1	34.9	35.4	41.0	45.6	46.6	55.4	60.3	62.3	
Low:	14.6	17.0	20.9	21.9	25.0	27.1	30.4	36.6	36.8	40.8	37.7	46.0	

Target Price Range
2024 | 2025 | 2026
80 / 60 / 50 / 40 / 30 / 25 / 20 / 15 / 10 / 7.5



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$49-$75	$62 (10%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	65	(+15%)	6%
Low	45	(-20%)	-2%

Institutional Decisions

	1Q2021	2Q2021	3Q2021
to Buy	249	236	237
to Sell	253	237	232
Hld's(000)	188898	191641	194869

% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	5.4	55.5
3 yr.	42.6	64.6
5 yr.	71.6	104.1

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
14.01	14.46	15.57	16.67	15.51	15.40	16.51	13.94	14.77	15.10	14.34	14.58	14.62	14.97	14.89	13.67	*14.75*	*15.55*	Revenues per sh	*17.25*
2.73	2.16	2.56	2.28	2.10	2.60	2.75	2.95	3.34	3.49	3.45	3.45	3.97	4.32	4.59	4.92	*5.30*	*5.65*	"Cash Flow" per sh	*7.00*
1.11	1.03	1.35	1.27	.95	1.38	1.38	1.53	1.65	1.74	1.69	1.65	1.99	2.19	2.33	2.47	*2.65*	*2.75*	Earnings per sh A	*3.25*
.53	.58	.64	.70	.75	.79	.85	.90	.94	1.02	1.10	1.18	1.26	1.34	1.42	1.52	*1.61*	*1.71*	Div'd Decl'd per sh B ■ †	*2.05*
2.25	1.71	2.46	3.98	5.43	3.91	3.03	5.22	3.32	3.78	4.25	5.26	6.34	6.92	6.69	5.47	*4.80*	*5.30*	Cap'l Spending per sh	*6.50*
10.43	11.42	12.15	12.78	12.54	13.05	13.57	14.12	14.79	15.54	16.41	16.96	18.08	19.43	21.24	22.76	*23.85*	*24.95*	Book Value per sh C	*28.50*
234.07	232.25	220.72	220.90	221.31	221.79	222.04	221.97	221.89	221.87	226.92	227.67	231.35	236.06	245.02	249.87	*250.50*	*251.00*	Common Shs Outst'g D	*252.50*
12.6	16.8	15.1	13.4	13.9	12.5	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	*17.0*
.67	.91	.80	.81	.93	.80	.91	.92	.86	.87	.91	1.17	1.04	1.03	1.13	1.09	*Value Line*		Relative P/E Ratio	*.95*
3.8%	3.3%	3.1%	4.1%	5.7%	4.6%	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	*3.7%*

CAPITAL STRUCTURE as of 9/30/21
Total Debt $7391 mill. **Due in 5 Yrs** $2174 mill.
LT Debt $6692 mill. **LT Interest** $255 mill.
(LT interest earned: 3.1x)
Leases, Uncapitalized Annual rentals $2 mill.

Pension Assets-12/20 $984 mill. **Oblig** $1351 mill.
Pfd Stock $200.0 mill. **Pfd Div'd** $10.2 mill.
8,000,000 shs. 5.1%, cumulative. Called for redemption on 12/15/21.

Common Stock 250,360,857 shs.
MARKET CAP: $14 billion (Large Cap)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
3665.3	3094.5	3276.8	3350.3	3253.6	3320.0	3382.2	3534.5	3647.7	3416.0	*3700*	*3900*	Revenues ($mill)	*4350*
304.4	337.8	382.1	395.7	390.9	384.0	466.1	522.3	567.4	624.0	*670*	*695*	Net Profit ($mill)	*810*
19.0%	21.5%	12.4%	10.1%	15.3%	13.4%	12.5%	8.4%	10.8%	NMF	*NMF*	*6.0%*	Income Tax Rate	*6.0%*
3.9%	6.5%	8.1%	8.8%	9.4%	16.3%	10.7%	14.5%	16.3%	8.8%	*4.0%*	*4.0%*	AFUDC % to Net Profit	*5.0%*
45.7%	48.4%	46.1%	49.7%	47.3%	51.5%	47.8%	52.3%	50.6%	53.5%	*53.0%*	*54.5%*	Long-Term Debt Ratio	*55.0%*
50.9%	48.4%	50.8%	47.5%	50.0%	46.1%	49.8%	45.7%	47.6%	44.9%	*47.0%*	*45.5%*	Common Equity Ratio	*45.0%*
5921.2	6476.6	6461.0	7257.2	7446.3	8377.6	8392.8	10032	10938	12657	*12700*	*13800*	Total Capital ($mill)	*16100*
7037.1	7838.0	7147.3	6442.0	8970.2	9809.9	10798	12462	13527	14336	*15125*	*15950*	Net Plant ($mill)	*19600*
6.4%	6.3%	7.0%	6.5%	6.3%	5.6%	6.7%	6.3%	6.3%	5.9%	*6.5%*	*6.0%*	Return on Total Cap'l	*6.0%*
9.5%	10.1%	11.0%	10.8%	10.0%	9.5%	10.6%	10.9%	10.5%	10.6%	*11.0%*	*11.0%*	Return on Shr. Equity	*11.5%*
9.5%	10.3%	11.3%	11.2%	10.2%	9.7%	10.9%	11.2%	10.7%	10.8%	*11.0%*	*11.0%*	Return on Com Equity E	*11.5%*
3.3%	3.9%	4.9%	4.6%	3.6%	2.8%	4.0%	4.4%	4.2%	4.2%	*4.5%*	*4.0%*	Retained to Com Eq	*4.0%*
67%	64%	57%	60%	66%	72%	64%	62%	61%	62%	*61%*	*62%*	All Div'ds to Net Prof	*64%*

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. (%)	260	265	251

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	-1.0%	-.5%	*2.5%*
"Cash Flow"	7.0%	6.0%	*7.0%*
Earnings	7.0%	6.5%	*5.5%*
Dividends	6.5%	7.0%	*6.0%*
Book Value	5.0%	6.5%	*5.0%*

Cal-endar	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	817.0	1024.0	*958*	*3700*
2022	*1000*	*850*	*1075*	*975*	*3900*

Cal-endar	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	.57	1.02	*.38*	*2.65*
2022	*.68*	*.57*	*1.05*	*.45*	*2.75*

Cal-endar	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	.4025	.4025	.4025	.4025	

BUSINESS: Alliant Energy Corporation, formerly named Interstate Energy, is a holding company formed through the merger of WPL Holdings, IES Industries, and Interstate Power. Supplies electricity to 977,000 customers and gas to 420,000 customers 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: gas, 34%; coal, 22%; wind, 16%; other, 1%; purchased, 27%. Fuel costs: 41% of revs. '20 reported depreciation rates: 2.8%-6.3%. Has 3,400 employees. Chairman, President & CEO: John O. Larsen. Inc.: Wisconsin. Address: 4902 N. Biltmore Lane, Madison, Wisconsin 53718-2148. Tel.: 608-458-3311. Internet: www.alliantenergy.com.

Alliant Energy has raised its earnings target for 2021, issued guidance for 2022, and announced its expectation for the dividend in 2022. Upon reporting third-quarter profits, which were helped by favorable weather patterns, management raised and narrowed its targeted range for share net in 2021 from $2.50-$2.64 to $2.61-$2.67. Alliant's guidance for 2022 is $2.65-$2.79 a share. The company also announced that its expectation for the annual dividend in 2022 is $1.71 a share, a raise of $0.10 (6.2%). The board of directors is likely to declare the next dividend in January.

Wisconsin Power and Light is awaiting a decision on its regulatory settlement. If this is approved by the Wisconsin commission, at the start of 2022 the utility's electric rates will be raised by $70 million (6%) and gas tariffs will be hiked by $15 million (8%). WPL's allowed return on equity will remain at 10%, and the allowed common-equity ratio will rise from 52.5% to 54%.

We estimate that earnings will advance 4% in 2022. We assume that the Wisconsin regulators approve the settlement. However, we also assume normal weather conditions. Favorable weather boosted share profits by $0.08 in the first nine months of 2021. This growth rate we expect is below Alliant's target of 5%-7% because the weather benefit in 2021 makes the comparison tough.

Alliant's utilities plan to add renewable energy capacity in Wisconsin and Iowa. The Wisconsin commission granted WPL permission to acquire 675 megawatts of capacity. The company is asking the Iowa commission to approve a proposal to add 400 mw of solar capacity and 75 mw of battery storage. However, some of Alliant's capital spending on renewable energy will be postponed from 2022 and 2023 to 2024 due to inflation and supply-chain concerns. Some of the funding for these projects will come from tax-equity partnerships.

This stock's valuation remains high. The dividend yield is below the utility average. Total return potential over the 18-month span is decent, but with the recent quotation well within the equity's 3- to 5-year Target Price Range, total return potential is low.

Paul E. Debbas, CFA *December 10, 2021*

(A) Diluted EPS. Excl. nonrecurring losses: '11, 1¢; '12, 8¢. '20 EPS don't sum due to rounding. Next earnings report due mid-Feb. (B) Dividends historically paid in mid-Feb., May, Aug., and Nov. ■ Dividend reinvestment plan avail. † Shareholder investment plan avail. (C) Incl. deferred charges. In '20: $2002 mill., $8.01/sh. (D) In millions, adj. for split. (E) Rate base: Orig. cost. Rates all'd on com. eq. in IA in '20: various; in WI in '20: 10%; earned on avg. com. eq., '20: 11.3%. Regulatory Climate: WI, Above Average; Iowa, Average.

Company's Financial Strength	A
Stock's Price Stability	95
Price Growth Persistence	65
Earnings Predictability	95

BLACK HILLS CORP. NYSE-BKH

RECENT PRICE	P/E RATIO	(Trailing: 16.8 / Median: 18.0)	RELATIVE P/E RATIO	DIV'D YLD
63.12	15.7	Trailing: 16.8; Median: 18.0	0.85	3.8%

VALUE LINE

TIMELINESS	4	Lowered 4/16/21
SAFETY	2	Raised 5/1/15
TECHNICAL	1	Raised 10/1/21

BETA 1.00 (1.00 = Market)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
High:	34.5	34.8	37.0	55.1	62.1	53.4	64.6	72.0	68.2	82.0	87.1	72.8
Low:	25.7	25.8	30.3	36.9	47.1	36.8	44.7	57.0	50.5	60.8	48.1	58.2

18-Month Target Price Range

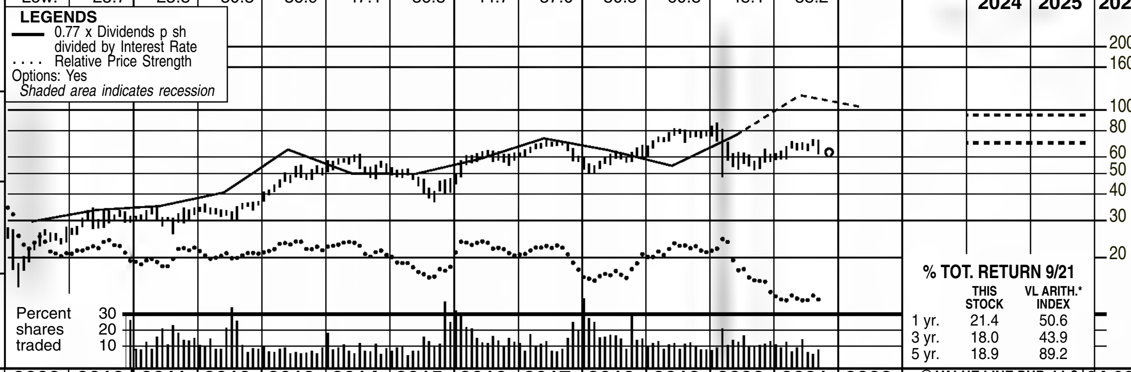
Low-High	Midpoint (% to Mid)
$34-$93	$64 (0%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	95	(+50%)	14%
Low	70	(+10%)	7%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	130	132	91
to Sell	142	141	163
Hld's(000)	53730	54420	55341



Target Price Range
2024 | 2025 | 2026

% TOT. RETURN 9/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	21.4	50.6
3 yr.	18.0	43.9
5 yr.	18.9	89.2

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
41.97	19.69	18.41	26.03	32.58	33.29	28.96	26.55	28.67	31.20	25.48	29.47	31.38	29.24	28.22	27.02	*29.05*	*28.25*	Revenues per sh	*29.25*
4.81	5.04	5.29	2.95	5.41	4.88	4.01	5.59	5.93	6.25	5.67	6.28	7.15	6.61	7.02	7.41	*7.65*	*7.95*	"Cash Flow" per sh	*9.25*
2.11	2.21	2.68	.18	2.32	1.66	1.01	1.97	2.61	2.89	2.83	2.63	3.38	3.47	3.53	3.73	*3.90*	*4.05*	Earnings per sh A	*4.75*
1.28	1.32	1.37	1.40	1.42	1.44	1.46	1.48	1.52	1.56	1.62	1.68	1.81	1.93	2.05	2.17	*2.29*	*2.41*	Div'd Decl'd per sh B ■	*2.80*
4.18	9.24	6.92	8.51	8.90	12.04	10.03	7.90	7.97	8.92	8.90	8.89	6.09	7.62	13.31	12.22	*10.05*	*9.15*	Cap'l Spending per sh	*9.00*
22.29	23.68	25.66	27.19	27.84	28.02	27.53	27.88	29.39	30.80	28.63	30.25	31.92	36.36	38.42	40.79	*42.85*	*44.90*	Book Value per sh C	*52.00*
33.16	33.37	37.80	38.64	38.97	39.27	43.92	44.21	44.50	44.67	51.19	53.38	53.54	60.00	61.48	62.79	*64.50*	*65.50*	Common Shs Outst'g D	*68.50*
17.3	15.8	15.0	NMF	9.9	18.1	31.1	17.1	18.2	19.0	16.1	22.3	19.5	16.8	21.2	17.0	*Bold figures are*		Avg Ann'l P/E Ratio	*17.5*
.92	.85	.80	NMF	.66	1.15	1.95	1.09	1.02	1.00	.81	1.17	.98	.91	1.13	.87	*Value Line*		Relative P/E Ratio	*.95*
3.5%	3.8%	3.4%	4.2%	6.2%	4.8%	4.6%	4.4%	3.2%	2.8%	3.5%	2.9%	2.7%	3.3%	2.7%	3.4%	*estimates*		Avg Ann'l Div'd Yield	*3.4%*

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
1272.2	1173.9	1275.9	1393.6	1304.6	1573.0	1680.3	1754.3	1734.9	1696.9	*1875*	*1850*	Revenues ($mill)	*2000*
40.4	86.9	115.8	128.8	128.3	140.3	186.5	192.5	214.5	232.9	*250*	*265*	Net Profit ($mill)	*325*
31.1%	35.5%	34.7%	33.7%	35.8%	25.1%	28.7%	19.2%	13.0%	12.2%	*8.5%*	*8.5%*	Income Tax Rate	*8.5%*
65.0%	5.4%	2.4%	2.4%	2.7%	5.3%	2.7%	1.4%	3.3%	2.5%	*2.0%*	*2.0%*	AFUDC % to Net Profit	*1.0%*
51.4%	43.2%	51.6%	47.9%	56.0%	66.5%	64.5%	57.5%	57.1%	57.9%	*60.5%*	*55.5%*	Long-Term Debt Ratio	*49.0%*
48.6%	56.8%	48.4%	52.1%	44.0%	33.5%	35.5%	42.5%	42.9%	42.1%	*39.5%*	*44.5%*	Common Equity Ratio	*51.0%*
2489.7	2171.4	2704.7	2643.6	3332.7	4825.8	4818.4	5132.4	5502.2	6089.5	*6990*	*6645*	Total Capital ($mill)	*7000*
2789.6	2742.7	2990.3	3239.4	3259.1	4469.0	4541.4	4854.9	5503.2	6019.7	*6425*	*6765*	Net Plant ($mill)	*7725*
3.3%	5.5%	5.5%	6.1%	4.9%	4.0%	5.2%	5.0%	4.9%	5.0%	*4.5%*	*5.0%*	Return on Total Cap'l	*5.5%*
3.3%	7.1%	8.9%	9.4%	8.8%	8.7%	10.9%	8.8%	9.1%	9.1%	*9.0%*	*9.0%*	Return on Shr. Equity	*9.0%*
3.3%	7.1%	8.9%	9.4%	8.8%	8.7%	10.9%	8.8%	9.1%	9.1%	*9.0%*	*9.0%*	Return on Com Equity E	*9.0%*
NMF	1.8%	3.7%	4.3%	3.8%	3.3%	5.3%	3.9%	3.8%	3.8%	*3.5%*	*3.5%*	Retained to Com Eq	*4.0%*
NMF	75%	58%	54%	57%	62%	52%	55%	58%	58%	*59%*	*59%*	All Div'ds to Net Prof	*59%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $4367.1 mill. **Due in 5 Yrs** $1335.3 mill.
LT Debt $3530.2 mill. **LT Interest** $141.6 mill.
(LT interest earned: 2.7x)
Leases, Uncapitalized Annual rentals $.9 mill.

Pension Assets-12/20 $473.7 mill.
Oblig $514.0 mill.

Pfd Stock None

Common Stock 63,480,270 shs.
as of 7/31/21

MARKET CAP: $4.0 billion (Mid Cap)

ELECTRIC OPERATING STATISTICS

	2018	2019	2020
% Change Retail Sales (KWH)	+2.7	+2.1	-.7
Avg. Indust. Use (MWH)	19789	21406	21624
Avg. Indust. Revs. per KWH (¢)	7.41	7.38	7.31
Capacity at Yearend (Mw)	NA	NA	NA
Peak Load, Summer (Mw)	1104	1022	1050
Annual Load Factor (%)	NA	NA	NA
% Change Customers (yr-end)	+.8	+1.1	+.9
Fixed Charge Cov. (%)	276	278	285

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	-1.0%	--	.5%
"Cash Flow"	4.5%	3.5%	4.5%
Earnings	10.0%	5.0%	5.0%
Dividends	3.5%	5.5%	5.5%
Book Value	3.5%	5.5%	5.0%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	575.4	355.7	322.0	501.2	1754.3
2019	597.8	333.9	325.5	477.7	1734.9
2020	537.0	326.9	346.6	486.4	1696.9
2021	633.4	372.6	*359*	*510*	*1875*
2022	*595*	*375*	*360*	*520*	*1850*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	1.59	.45	.32	1.11	3.47
2019	1.73	.24	.44	1.13	3.53
2020	1.59	.33	.58	1.23	3.73
2021	1.54	.40	*.65*	*1.31*	*3.90*
2022	*1.65*	*.45*	*.65*	*1.30*	*4.05*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.445	.445	.445	.475	1.81
2018	.475	.475	.475	.505	1.93
2019	.505	.505	.505	.535	2.05
2020	.535	.535	.535	.565	2.17
2021	.565	.565	.565		

BUSINESS: Black Hills Corporation is a holding company for Black Hills Energy, which serves 214,000 electric customers in CO, SD, WY and MT, and 1.1 million gas customers in NE, IA, KS, CO, WY, and AR. Has coal mining sub. Acq'd Cheyenne Light 1/05; utility ops. from Aquila 7/08; SourceGas 2/16. Discont. telecom in '05; oil marketing in '06; gas marketing in '11; gas & oil E&P in '17. Electric rev. breakdown: res'l, 31%; comm'l, 34%; ind'l, 18%; other, 17%. Generating sources: coal, 33%; other, 12%; purch., 55%. Fuel costs: 29% of revs. '20 deprec. rate: 3.2%. Has 3,000 employees. Chairman: David R. Emery. Pres. & CEO: Linn Evans. Inc.: SD. Address: 7001 Mount Rushmore Rd., P.O. Box 1400, Rapid City, SD 57709-1400. Tel.: 605-721-1700. Internet: www.blackhillscorp.com.

Black Hills has become more active in the regulatory arena this year. The utility has reached a settlement in Colorado (subject to approval by the state commission) that will raise gas rates by $6.5 million at the start of 2022, based on a 9.2% return on equity and a 50.3% common-equity ratio. In Iowa, the utility requested a gas rate increase of $8.3 million, based on a 10.15% ROE and a 50% common-equity ratio. An interim hike (of an undisclosed amount) took effect in June. In Kansas, Black Hills asked for $5.3 million, based on a 10.15% ROE and a 50.3% common-equity ratio. Besides higher rates, Black Hills is asking for a five-year regulatory mechanism in Iowa (and a renewal of this, in Kansas) to recover safety-focused expenditures. New tariffs in Iowa and Kansas should take effect in the first quarter of 2022.

Other rate applications are upcoming. The company expects to file a gas case in Arkansas by yearend and an electric petition in Wyoming in mid-2022. When the next electric application in Colorado will occur is unknown. Black Hills' last electric case in that state did not go well.

Despite some challenging factors, earnings should advance respectably in 2021 and 2022. A cold spell in February hurt the bottom line by $0.15 a share, although some of this is being recovered in subsequent periods. Sales of common equity will result in higher average shares outstanding each year. In 2022, a reduction in the price obtained through a purchased-power contract will be another negative factor. Even so, rate relief and healthy growth at the utilities point to higher profits. Our 2021 and 2022 share-net estimates are at the midpoint of Black Hills' guidance of $3.80-$4.00 and $3.95-$4.15, respectively.

We expect a dividend increase this quarter. In recent years, the board has been raising the quarterly disbursement $0.03 a share, and we think this pattern will continue. Black Hills' goal is at least 5% annual dividend growth through 2025.

This untimely stock has a dividend yield that is about average for a utility. Total return potential is low for the next 18 months, but average for the 3- to 5-year period.

Paul E. Debbas, CFA — *October 22, 2021*

(A) Dil. EPS. Excl. nonrec. gains (losses): '08, ($1.55); '09, (28¢); '10, 10¢; '15, ($3.54); '16, ($1.26); '17, 14¢; '18, $1.31; '19, (25¢); '20, (8¢); discontinued ops.: '08, $4.12; '09, 7¢; '11, 23¢; '12, (16¢); '17, (31¢); '18, (12¢). '19 EPS don't sum due to rounding. Next egs. due early Nov. (B) Div'ds pd. early Mar., Jun., Sept., & Dec. ■ Div'd reinv. plan avail. (C) Incl. def'd chgs. In '20: $24.49/sh. (D) In mill. (E) Rate base: Net orig. cost. Rate all'd on com. eq. in SD in '15: none; in CO in '17: 9.37%; earn. on avg. com. eq., '20: 9.5%. Regul. Climate: Avg.

Company's Financial Strength	A
Stock's Price Stability	85
Price Growth Persistence	50
Earnings Predictability	90

CMS ENERGY CORP. NYSE-CMS

RECENT PRICE	61.13	P/E RATIO	23.9 (Trailing: 22.4 / Median: 19.0)	RELATIVE P/E RATIO	1.32	DIV'D YLD	2.9%	VALUE LINE

TIMELINESS	3	Raised 4/30/21
SAFETY	2	Raised 3/21/14
TECHNICAL	3	Lowered 12/10/21
BETA .80 (1.00 = Market)		

18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$53-$82	$68 (10%)

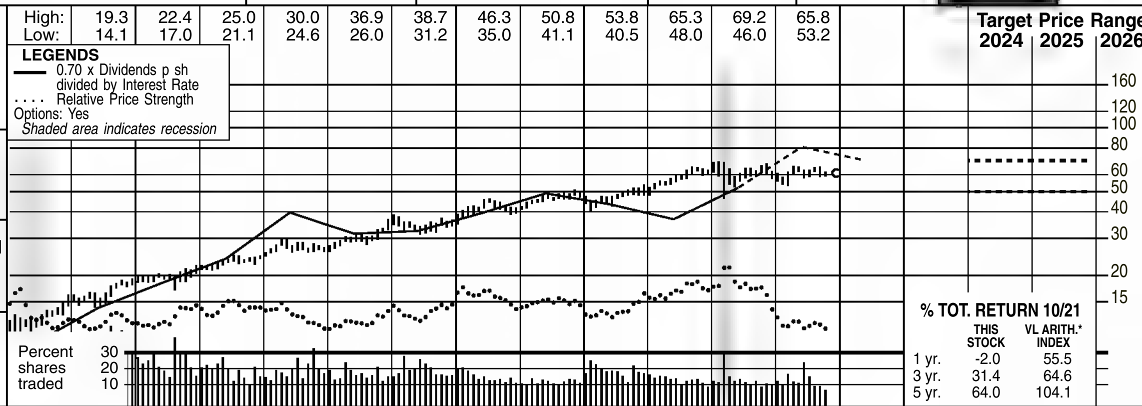
2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	70	(+15%)	7%
Low	50	(-20%)	-1%

Institutional Decisions

	1Q2021	2Q2021	3Q2021
to Buy	268	293	261
to Sell	262	245	244
Hld's(000)	259761	263668	270396

High:	19.3	22.4	25.0	30.0	36.9	38.7	46.3	50.8	53.8	65.3	69.2	65.8
Low:	14.1	17.0	21.1	24.6	26.0	31.2	35.0	41.1	40.5	48.0	46.0	53.2



% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	-2.0	55.5
3 yr.	31.4	64.6
5 yr.	64.0	104.1

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
28.52	30.57	28.95	30.13	27.23	25.77	25.59	23.90	24.68	26.09	23.29	22.92	23.37	24.25	24.11	23.12	*25.05*	*25.70*	Revenues per sh	*27.75*
3.43	3.22	3.08	3.88	3.47	3.70	3.65	3.82	4.06	4.22	4.59	4.88	5.29	5.61	5.89	6.24	*6.45*	*6.90*	"Cash Flow" per sh	*8.25*
1.10	.64	.64	1.23	.93	1.33	1.45	1.53	1.66	1.74	1.89	1.98	2.17	2.32	2.39	2.64	*2.65*	*2.85*	Earnings per sh A	*3.50*
- -	- -	.20	.36	.50	.66	.84	.96	1.02	1.08	1.16	1.24	1.33	1.43	1.53	1.63	*1.74*	*1.80*	Div'd Decl'd per sh B ■	*2.10*
2.69	3.01	5.61	3.50	3.59	3.29	3.47	4.65	4.98	5.73	5.64	5.99	5.91	7.32	7.41	8.02	*8.65*	*10.35*	Cap'l Spending per sh	*8.50*
10.53	10.03	9.46	10.88	11.42	11.19	11.92	12.09	12.98	13.34	14.21	15.23	15.77	16.78	17.68	19.02	*22.05*	*23.15*	Book Value per sh C	*27.75*
220.50	222.78	225.15	226.41	227.89	249.60	254.10	264.10	266.10	275.20	277.16	279.21	281.65	283.37	283.86	288.94	*289.70*	*289.70*	Common Shs Outst'g D	*295.00*
12.6	22.2	26.8	10.9	13.6	12.5	13.6	15.1	16.3	17.3	18.3	20.9	21.3	20.3	24.3	23.3	*Bold figures are*		Avg Ann'l P/E Ratio	*17.0*
.67	1.20	1.42	.66	.91	.80	.85	.96	.92	.91	.92	1.10	1.07	1.10	1.29	1.21	*Value Line*		Relative P/E Ratio	*.95*
- -	- -	1.2%	2.7%	4.0%	4.0%	4.3%	4.2%	3.8%	3.6%	3.4%	3.0%	2.9%	3.0%	2.6%	2.6%	*estimates*		Avg Ann'l Div'd Yield	*3.5%*

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
6503.0	6312.0	6566.0	7179.0	6456.0	6399.0	6583.0	6873.0	6845.0	6680.0	*7250*	*7450*	Revenues ($mill)	*8200*
384.0	413.0	454.0	479.0	525.0	553.0	610.0	659.0	682.0	757.0	*770*	*845*	Net Profit ($mill)	*1050*
36.8%	39.4%	39.9%	34.3%	34.0%	33.1%	31.2%	14.9%	17.7%	15.0%	*13.0%*	*13.0%*	Income Tax Rate	*13.0%*
2.6%	2.9%	2.0%	2.3%	2.7%	3.1%	1.1%	1.4%	2.1%	1.1%	*1.0%*	*2.0%*	AFUDC % to Net Profit	*1.0%*
66.9%	67.9%	67.5%	68.7%	68.3%	67.1%	67.3%	69.0%	70.4%	71.2%	*64.5%*	*64.0%*	Long-Term Debt Ratio	*64.5%*
32.6%	31.6%	32.2%	31.0%	31.4%	32.6%	32.4%	30.7%	29.4%	28.6%	*34.0%*	*34.5%*	Common Equity Ratio	*34.5%*
9279.0	10101	10730	11846	12534	13040	13692	15476	17082	19223	*18725*	*19375*	Total Capital ($mill)	*23600*
10633	11551	12246	13412	14705	15715	16761	18126	18926	21039	*22425*	*24250*	Net Plant ($mill)	*28000*
6.3%	5.9%	6.0%	5.7%	5.7%	5.8%	5.9%	5.6%	5.3%	5.2%	*5.5%*	*5.5%*	Return on Total Cap'l	*5.5%*
12.5%	12.8%	13.0%	12.9%	13.2%	12.9%	13.6%	13.8%	13.5%	13.7%	*11.5%*	*12.0%*	Return on Shr. Equity	*12.5%*
12.6%	12.9%	13.1%	13.0%	13.3%	13.0%	13.7%	13.8%	13.6%	13.7%	*12.0%*	*12.5%*	Return on Com Equity E	*12.5%*
5.6%	5.0%	5.2%	5.0%	5.2%	4.8%	5.2%	5.3%	4.9%	5.3%	*4.0%*	*4.5%*	Retained to Com Eq	*5.0%*
55%	61%	60%	62%	61%	63%	62%	62%	64%	62%	*66%*	*63%*	All Div'ds to Net Prof	*60%*

CAPITAL STRUCTURE as of 9/30/21
Total Debt $12660 mill. **Due in 5 Yrs** NA
LT Debt $12075 mill. **LT Interest** $479 mill.
Incl. $48 mill. finance leases.
(LT interest earned: 2.9x)
Leases, Uncapitalized Annual rentals $10 mill.
Pension Assets-12/20 $3402 mill.
Oblig $3266 mill.
Pfd Stock $261 mill. **Pfd Div'd** $11 mill.
Incl. 373,148 shs. $4.50 $100 par, cum., callable at $110.00; 9,200,000 shs. 4.2%, $25 par, cum.
Common Stock 289,697,389 shs.
as of 10/11/21
MARKET CAP: $18 billion (Large Cap)

ELECTRIC OPERATING STATISTICS

	2018	2019	2020
% Change Retail Sales (KWH)	+2.2	-3,7	-3.1
Avg. Indust. Use (MWH)	NA	NA	NA
Avg. Indust. Revs. per KWH (¢)	7.63	7.94	8.14
Capacity at Peak (Mw)	NA	NA	NA
Peak Load, Summer (Mw)	8084	8039	8215
Annual Load Factor (%)	NA	NA	NA
% Change Customers (yr-end)	+.3	+.9	+1.0
Fixed Charge Cov. (%)	250	235	240

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	-1.5%	-.5%	*2.5%*
"Cash Flow"	5.0%	6.5%	*5.5%*
Earnings	7.5%	7.0%	*6.0%*
Dividends	11.5%	7.0%	*5.5%*
Book Value	5.0%	5.5%	*7.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	1953	1492	1599	1829	6873.0
2019	2059	1445	1546	1795	6845.0
2020	1864	1443	1575	1798	6680.0
2021	2013	1558	1725	*1954*	*7250*
2022	*2100*	*1600*	*1750*	*2000*	*7450*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.86	.49	.59	.38	2.32
2019	.75	.33	.73	.58	2.39
2020	.85	.48	.76	.55	2.64
2021	1.09	.55	.54	*.47*	*2.65*
2022	*.95*	*.60*	*.75*	*.55*	*2.85*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec. 31	Full Year
2017	.3325	.3325	.3325	.3325	1.33
2018	.3575	.3575	.3575	.3575	1.43
2019	.3825	.3825	.3825	.3825	1.53
2020	.4075	.4075	.4075	.4075	1.63
2021	.435	.435	.435	.435	

BUSINESS: CMS Energy Corporation is a holding company for Consumers Energy, which supplies electricity and gas to lower Michigan (excluding Detroit). Has 1.8 million electric, 1.8 million gas customers. Has 1,234 megawatts of nonregulated generating capacity. Discontinued EnerBank in '21. Electric revenue breakdown: residential, 48%; commercial, 33%; industrial, 13%; other, 6%. Generating sources: coal, 23%; gas, 17%; renewables, 4%; purchased, 56%. Fuel costs: 38% of revenues. '20 reported deprec. rates: 3.9% electric, 2.9% gas, 9.8% other. Has 8,100 full-time employees. Chairman: John G. Russell. President & CEO: Garrick Rochow. Inc.: MI. Address: One Energy Plaza, Jackson, MI 49201. Tel.: 517-788-0550. Internet: www.cmsenergy.com.

CMS Energy has completed the sale of its EnerBank subsidiary. The bank is solidly profitable, but was not a core business for a company that is primarily an electric and gas utility. The sale raised about $1 billion in cash, which will obviate the company's expected equity needs through 2024. CMS Energy expects to book a pretax gain of $660 million on the sale in the current quarter, which we will *exclude* from our earnings presentation as income from discontinued operations. This business was expected to contribute $0.20-$0.22 to share net this year, so without this income, earnings will probably approximate the $2.64 tally of 2020.

One rate case is about to be concluded, and two more are upcoming. Consumers Energy is seeking an increase of $201 million, based on a return on equity of 10.5% and a common-equity ratio of 52%. The staff of the Michigan commission proposed a hike of $85 million, based on an ROE of 9.7% and a common-equity ratio of 51%. An administrative law judge recommended a $35 million increase, based on the same ROE and equity ratio as the staff. A ruling is due soon, with new tariffs taking effect at the start of 2022. The utility plans to file a gas rate application this month and its next electric petition in the first quarter of 2022. Decisions are due 10 months after the filing dates.

We expect solid earnings growth in 2022. Consumers Energy should benefit from rate relief. Our estimate is at the low end of CMS Energy's typically narrow guidance of $2.85-$2.87 a share. Management's target for annual earnings growth is 6%-8%.

We expect a dividend increase in the first quarter of 2022. This is the usual timing of the board's action. However, the hike will almost certainly be lower than in recent years. Now that EnerBank is no longer part of CMS Energy, the payout ratio is above the company's long-term target of 60%.

This stock has a high valuation. The dividend yield is a cut below the utility mean. The equity doesn't stand out for the next 18 months. With the recent quotation within our 3- to 5-year Target Price Range, total return potential is low over this time frame.

Paul E. Debbas, CFA *December 10, 2021*

(A) Diluted EPS. Excl. nonrec. gains (losses): '05, ($1.61); '06, ($1.08); '07, ($1.26); '09, (7¢); '10, 3¢; '11, 12¢; '12, (14¢); '17, (53¢); gains (losses) on discont. ops.: '05, 7¢; '06, 3¢; '07, (40¢); '09, 8¢; '10, (8¢); '11, 1¢; '12, 3¢; '21, 28¢; 4Q '21, *$1.70*. Next egs. report due early Feb. (B) Div'ds historically paid late Feb., May, Aug., & Nov. ■ Div'd reinv. plan avail. (C) Incl. intang. In '20: $9.18/sh. (D) In mill. (E) Rate base: Net orig. cost. Rate all'd on com. eq. in '21: 9.9% elec.; in '19: 9.9% gas; earn. on avg. com. eq., '20: 14.4%. Reg. Clim.: Above Avg.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	65
Earnings Predictability	95

CON. EDISON NYSE-ED

RECENT PRICE	76.11	P/E RATIO	17.3 (Trailing: 17.3 / Median: 17.0)	RELATIVE P/E RATIO	0.94	DIV'D YLD	4.2%	VALUE LINE

TIMELINESS **5** Lowered 7/16/21
SAFETY **1** New 7/27/90
TECHNICAL **4** Lowered 11/12/21
BETA .75 (1.00 = Market)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
High:	51.0	62.7	66.0	64.0	68.9	72.3	81.9	89.7	84.9	95.0	95.1	80.4
Low:	41.5	48.6	53.6	54.2	52.2	56.9	63.5	72.1	71.1	73.3	62.0	65.6

18-Month Target Price Range

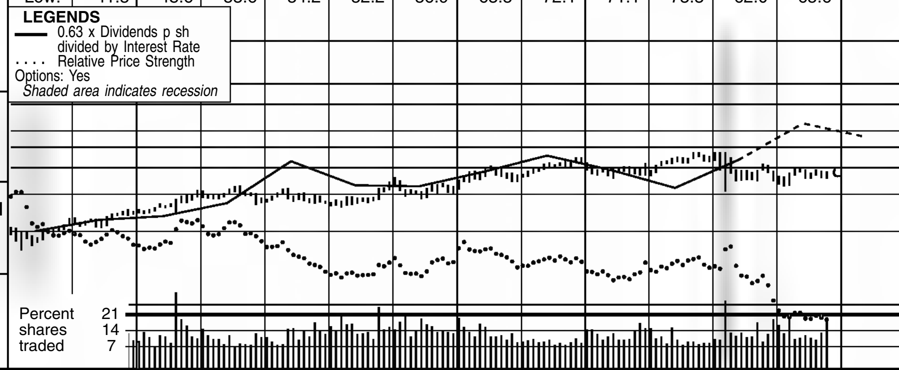
Low-High	Midpoint (% to Mid)
$54-$112	$83 (10%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	105	(+40%)	12%
Low	85	(+10%)	7%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	456	403	471
to Sell	368	425	348
Hld's(000)	206575	208737	216551



Target Price Range 2024 | 2025 | 2026
320
200
160
120
100
80
60
40
18

% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	0.0	55.5
3 yr.	10.3	64.6
5 yr.	19.1	104.1

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
47.66	47.14	48.23	49.62	46.36	45.69	44.17	41.62	42.27	44.11	42.85	39.59	38.82	38.44	37.80	35.78	*38.15*	*38.90*	Revenues per sh	*42.00*
5.27	5.28	5.77	5.99	5.86	6.24	6.61	7.15	7.45	7.30	7.93	7.89	8.41	8.92	9.10	9.48	*10.10*	*10.35*	"Cash Flow" per sh	*11.75*
2.99	2.95	3.48	3.36	3.14	3.47	3.57	3.86	3.93	3.62	4.05	3.94	4.10	4.55	4.08	3.94	*4.50*	*4.50*	Earnings per sh A	*5.00*
2.28	2.30	2.32	2.34	2.36	2.38	2.40	2.42	2.46	2.52	2.60	2.68	2.76	2.86	2.96	3.06	*3.10*	*3.20*	Div'd Decl'd per sh B ■	*3.50*
6.59	7.17	7.09	8.50	7.80	6.96	6.72	7.06	8.67	8.26	10.42	12.07	11.11	10.90	10.48	11.42	*11.45*	*11.70*	Cap'l Spending per sh	*12.00*
29.80	31.09	32.58	35.43	36.46	37.93	39.05	40.53	41.81	42.94	44.55	46.88	49.74	52.11	54.18	55.06	*56.60*	*58.15*	Book Value per sh C	*63.25*
245.29	257.46	272.02	273.72	281.12	291.62	292.89	292.87	292.87	292.88	293.00	305.00	310.00	320.96	332.63	342.30	*354.00*	*360.00*	Common Shs Outst'g D	*370.00*
15.1	15.5	13.8	12.3	12.5	13.3	15.1	15.4	14.7	15.9	15.6	18.8	19.8	17.1	21.1	20.1	*Bold figures are*		Avg Ann'l P/E Ratio	*18.0*
.80	.84	.73	.74	.83	.85	.95	.98	.83	.84	.79	.99	1.00	.92	1.12	1.03	*Value Line*		Relative P/E Ratio	*1.00*
5.0%	5.0%	4.8%	5.7%	6.0%	5.2%	4.5%	4.1%	4.3%	4.4%	4.1%	3.6%	3.4%	3.7%	3.4%	3.9%	*estimates*		Avg Ann'l Div'd Yield	*3.7%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $24065 mill. **Due in 5 Yrs** $5988 mill.
LT Debt $21666 mill. **LT Interest** $867 mill.
(LT interest earned: 2.7x)

Leases, Uncapitalized Annual rentals $79 mill.

Pension Assets-12/20 $17022 mill.
Oblig $18965 mill.
Pfd Stock None

Common Stock 353,381,808 shs.
as of 7/31/21
MARKET CAP: $27 billion (Large Cap)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
12938	12188	12381	12919	12554	12075	12033	12337	12574	12246	*13500*	*14000*	Revenues ($mill)	*15500*
1062.0	1141.0	1157.0	1066.0	1193.0	1189.0	1266.0	1424.0	1343.0	1324.0	*1565*	*1605*	Net Profit ($mill)	*1880*
36.1%	34.5%	31.8%	34.0%	33.6%	35.3%	36.6%	20.1%	17.1%	12.0%	*16.0%*	*16.0%*	Income Tax Rate	*16.0%*
1.6%	.5%	.5%	.3%	.7%	1.3%	1.5%	1.5%	2.0%	2.3%	*2.0%*	*2.0%*	AFUDC % to Net Profit	*2.0%*
46.5%	45.9%	46.1%	48.0%	47.9%	50.8%	48.9%	51.1%	50.7%	52.0%	*52.5%*	*51.5%*	Long-Term Debt Ratio	*51.5%*
52.5%	54.1%	53.9%	52.0%	52.1%	49.2%	51.1%	48.9%	49.3%	48.0%	*47.5%*	*48.5%*	Common Equity Ratio	*48.5%*
21794	21933	22735	24207	25058	29033	30149	34221	36549	39229	*42325*	*43200*	Total Capital ($mill)	*48100*
25093	26939	28436	29827	32209	35216	37600	41749	43889	46555	*48600*	*50675*	Net Plant ($mill)	*56900*
6.2%	6.5%	6.4%	5.6%	6.0%	5.3%	5.4%	5.3%	4.9%	4.5%	*5.0%*	*5.0%*	Return on Total Cap'l	*5.0%*
9.1%	9.6%	9.4%	8.5%	9.1%	8.3%	8.2%	8.5%	7.5%	7.0%	*8.0%*	*7.5%*	Return on Shr. Equity	*8.0%*
9.2%	9.6%	9.4%	8.5%	9.1%	8.3%	8.2%	8.5%	7.5%	7.0%	*8.0%*	*7.5%*	Return on Com Equity E	*8.0%*
3.1%	3.6%	3.6%	2.6%	3.5%	3.0%	3.0%	3.5%	2.3%	1.9%	*2.5%*	*2.0%*	Retained to Com Eq	*2.5%*
66%	62%	62%	69%	61%	64%	63%	59%	69%	74%	*67%*	*69%*	All Div'ds to Net Prof	*67%*

ELECTRIC OPERATING STATISTICS

	2018	2019	2020
% Change Retail Sales (KWH)	+2.8	-2.9	-6.2
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)	14156	13835	13170
Annual Load Factor (%)	NMF	NMF	NMF
% Change Customers (yr-end)	NA	NA	NA
Fixed Charge Cov. (%)	306	267	257

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	-2.5%	-3.0%	*2.0%*
"Cash Flow"	4.5%	4.0%	*4.0%*
Earnings	2.5%	1.5%	*3.0%*
Dividends	2.5%	3.0%	*3.0%*
Book Value	4.0%	4.5%	*2.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	3364	2696	3328	2949	12337
2019	3514	2744	3365	2951	12574
2020	3234	2719	3333	2960	12246
2021	3677	2971	*3600*	*3252*	*13500*
2022	*3800*	*3100*	*3750*	*3350*	*14000*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	1.37	.60	1.52	1.06	4.55
2019	1.31	.46	1.42	.88	4.08
2020	1.12	.57	1.47	.78	3.94
2021	1.58	.56	*1.55*	*.81*	*4.50*
2022	*1.45*	*.60*	*1.60*	*.85*	*4.50*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.69	.69	.69	.69	2.76
2018	.715	.715	.715	.715	2.86
2019	.74	.74	.74	.74	2.96
2020	.765	.765	.765	.765	3.06
2021	.775	.775	.775		

BUSINESS: Consolidated Edison, Inc. is a holding company for Consolidated Edison Company of New York, Inc. (CECONY), which sells electricity, gas, and steam in most of New York City and Westchester County. Also owns Orange and Rockland Utilities (O&R), which operates in New York and New Jersey. Has 3.7 mill. electric, 1.2 mill. gas customers. Pursues competitive energy opportunities through three wholly owned subsidiaries. Entered into midstream gas joint venture 6/16; sold it 7/21. Purchases most of its power. Fuel costs: 19% of revenues. '20 reported deprec. rates: 3.2%-3.5%. Has 14,100 empls. Chairman: John McAvoy. President & CEO: Timothy Cawley. Inc.: NY. Address: 4 Irving Place, New York, NY 10003. Tel.: 212-460-4600. Internet: www.conedison.com.

Consolidated Edison's earnings will probably advance significantly in 2021. The comparison is easy, as mark-to-market charges and an accounting item associated with renewable energy reduced share net by $0.13 and $0.10, respectively. On the other hand, these two factors boosted profits by $0.19 a share in the first six months of 2021. (Note that this is *excluded* from management's definition of operating earnings.) Aside from this favorable swing, the company's largest utility subsidiary, Consolidated Edison Company of New York, received the second phase of a three-year rate hike at the start of 2021. The renewable-energy businesses are benefiting as they add projects.

The New York State commission approved a settlement resolving matters related to service disruptions in recent years. The cost to ConEd's utilities will total $82.1 million, including $35.9 million that has already been incurred. The utilities will forgo some revenues and incur some costs in the coming years as a result of the agreement.

Orange and Rockland is awaiting an order on its rate case. The utility is seeking electric and gas increases of $27.8 million and $8.6 million, respectively. O&R based its application on a 9.5% return on equity and a 50% common-equity ratio. New tariffs will take effect at the start of 2022.

We estimate flat share earnings next year. The company will benefit from the third phase of the rate increase at CECONY and rate relief at O&R. However, the comparison will be tough because we assume no accounting income. Also, average shares outstanding will be higher due to equity issuances.

Our earnings presentation excludes charges stemming from the exit of a gas pipeline joint venture. The asset sale raised $600 million. However, ConEd had to write down the value of its investment. This amounted to charges totaling $147 million ($0.43 a share) in the first six months of 2021.

This high-quality stock is untimely, but has an above-average dividend yield, even by utility standards. Total return potential is decent for the next 18 months and the 3- to 5-year period.

Paul E. Debbas, CFA *November 12, 2021*

(A) Diluted EPS. Excl. nonrec. gains (losses): '13, (32¢); '14, 9¢; '16, 15¢; '17, 84¢; '18, (13¢); '20, (66¢); '21, (43¢); gain on disc. operations: '08, $1.01. '19 EPS don't sum due to rounding. Next earnings report due mid-Feb.
(B) Div'ds historically paid in mid-Mar., June, Sept., and Dec. ■ Div'd reinvestment plan avail. (C) Incl. intangibles. In '20: $24.50/sh.
(D) In mill. (E) Rate base: net orig. cost. Rate allowed on com. eq. for CECONY in '20: 8.8%; O&R in '19: 9.0%; earned on avg. com. eq., '20: 7.1%. Regulatory Climate: Below Average.

Company's Financial Strength	A+
Stock's Price Stability	90
Price Growth Persistence	40
Earnings Predictability	100

EVERSOURCE ENERGY NYSE-ES

RECENT PRICE	P/E RATIO		RELATIVE P/E RATIO	DIV'D YLD
84.75	22.8	(Trailing: 24.7) (Median: 19.0)	1.23	3.0%

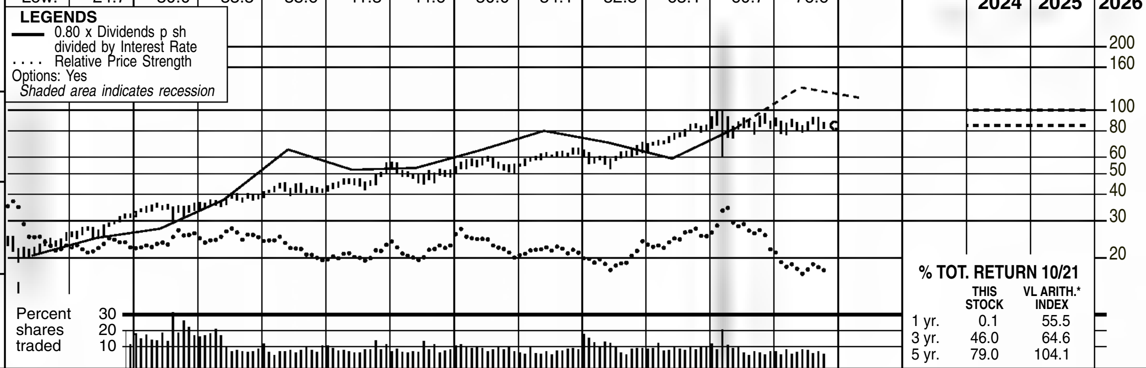
VALUE LINE

TIMELINESS 5 Lowered 10/8/21
SAFETY 1 Raised 5/22/15
TECHNICAL 3 Lowered 11/12/21
BETA .90 (1.00 = Market)

High:	32.2	36.5	40.9	45.7	56.7	56.8	60.4	66.1	70.5	86.6	99.4	92.7
Low:	24.7	30.0	33.5	38.6	41.3	44.6	50.0	54.1	52.8	63.1	60.7	76.6

Target Price Range 2024 | 2025 | 2026

LEGENDS
— 0.80 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area indicates recession



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$62-$150	$106 (25%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	100	(+20%)	7%
Low	85	(Nil)	3%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	387	331	360
to Sell	293	369	326
Hld's(000)	263115	266387	266114

Percent shares traded 30 20 10

% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	0.1	55.5
3 yr.	46.0	64.6
5 yr.	79.0	104.1

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
41.85	44.64	37.27	37.22	30.97	27.76	25.21	19.98	23.16	24.42	25.08	24.11	24.46	26.66	25.85	25.96	**28.50**	**28.80**	Revenues per sh	**31.25**
5.46	3.69	4.82	6.16	4.96	5.68	4.88	4.03	5.22	4.56	4.94	5.46	5.84	6.64	6.65	6.89	**7.20**	**7.90**	"Cash Flow" per sh	**9.00**
.98	.82	1.59	1.86	1.91	2.10	2.22	1.89	2.49	2.58	2.76	2.96	3.11	3.25	3.45	3.55	**3.50**	**4.05**	Earnings per sh A	**5.00**
.68	.73	.78	.83	.95	1.03	1.10	1.32	1.47	1.57	1.67	1.78	1.90	2.02	2.14	2.27	**2.41**	**2.56**	Div'd Decl'd per sh B ■	**3.05**
5.89	5.49	7.14	8.06	5.17	5.41	6.08	4.69	4.62	5.06	5.44	6.24	7.41	7.96	8.83	8.58	**10.25**	**10.20**	Cap'l Spending per sh	**8.50**
18.46	18.14	18.65	19.38	20.37	21.60	22.65	29.41	30.49	31.47	32.64	33.80	34.99	36.25	38.29	41.01	**42.30**	**44.15**	Book Value per sh C	**50.25**
131.59	154.23	156.22	155.83	175.62	176.45	177.16	314.05	315.27	316.98	317.19	316.89	316.89	316.89	329.88	342.95	**344.00**	**347.00**	Common Shs Outst'g D	**357.00**
19.8	27.1	18.7	13.7	12.0	13.4	15.4	19.9	16.9	17.9	18.1	18.7	19.5	18.7	22.1	24.3	*Bold figures are*		Avg Ann'l P/E Ratio	**18.5**
1.05	1.46	.99	.82	.80	.85	.97	1.27	.95	.94	.91	.98	.98	1.01	1.18	1.24	*Value Line*		Relative P/E Ratio	**1.05**
3.5%	3.3%	2.6%	3.2%	4.2%	3.6%	3.2%	3.5%	3.5%	3.4%	3.3%	3.2%	3.1%	3.3%	2.8%	2.6%	*estimates*		Avg Ann'l Div'd Yield	**3.3%**

CAPITAL STRUCTURE as of 6/30/21
Total Debt $19172 mill. **Due in 5 Yrs** $8382.1 mill.
LT Debt $16327 mill. **LT Interest** $597.2 mill.
(LT interest earned: 3.9x)
Leases, Uncapitalized Annual rentals $11.4 mill.
Pension Assets-12/20 $5409.2 mill. Oblig $7045.3 mill.
Pfd Stock $155.6 mill. **Pfd Div'd** $7.6 mill.
Incl. 2,324,000 shs $1.90-$3.28 rates ($50 par) not subject to mandatory redemption, call. at $50.50-$54.00; 430,000 shs 4.25%-4.78% not subject to mandatory redemption, call. at $102.80-$103.63.
Common Stock 343,643,255 shs. **as of 7/31/21**
MARKET CAP: $29 billion (Large Cap)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
4465.7	6273.8	7301.2	7741.9	7954.8	7639.1	7752.0	8448.2	8526.5	8904.4	**9800**	**10000**	Revenues ($mill)	**11000**
400.3	533.0	793.7	827.1	886.0	949.8	995.5	1040.5	1121.0	1212.7	**1220**	**1410**	Net Profit ($mill)	**1760**
29.9%	34.0%	35.0%	36.2%	37.9%	36.9%	36.8%	21.7%	19.7%	22.2%	**20.0%**	**20.0%**	Income Tax Rate	**20.0%**
8.6%	2.3%	1.4%	2.4%	2.9%	3.9%	4.7%	6.1%	6.3%	5.4%	**5.0%**	**5.0%**	AFUDC % to Net Profit	**4.0%**
53.4%	43.7%	44.3%	45.9%	45.6%	44.8%	51.2%	52.4%	52.8%	52.4%	**53.0%**	**53.5%**	Long-Term Debt Ratio	**55.0%**
45.3%	55.4%	54.8%	53.2%	53.6%	54.4%	48.2%	46.9%	46.6%	47.1%	**46.5%**	**46.0%**	Common Equity Ratio	**44.5%**
8856.0	16675	17544	18738	19313	19697	23018	24474	27097	29842	**31425**	**33400**	Total Capital ($mill)	**40200**
10403	16605	17576	18647	19892	21351	23617	25610	27585	30883	**33275**	**35650**	Net Plant ($mill)	**41600**
5.9%	4.2%	5.5%	5.3%	5.5%	5.8%	5.2%	5.2%	5.1%	5.0%	**5.0%**	**5.0%**	Return on Total Cap'l	**5.5%**
9.7%	5.7%	8.1%	8.2%	8.4%	8.7%	8.9%	8.9%	8.8%	8.5%	**8.5%**	**9.0%**	Return on Shr. Equity	**9.5%**
9.8%	5.7%	8.2%	8.2%	8.5%	8.8%	8.9%	9.0%	8.8%	8.6%	**8.5%**	**9.0%**	Return on Com Equity E	**10.0%**
5.0%	1.6%	3.4%	3.5%	3.4%	3.5%	3.5%	3.4%	3.6%	3.3%	**2.5%**	**3.5%**	Retained to Com Eq	**3.5%**
50%	72%	59%	58%	61%	60%	61%	62%	60%	62%	**69%**	**63%**	All Div'ds to Net Prof	**62%**

ELECTRIC OPERATING STATISTICS

	2018	2019	2020
% Change Retail Sales (KWH)	+2.2	-3.3	-2.7
Avg. Indust. Use (MWH)	NA	NA	NA
Avg. Indust. Revs. per KWH (¢)	NA	NA	NA
Capacity at Peak (Mw)	NA	NA	NA
Peak Load, Winter (Mw)	NA	NA	NA
Annual Load Factor (%)	NA	NA	NA
% Change Customers (yr-end)	+.5	+.7	+.8
Fixed Charge Cov. (%)	319	319	345

BUSINESS: Eversource Energy (formerly Northeast Utilities) is the parent of utilities with 3.2 mill. electric, 881,000 gas, 216,000 water customers. Supplies power to most of Connecticut and gas to part of Connecticut; supplies power to 3/4 of New Hampshire's population; supplies power to western Massachusetts and parts of eastern MA & gas to central & eastern MA; supplies water to CT, MA, & NH. Acq'd NSTAR 4/12; Aquarion 12/17; Columbia Gas 10/20. Electric rev. breakdown: residential, 56%; commercial, 33%; industrial, 5%; other, 6%. Fuel costs: 34% of revs. '20 reported deprec. rate: 3.0%. Has 9,300 employees. Chairman: James J. Judge. President & CEO: Joe Nolan. Inc.: MA. Address: 300 Cadwell Drive, Springfield, MA 01104. Tel.: 413-785-5871. Internet: www.eversource.com.

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	-2.0%	1.5%	3.0%
"Cash Flow"	2.0%	6.5%	5.0%
Earnings	5.5%	5.5%	6.5%
Dividends	8.5%	6.5%	6.0%
Book Value	6.5%	4.0%	4.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	2288	1854	2271	2035	8448.1
2019	2416	1884	2176	2050	8526.5
2020	2373	1953	2344	2234	8904.4
2021	2826	2122	2461	**2391**	**9800**
2022	**2850**	**2200**	**2550**	**2400**	**10000**

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.85	.76	.91	.73	3.25
2019	.97	.74	.98	.76	3.45
2020	1.01	.75	1.01	.78	3.55
2021	1.06	.77	.82	**.85**	**3.50**
2022	**1.17**	**.87**	**1.08**	**.93**	**4.05**

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.475	.475	.475	.475	1.90
2018	.505	.505	.505	.505	2.02
2019	.535	.535	.535	.535	2.14
2020	.5675	.5675	.5675	.5675	2.27
2021	.6025	.6025	.6025		

The regulators in Connecticut have approved a settlement affecting Eversource Energy's electric company in the state. Connecticut Light & Power was criticized for its performance following a tropical storm in August of 2020. In fact, the commission threatened to lower the utility's allowed return on equity, in addition to a penalty that cost the company $0.07 in the first quarter. The allowed ROE will not be cut, but CL&P will have to provide customers with $75 million of bill credits and assistance. As a result, Eversource took a charge of $0.17 a share against third-quarter results, which is *included* in our earnings presentation.

We have lowered our 2021 earnings estimate by $0.25 a share, to $3.50. This would result in a slight decline even from the 2020 tally, which was hurt by storm-related expenses and costs associated with the purchase of a gas utility. (The acquisition costs continued into 2021, and lowered share net by $0.05 in the first nine months.) Positive factors this year include a full year of income from the newly acquired gas company and a full year's effect of rate hikes that were granted in 2020. As always, Eversource benefits from spending on electric transmission, which is recoverable in rates contemporaneously.

Earnings should increase materially in 2022. The comparison will be easy because there will be no penalty or customer credits, and we assume no transition costs associated with the gas utility acquisition. Income from Eversource's transmission operations should advance further. The company's long-term annual earnings growth target is 5%-7%.

Eversource is building offshore wind projects through a joint venture with Orsted, a European company. The three projects in various stages of development would provide 1,760 megawatts of capacity beginning in late 2023. If all goes as planned, this will accelerate the company's earnings growth, but investors should be aware that offshore wind has significant construction risk.

This top-quality but untimely stock has a below-average dividend yield for a utility. Total return potential is attractive for the next 18 months, but low for the 3- to 5-year period.

Paul E. Debbas, CFA *November 12, 2021*

(A) Diluted EPS. Excl. nonrecurring gains (losses): '05, ($1.36); '08, (19¢); '10, 9¢; '19, (64¢). Next earnings report due late Feb. (B) Div'ds historically paid late Mar., June, Sept., & Dec. ■ Div'd reinvestment plan avail. (C) Incl. deferred charges. In '20: $9939.3 mill., $28.98/sh. (D) In mill. (E) Rate allowed on com. eq. in MA: (elec.) '18, 10.0%; (gas) '20, 9.7%-9.9%; in CT: (elec.) '18, 9.25%; (gas) '18, 9.3%; in NH: '21, 9.3%; earned on avg. com. eq., '20: 9.0%. Regulatory Climate: CT, Below Average; NH, Average; MA, Above Average.

Company's Financial Strength	A
Stock's Price Stability	85
Price Growth Persistence	65
Earnings Predictability	100

MGE ENERGY INC. NDQ-MGEE

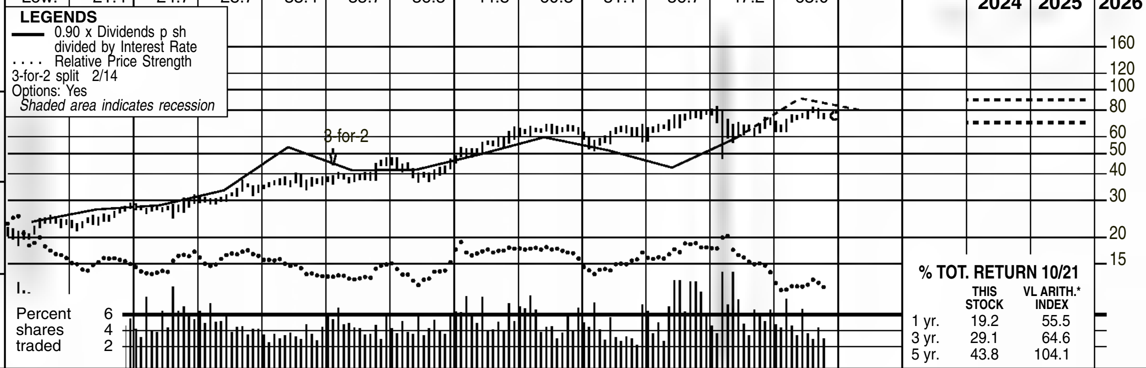
RECENT PRICE	75.25	P/E RATIO	26.9 (Trailing: 25.0 / Median: 22.0)	RELATIVE P/E RATIO	1.49	DIV'D YLD	2.1%	VALUE LINE

TIMELINESS 3 Raised 5/21/21
SAFETY 1 New 1/3/03
TECHNICAL 3 Lowered 12/3/21
BETA .75 (1.00 = Market)

High:	29.1	31.9	37.4	40.5	48.0	48.0	66.9	68.7	68.9	80.8	83.3	82.9
Low:	21.4	24.7	28.7	33.4	35.7	36.5	44.8	60.3	51.1	56.7	47.2	63.0

Target Price Range 2024 | 2025 | 2026

LEGENDS
— 0.90 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-2 split 2/14
Options: Yes
Shaded area indicates recession



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$67-$98	$83 (10%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	90	(+20%)	7%
Low	70	(-5%)	1%

Institutional Decisions

	1Q2021	2Q2021	3Q2021
to Buy	72	58	69
to Sell	65	85	62
Hld's(000)	17787	18080	18137

% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	19.2	55.5
3 yr.	29.1	64.6
5 yr.	43.8	104.1

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
16.73	16.13	16.33	17.35	15.40	15.36	15.76	15.61	17.04	17.88	16.27	15.71	16.24	16.15	16.41	15.32	*16.30*	*16.85*	Revenues per sh	*18.75*
2.00	2.34	2.46	2.68	2.66	2.76	2.94	2.98	3.28	3.49	3.33	3.47	3.73	4.06	4.57	4.74	*5.05*	*5.20*	"Cash Flow" per sh	*5.75*
1.05	1.37	1.51	1.59	1.47	1.67	1.76	1.86	2.16	2.32	2.06	2.18	2.20	2.43	2.51	2.60	*2.95*	*3.00*	Earnings per sh A	*3.50*
.92	.93	.94	.96	.97	.99	1.01	1.04	1.07	1.11	1.16	1.21	1.26	1.32	1.38	1.45	*1.52*	*1.59*	Div'd Decl'd per sh B ■ †	*1.85*
2.80	2.94	4.14	3.08	2.35	1.76	1.88	2.84	3.43	2.67	2.08	2.41	3.12	6.12	4.73	5.78	*4.75*	*5.60*	Cap'l Spending per sh	*4.75*
11.21	11.93	12.99	13.92	14.47	15.14	15.89	16.71	17.81	19.02	19.92	20.89	22.45	23.56	24.68	27.76	*28.45*	*29.85*	Book Value per sh C	*34.50*
30.68	31.46	32.93	34.36	34.67	34.67	34.67	34.67	34.67	34.67	34.67	34.67	34.67	34.67	34.67	36.16	*36.16*	*36.16*	Common Shs Outst'g D	*36.16*
22.4	15.9	15.0	14.2	15.1	15.0	15.8	17.2	17.0	17.2	20.3	24.9	29.4	25.1	28.4	26.4	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*23.0*
1.19	.86	.80	.85	1.01	.95	.99	1.09	.96	.91	1.02	1.31	1.48	1.36	1.51	1.37			Relative P/E Ratio	*1.45*
3.9%	4.3%	4.1%	4.2%	4.4%	4.0%	3.6%	3.2%	2.9%	2.8%	2.8%	2.2%	2.0%	2.2%	1.9%	2.1%			Avg Ann'l Div'd Yield	*2.3%*

CAPITAL STRUCTURE as of 9/30/21
Total Debt $620.2 mill. **Due in 5 Yrs** $103.9 mill.
LT Debt $615.3 mill. **LT Interest** $24.8 mill.
Incl. $17.5 mill. finance leases.
(LT interest earned: 5.7x)
Leases, Uncapitalized Annual rentals $1.8 mill.

Pension Assets-12/20 $429.5 mill.
Oblig $461.2 mill.
Pfd Stock None

Common Stock 36,163,370 shs.
as of 10/31/21
MARKET CAP: $2.7 billion (Mid Cap)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
546.4	541.3	590.9	619.9	564.0	544.7	563.1	559.8	568.9	538.6	*590*	*610*	Revenues ($mill)	*680*
60.9	64.4	74.9	80.3	71.3	75.6	76.1	84.2	86.9	92.4	*105*	*110*	Net Profit ($mill)	*125*
37.1%	37.7%	37.5%	37.5%	36.7%	36.0%	36.4%	24.6%	18.5%	17.4%	*17.0%*	*16.5%*	Income Tax Rate	*16.0%*
- -	- -	5.6%	5.7%	1.3%	2.1%	2.1%	5.2%	3.6%	8.7%	*9.0%*	*5.0%*	AFUDC % to Net Profit	*5.0%*
39.6%	38.2%	39.3%	37.5%	36.2%	34.6%	33.8%	37.7%	38.0%	35.5%	*38.5%*	*39.0%*	Long-Term Debt Ratio	*40.0%*
60.4%	61.8%	60.7%	62.5%	63.8%	65.4%	66.2%	62.3%	62.0%	64.5%	*61.5%*	*61.0%*	Common Equity Ratio	*60.0%*
911.9	937.9	1016.9	1054.7	1081.5	1106.9	1176.3	1310.0	1379.4	1512.8	*1665*	*1765*	Total Capital ($mill)	*2075*
995.6	1073.5	1160.2	1208.1	1243.4	1282.1	1341.4	1509.4	1642.7	1769.4	*1865*	*1990*	Net Plant ($mill)	*2325*
7.8%	7.9%	8.3%	8.6%	7.5%	7.7%	7.3%	7.2%	7.1%	6.8%	*7.0%*	*6.5%*	Return on Total Cap'l	*7.0%*
11.1%	11.1%	12.1%	12.2%	10.3%	10.4%	9.8%	10.3%	10.2%	9.5%	*10.5%*	*10.0%*	Return on Shr. Equity	*10.0%*
11.1%	11.1%	12.1%	12.2%	10.3%	10.4%	9.8%	10.3%	10.2%	9.5%	*10.5%*	*10.0%*	Return on Com Equity D	*10.0%*
4.7%	4.9%	6.1%	6.4%	4.5%	4.7%	4.2%	4.7%	4.6%	4.2%	*5.0%*	*4.5%*	Retained to Com Eq	*4.5%*
57%	56%	50%	48%	56%	55%	57%	54%	55%	56%	*51%*	*53%*	All Div'ds to Net Prof	*54%*

ELECTRIC OPERATING STATISTICS

	2018	2019	2020
% Change Retail Sales (KWH)	+1.6	-2.3	-3.5
Avg. Indust. Use (MWH)	1802	NA	NA
Avg. Indust. Revs. per KWH (¢)	7.70	7.43	7.16
Capacity at Peak (Mw)	NA	NA	NA
Peak Load, Summer (Mw)	686	NA	NA
Annual Load Factor (%)	NA	NA	NA
% Change Customers (avg.)	NA	NA	NA
Fixed Charge Cov. (%)	645	465	429

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	- -	-1.5%	*2.5%*
"Cash Flow"	5.0%	6.0%	*4.5%*
Earnings	5.0%	3.0%	*5.5%*
Dividends	3.5%	4.5%	*5.0%*
Book Value	5.5%	6.0%	*5.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	157.6	124.3	137.8	140.1	559.8
2019	167.6	122.2	138.2	140.9	568.9
2020	149.9	117.0	135.2	136.5	538.6
2021	167.9	130.7	145.9	*145.5*	*590*
2022	*175*	*135*	*150*	*150*	*610*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	.58	.53	.85	.47	2.43
2019	.69	.45	.88	.48	2.51
2020	.75	.53	.88	.44	2.60
2021	.97	.63	.97	*.38*	*2.95*
2022	*.90*	*.55*	*.95*	*.50*	*3.00*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ † Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.3075	.3075	.3225	.3225	1.26
2018	.3225	.3225	.3375	.3375	1.32
2019	.3375	.3375	.3525	.3525	1.38
2020	.3525	.3525	.37	.37	1.45
2021	.37	.37	.3875		

BUSINESS: MGE Energy, Inc. is a holding company for Madison Gas and Electric Company (MGE), which provides electric service to 157,000 customers in Dane County and gas service to 166,000 customers in seven counties in Wisconsin. Electric revenue breakdown: residential, 37%; commercial, 50%; industrial, 3%; other, 10%. Generating sources: coal, 47%; gas, 15%; renewables, 14%; purchased power, 24%. Fuel costs: 28% of revenues. '20 reported depreciation rates: electric, 3.5%; gas, 2.2%; nonregulated, 2.3%. Has about 700 employees. Chairman, President & CEO: Jeffrey M. Keebler. Incorporated: Wisconsin. Address: 133 South Blair Street, P.O. Box 1231, Madison, Wisconsin 53701-1231. Telephone: 608-252-7000. Internet: www.mgeenergy.com.

MGE Energy's utility subsidiary has reached a settlement of its general rate case. For 2022, Madison Gas and Electric filed for electric and gas rate increases of $23.1 million (5.9%) and $5.3 million (3.0%), respectively, based on a 9.8% return on equity and a 55.6% common-equity ratio. For 2023, the utility sought no increase for electricity (but wanted to reopen the case under certain circumstances, such as a change in the federal tax rate), and asked for a $3.0 million (1.6%) boost in gas tariffs. The company reached a settlement with the staff of the Wisconsin commission and various intervenors that calls for electric and gas increases of $20.5 million (5.2%) and $4.2 million (2.2%), respectively, in 2022. Electric tariffs would be flat in 2023 (with a clause allowing for a reopener under certain circumstances) and gas rates would climb $1.8 million (1.0%). The allowed ROE and common-equity ratio would be what MG&E requested. We consider this a constructive regulatory settlement. An order from the regulators is expected by yearend, with new tariffs taking effect at the start of 2022.

We have raised our 2021 and 2022 earnings estimates by $0.10 a share each year. Third-quarter share net easily topped our estimate of $0.85. Favorable weather conditions helped, as they have so far this year. Economic improvement as the economy reopens has been another positive factor. We assume in our 2022 estimate that the commission approves the regulatory settlement. Despite the expectation of rate relief, we look for just a slight earnings increase because we also assume normal weather patterns.

The utility is adding renewable generating capacity. A 50-megawatt solar project is close to completion at a cost of $65 million, and a similar facility is scheduled for commercial operation in late 2022. Besides these projects, MGE's plans call for the addition of 127 mw of solar, wind, and battery storage at a cost of $185 million from 2022 through 2024.

This stock has one of the highest valuations of any utility issue. The dividend yield is well below the industry mean. The recent quotation is within our 2024-2026 Target Price Range.

Paul E. Debbas, CFA *December 10, 2021*

(A) Diluted earnings. Excludes nonrecurring gain: '17, 62¢. '19 earnings don't sum due to rounding. Next earnings report due late Feb. (B) Dividends historically paid in mid-March, June, September, and December. ■ Dividend reinvestment plan available. † Shareholder investment plan available. (C) Includes regulatory assets. In '20: $178.6 mill., $4.94/sh. (D) In millions, adjusted for split. (E) Rate allowed on common equity in '21: 9.8%; earned on common equity, '20: 10.1%. Regulatory Climate: Above Average.

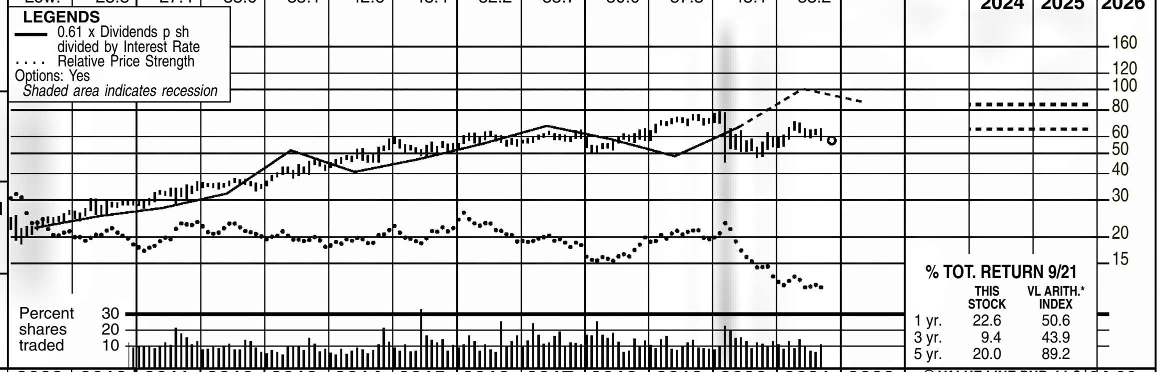
Company's Financial Strength	A+
Stock's Price Stability	100
Price Growth Persistence	60
Earnings Predictability	100

NORTHWESTERN NDQ-NWE

RECENT PRICE	57.49	P/E RATIO	15.5 (Trailing: 16.0 / Median: 17.0)	RELATIVE P/E RATIO	0.84	DIV'D YLD	4.4%	VALUE LINE

TIMELINESS 4 Lowered 8/6/21
SAFETY 2 Raised 7/27/18
TECHNICAL 2 Raised 10/1/21
BETA .95 (1.00 = Market)

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



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$44-$93	$69 (20%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	85	(+50%)	*14%*
Low	65	(+15%)	*8%*

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	116	114	118
to Sell	135	130	125
Hld's(000)	47664	47776	47852

% TOT. RETURN 9/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	22.6	50.6
3 yr.	9.4	43.9
5 yr.	20.0	89.2

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
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	*24.30*	*24.30*	Revenues per sh	*26.25*
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	*7.05*	*7.40*	"Cash Flow" per sh	*8.00*
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	*3.65*	*3.75*	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	*8.30*	*10.95*	Cap'l Spending per sh	*7.00*
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	*43.00*	*44.15*	Book Value per sh C	*48.00*
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	*54.50*	*54.50*	Common Shs Outst'g D	*57.00*
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*		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	*Value Line*		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%	*estimates*		Avg Ann'l Div'd Yield	*3.7%*

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
1117.3	1070.3	1154.5	1204.9	1214.3	1257.2	1305.7	1198.1	1257.9	1198.7	*1325*	*1325*	Revenues ($mill)	*1500*
92.6	83.7	94.0	120.7	138.4	164.2	162.7	171.1	179.3	155.2	*195*	*205*	Net Profit ($mill)	*235*
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%*	*12.0%*	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%	*50.5%*	*50.5%*	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%	*49.5%*	*49.5%*	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	*4745*	*4860*	Total Capital ($mill)	*5375*
2213.3	2435.6	2690.1	3758.0	4059.5	4214.9	4358.3	4521.3	4700.9	4952.9	*5215*	*5610*	Net Plant ($mill)	*6350*
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%	*67%*	*68%*	All Div'ds to Net Prof	*69%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $2519.5 mill. **Due in 5 Yrs** $782.2 mill.
LT Debt $2516.7 mill. **LT Interest** $87.8 mill.
Incl. $13.4 mill. finance leases.
(LT interest earned: 3.0x)

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

Pfd Stock None

Common Stock 51,561,227 shs. as of 7/23/21

MARKET CAP: $3.0 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%	*2.5%*
Earnings	5.5%	3.5%	*3.0%*
Dividends	5.5%	6.5%	*3.5%*
Book Value	6.0%	5.5%	*3.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) 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	298.2	*300*	*326*	*1325*
2022	*390*	*300*	*300*	*335*	*1325*

Cal-endar	EARNINGS PER SHARE A 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	.72	*.60*	*1.09*	*3.65*
2022	*1.30*	*.55*	*.65*	*1.25*	*3.75*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ † 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	.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: Dana J. Dykhouse. 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.

NorthWestern's earnings are likely to wind up much improved in 2021. The comparison with the 2020 tally is easy. In 2020, profits were hurt by coronavirus-related costs, unfavorable weather patterns, and a charge for the disallowance of power costs. This year, the weather has been near normal, and the company booked an unusual (but not nonrecurring) credit of $0.13 a share in the second quarter. Management excludes this from its guidance of $3.43-$3.58 a share, so our estimate of $3.65 is above this range.

The company is issuing stock. This will help finance its capital budget and shore up its balance sheet. (NorthWestern has a negative outlook from a credit-rating agency.) Previously, the company had expected to issue $200 million of common equity through an at-the-market program over a three-year span, but management now intends to finish this by yearend.

We look for just a slight earnings increase in 2022. The second-quarter comparison will be difficult. Also, average shares outstanding will be higher due to the stock issuance.

NorthWestern is adding generating capacity. In South Dakota, a 60-megawatt gas-fired facility is being built at a cost of $80 million. This is still expected to be on line in late 2021, but completion might slip into early 2022. The utility plans to add another 30 mw-40 mw in the state in 2023 at an expected cost of about $60 million. In Montana, NorthWestern plans to build a 175-mw gas-fired plant at an expected cost of $275 million (including the Allowance for Funds Used During Construction). The utility is no longer seeking a certificate of need from the state regulators because it wants to ensure that the project is completed by late 2023 or early 2024. This is not included in NorthWestern's five-year capital spending expectations. There is a risk of a write-off if the commission deems the project imprudent, but this would almost certainly have been delayed if the utility went through the approval process.

This stock is untimely, but offers a good dividend yield. This is above the utility average. Prospects for the 18-month span are good, but the equity does not stand out for the 3- to 5-year period.

Paul E. Debbas, CFA *October 22, 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 mid-Feb. **(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	85
Price Growth Persistence	45
Earnings Predictability	90

SEMPRA ENERGY NYSE-SRE

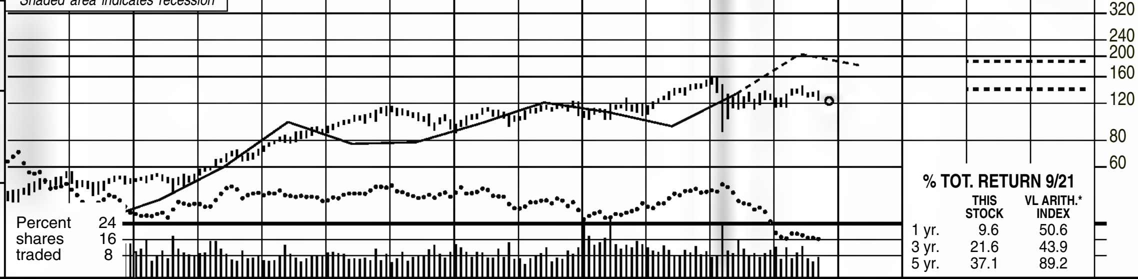
RECENT PRICE	123.13	P/E RATIO	31.7 (Trailing: 17.8, Median: 20.0)	RELATIVE P/E RATIO	1.71	DIV'D YLD	3.7%	VALUE LINE

TIMELINESS 5 Lowered 10/8/21
SAFETY 2 Raised 7/29/16
TECHNICAL 2 Raised 10/22/21
BETA 1.00 (1.00 = Market)

High:	57.2	56.0	72.9	93.0	116.3	116.2	114.7	123.0	127.2	154.5	161.9	144.9	
Low:	43.9	44.8	54.7	70.6	86.7	89.4	86.7	99.7	100.5	106.1	88.0	114.7	

Target Price Range 2024 | 2025 | 2026

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



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$97-$217	$157 (30%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	190	(+55%)	14%
Low	140	(+15%)	7%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	374	412	434
to Sell	359	325	272
Hld's(000)	240266	254378	266791

% TOT. RETURN 9/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	9.6	50.6
3 yr.	21.6	43.9
5 yr.	37.1	89.2

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
45.64	44.89	43.79	44.21	32.88	37.44	41.83	39.80	43.18	44.80	41.20	40.71	44.59	42.69	37.12	39.41	**37.60**	**39.75**	Revenues per sh	**46.50**
5.96	6.74	6.93	7.40	7.94	7.76	8.58	8.92	8.87	9.41	10.32	9.50	10.57	11.07	11.14	12.41	**9.55**	**14.70**	"Cash Flow" per sh	**18.50**
3.52	4.23	4.26	4.43	4.78	4.02	4.47	4.35	4.22	4.63	5.23	4.24	4.63	5.48	5.97	6.58	**4.00**	**8.50**	Earnings per sh A	**10.75**
1.16	1.20	1.24	1.37	1.56	1.56	1.92	2.40	2.52	2.64	2.80	3.02	3.29	3.58	3.87	4.18	**4.40**	**4.62**	Div'd Decl'd per sh B ■	**5.50**
5.46	7.28	7.70	8.47	7.76	8.58	11.85	12.20	10.52	12.68	12.71	16.85	15.71	13.82	12.71	16.21	**17.85**	**15.70**	Cap'l Spending per sh	**13.00**
23.95	28.66	31.87	32.75	36.54	37.54	41.00	42.42	45.03	45.98	47.56	51.77	50.41	54.35	60.58	70.11	**75.75**	**79.65**	Book Value per sh C	**94.00**
257.19	262.01	261.21	243.32	246.51	240.45	239.93	242.37	244.46	246.33	248.30	250.15	251.36	273.77	291.71	288.47	**322.00**	**322.00**	Common Shs Outst'g D	**322.00**
11.8	11.5	14.0	11.8	10.1	12.6	11.8	14.9	19.7	21.9	19.7	24.4	24.3	20.4	22.5	19.6	*Bold figures are*		Avg Ann'l P/E Ratio	**15.5**
.63	.62	.74	.71	.67	.80	.74	.95	1.11	1.15	.99	1.28	1.22	1.10	1.20	1.01	*Value Line*		Relative P/E Ratio	**.85**
2.8%	2.5%	2.1%	2.6%	3.2%	3.1%	3.6%	3.7%	3.0%	2.6%	2.7%	2.9%	2.9%	3.2%	2.9%	3.2%	*estimates*		Avg Ann'l Div'd Yield	**3.3%**

CAPITAL STRUCTURE as of 6/30/21
Total Debt $24863 mill. **Due in 5 Yrs** $8430 mill.
LT Debt $22090 mill. **LT Interest** $828 mill.
Incl. $1294 mill. finance leases.
(LT interest earned: 3.9x)
Leases, Uncapitalized Annual rentals $73 mill.
Pension Assets-12/20 $3002 mill. **Oblig** $4077 mill.
Pfd Stock $1454 mill. **Pfd Div'd** $83 mill.
5.75 mill. shs. 6.75% mand. conv. pfd.; 811,073 shs. 6% cum., $25 par.; 900,000 shs. 4.875% cum.
Common Stock 319,328,331 shs.
as of 8/2/21
MARKET CAP: $39 billion (Large Cap)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
10036	9647.0	10557	11035	10231	10183	11207	11687	10829	11370	**12100**	**12800**	Revenues ($mill)	**15000**
1088.0	1079.0	1060.0	1162.0	1314.0	1065.0	1169.0	1607.0	1825.0	2083.0	**1400**	**2890**	Net Profit ($mill)	**3635**
25.3%	18.2%	26.5%	19.7%	19.2%	14.4%	24.5%	20.1%	17.9%	16.7%	**NMF**	**19.0%**	Income Tax Rate	**19.0%**
15.2%	17.2%	11.2%	14.4%	15.3%	22.2%	21.9%	12.6%	10.0%	9.7%	**16.0%**	**8.0%**	AFUDC % to Net Profit	**6.0%**
50.4%	52.8%	50.5%	51.7%	52.6%	52.7%	56.4%	55.7%	51.0%	48.2%	**48.0%**	**48.0%**	Long-Term Debt Ratio	**48.5%**
49.2%	46.7%	49.4%	48.2%	47.3%	47.3%	43.5%	38.4%	43.4%	44.8%	**50.5%**	**50.0%**	Common Equity Ratio	**50.0%**
20015	22002	22281	23513	24963	27400	29135	38769	40734	45174	**48525**	**51275**	Total Capital ($mill)	**60700**
23572	25191	25460	25902	28039	32931	36503	36796	36452	40003	**43925**	**46975**	Net Plant ($mill)	**52600**
6.7%	6.1%	6.0%	6.1%	6.4%	5.0%	5.1%	5.1%	5.5%	5.5%	**4.0%**	**6.5%**	Return on Total Cap'l	**7.0%**
10.9%	10.4%	9.6%	10.2%	11.1%	8.2%	9.2%	9.4%	9.1%	8.9%	**5.0%**	**10.5%**	Return on Shr. Equity	**11.5%**
11.0%	10.4%	9.6%	10.3%	11.1%	8.2%	9.2%	10.0%	9.5%	9.5%	**5.0%**	**10.5%**	Return on Com Equity E	**11.5%**
6.5%	5.1%	4.1%	5.0%	5.8%	2.9%	3.3%	4.1%	3.9%	3.7%	**NMF**	**5.0%**	Retained to Com Eq	**5.5%**
41%	52%	58%	52%	48%	65%	65%	62%	62%	64%	**NMF**	**55%**	All Div'ds to Net Prof	**52%**

ELECTRIC OPERATING STATISTICS

	2018	2019	2020
% Change Retail Sales (KWH)	-3.2	-4.3	-.4
Avg. Indust. Use (MWH)	NA	NA	NA
Avg. Indust. Revs. per KWH (¢)	NA	NA	NA
Capacity at Peak (Mw)	NMF	NMF	NMF
Peak Load, Summer (Mw)	NMF	NMF	NMF
Annual Load Factor (%)	NMF	NMF	NMF
% Change Customers (yr-end)	+.9	+.8	+.8
Fixed Charge Cov. (%)	186	181	159

ANNUAL RATES

of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	.5%	-1.5%	*2.5%*
"Cash Flow"	4.0%	4.0%	*8.0%*
Earnings	3.0%	5.0%	*10.0%*
Dividends	10.0%	8.0%	*6.0%*
Book Value	5.5%	6.0%	*7.5%*

QUARTERLY REVENUES ($ mill.)

Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	2962	2564	2940	3221	11687
2019	2898	2230	2758	2943	10829
2020	3029	2526	2644	3171	11370
2021	3259	2741	***2800***	***3300***	***12100***
2022	***3400***	***2850***	***3050***	***3500***	***12800***

EARNINGS PER SHARE A

Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	1.43	1.27	1.23	1.55	5.48
2019	1.78	.85	2.00	1.34	5.97
2020	2.30	1.58	1.23	1.43	6.58
2021	2.87	1.21	***d1.80***	***1.72***	***4.00***
2022	***2.75***	***1.90***	***1.95***	***1.90***	***8.50***

QUARTERLY DIVIDENDS PAID B ■

Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.755	.8225	.8225	.8225	3.22
2018	.8225	.895	.895	.895	3.51
2019	.895	.9675	.9675	.9675	3.80
2020	.9675	1.045	1.045	1.045	4.10
2021	1.045	1.10	1.10	1.10	

BUSINESS: Sempra Energy is a holding co. for San Diego Gas & Electric Company, which sells electricity & gas mainly in San Diego County, & Southern California Gas Company, which distributes gas to most of Southern California. Owns 80% of Oncor (acq'd 3/18), which distributes electricity in Texas. Customers: 5.2 million electric, 7.0 million gas. Electric revenue breakdown not available. Purchases most of its power; the rest is gas. Has nonutility subsidiaries, incl. IEnova in Mexico. Sold commodities business in '10. Power costs: 21% of revenues. '20 reported deprec. rates: 2.5%-6.7%. Has 14,700 employees. Chairman, President & CEO: Jeffrey W. Martin. Inc.: CA. Address: 488 8th Ave., San Diego, CA 92101. Tel.: 619-696-2000. Internet: www.sempra.com.

Sempra has completed two significant transactions. First, the company purchased the 30% of IEnova, its Mexico subsidiary, that it didn't already own. IEnova's renewable-energy and gas-pipeline operations were combined with Sempra's liquefied natural gas division to form Sempra Infrastructure. Second, the company sold a 20% stake in Sempra Infrastructure Partners to KKR for $3.37 billion in cash. The company plans to use the sale proceeds to reduce debt at the parent level and for capital spending.

The company's SoCalGas subsidiary has announced agreements to resolve litigation. In 2015, there was a leak at one of the utility's natural gas storage facilities. Resolution of this matter will cause Sempra to take an aftertax charge of $1.13 billion ($3.58 a share) when third-quarter results are released in early November. We are *including* this charge in our earnings presentation because it resulted from something that is operational, so we slashed our 2021 share-net estimate from $8.15 to $4.00. The cash payment will amount to as much as $895 million, depending upon insurance receipts.

The litigation payment is the one negative factor in what has otherwise been a good year for Sempra. This is the first full year of operation for a liquefied natural gas facility on the Gulf Coast, which is expected to produce net profit of $400 million-$450 million annually. (The facility did not experience hurricane damage.) Oncor, the company's 80%-owned utility in Texas, is expanding rapidly and has increased its capital budget as a result. This should result in greater income growth.

Earnings will likely return to a normal level in 2022. Sempra's utilities in California will benefit from a total of $229 million of rate relief. We expect additional growth to come from Sempra Infrastructure in its first full year of operation. Our earnings estimate is within the company's targeted range of $8.10-$8.70 a share.

This untimely stock has a dividend yield that is average for a utility. Total return potential is attractive for the 18-month period and average for the pull to 2024-2026.

Paul E. Debbas, CFA *October 22, 2021*

(A) Dil. EPS. Excl. nonrec. gains (losses): '09, (26¢); '10, ($1.05); '11, $1.15; '12, (98¢); '13, (30¢); '15, 14¢; '16, $1.23; '17, (17¢); '18, ($2.06); '19, 16¢; '21, 16¢; gains from disc. ops.: '19, 95¢; '20, $6.32. '20 EPS don't add due to chg. in shs. Next egs. report due early Nov. **(B)** Div'ds paid mid-Jan., Apr., July, Oct. ■ Div'd reinv. avail. **(C)** Incl. intang. In '20: $12.57/sh. **(D)** In mill. **(E)** Rate base: Net orig. cost. Rate all'd on com. eq.: SDG&E in '20: 10.2%; SoCalGas in '20: 10.05%; earned on avg. com. eq., '20: 10.6%. Reg. Climate: Avg.

Company's Financial Strength	A
Stock's Price Stability	90
Price Growth Persistence	70
Earnings Predictability	85

WEC ENERGY GROUP NYSE-WEC

RECENT PRICE	P/E RATIO		RELATIVE P/E RATIO	DIV'D YLD
90.49	21.7	(Trailing: 21.8 / Median: 19.0)	1.20	3.2%

VALUE LINE

TIMELINESS	4	Raised 12/10/21
SAFETY	1	Raised 3/23/12
TECHNICAL	5	Lowered 12/10/21

BETA .80 (1.00 = Market)

18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$80-$125	$103 (15%)

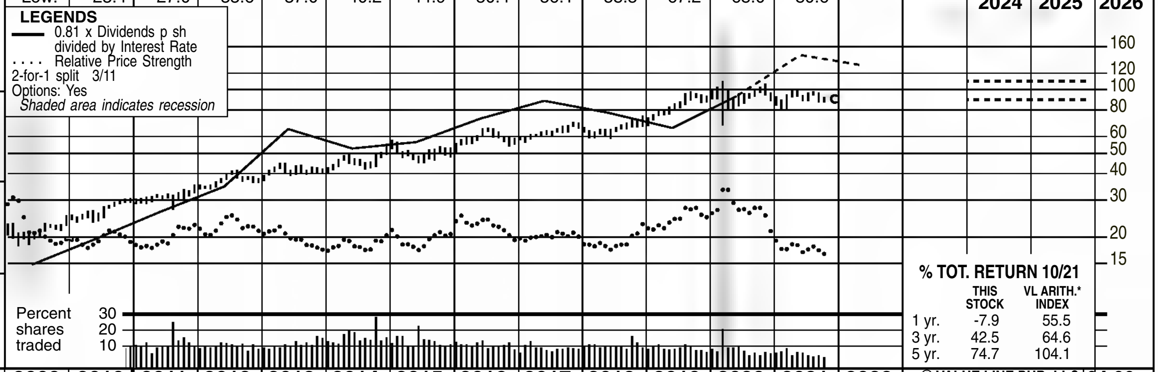
2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	110	(+20%)	8%
Low	90	(Nil)	4%

Institutional Decisions

	1Q2021	2Q2021	3Q2021
to Buy	362	405	366
to Sell	441	378	387
Hld's(000)	233922	231367	236130

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
High:	30.5	35.4	41.5	45.0	55.4	58.0	66.1	70.1	75.5	98.2	109.5	99.9
Low:	23.4	27.0	33.6	37.0	40.2	44.9	50.4	56.1	58.5	67.2	68.0	80.6



% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	-7.9	55.5
3 yr.	42.5	64.6
5 yr.	74.7	104.1

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
16.31	17.08	18.12	18.95	17.65	17.98	19.46	18.54	20.00	22.16	18.77	23.68	24.24	24.34	23.85	22.96	*26.00*	*25.50*	Revenues per sh	*28.75*
2.89	2.90	2.98	2.95	3.11	3.30	3.68	4.01	4.33	4.47	3.87	5.39	5.69	6.04	6.53	6.90	*7.45*	*8.05*	"Cash Flow" per sh	*10.00*
1.28	1.32	1.42	1.52	1.60	1.92	2.18	2.35	2.51	2.59	2.34	2.96	3.14	3.34	3.58	3.79	*4.10*	*4.35*	Earnings per sh A	*5.25*
.44	.46	.50	.54	.68	.80	1.04	1.20	1.45	1.56	1.74	1.98	2.08	2.21	2.36	2.53	*2.71*	*2.89*	Div'd Decl'd per sh B ■	*3.45*
3.40	4.17	5.28	4.86	3.50	3.41	3.60	3.09	3.04	3.26	4.01	4.51	6.21	6.71	7.17	7.10	*6.90*	*9.35*	Cap'l Spending per sh	*9.00*
11.46	12.35	13.25	14.27	15.26	16.26	17.20	18.05	18.73	19.60	27.42	28.29	29.98	31.02	32.06	33.19	*34.40*	*35.75*	Book Value per sh C	*40.25*
233.96	233.94	233.89	233.84	233.82	233.77	230.49	229.04	225.96	225.52	315.68	315.62	315.57	315.52	315.43	315.43	*315.43*	*315.43*	Common Shs Outst'g D	*315.43*
14.5	16.0	16.5	14.8	13.3	14.0	14.2	15.8	16.5	17.7	21.3	19.9	20.0	19.6	23.5	24.9	*Bold figures are*		Avg Ann'l P/E Ratio	*19.5*
.77	.86	.88	.89	.89	.89	.89	1.01	.93	.93	1.07	1.04	1.01	1.06	1.25	1.29	*Value Line*		Relative P/E Ratio	*1.10*
2.4%	2.2%	2.1%	2.4%	3.2%	3.0%	3.3%	3.2%	3.5%	3.4%	3.5%	3.4%	3.3%	3.4%	2.8%	2.7%	*estimates*		Avg Ann'l Div'd Yield	*3.4%*

CAPITAL STRUCTURE as of 9/30/21
Total Debt $14684 mill. **Due in 5 Yrs** $5541.0 mill.
LT Debt $12678 mill. **LT Interest** $445.2 mill.
Incl. $12.1 mill. finance leases.
(LT interest earned: 4.2x)
Leases, Uncapitalized Annual rentals $6.8 mill.
Pension Assets-12/20 $3225.0 mill.
Oblig $3346.4 mill.
Pfd Stock $30.4 mill. **Pfd Div'd** $1.2 mill.
260,000 shs. 3.60%, $100 par, callable $101; 44,498 shs. 6%, $100 par.
Common Stock 315,434,531 shs.

MARKET CAP: $29 billion (Large Cap)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
4486.4	4246.4	4519.0	4997.1	5926.1	7472.3	7648.5	7679.5	7523.1	7241.7	*8200*	*8050*	Revenues ($mill)	*9100*
514.0	547.5	578.6	589.5	640.3	940.2	998.2	1060.5	1134.2	1201.1	*1300*	*1380*	Net Profit ($mill)	*1660*
33.9%	35.9%	36.9%	38.0%	40.4%	37.6%	37.2%	13.8%	9.9%	15.9%	*13.5%*	*13.5%*	Income Tax Rate	*13.5%*
16.8%	9.4%	4.5%	1.3%	4.5%	3.8%	1.6%	2.1%	1.8%	2.4%	*2.0%*	*2.0%*	AFUDC % to Net Profit	*2.0%*
53.6%	51.7%	50.6%	48.5%	51.2%	50.5%	48.0%	50.4%	52.5%	52.8%	*54.5%*	*54.0%*	Long-Term Debt Ratio	*53.5%*
46.0%	48.0%	49.1%	51.2%	48.6%	49.3%	51.9%	49.4%	47.4%	47.1%	*45.5%*	*45.5%*	Common Equity Ratio	*46.5%*
8608.0	8619.3	8626.6	8636.5	17809	18118	18238	19813	21355	22228	*23975*	*24675*	Total Capital ($mill)	*27300*
10160	10572	10907	11258	19190	19916	21347	22001	23620	25707	*26825*	*28600*	Net Plant ($mill)	*33200*
7.5%	7.9%	8.1%	8.1%	4.5%	6.3%	6.6%	6.5%	6.5%	6.5%	*6.5%*	*6.5%*	Return on Total Cap'l	*7.0%*
12.9%	13.1%	13.6%	13.2%	7.4%	10.5%	10.5%	10.8%	11.2%	11.4%	*12.0%*	*12.0%*	Return on Shr. Equity	*13.0%*
12.9%	13.2%	13.6%	13.3%	7.4%	10.5%	10.5%	10.8%	11.2%	11.5%	*12.0%*	*12.0%*	Return on Com Equity E	*13.0%*
6.8%	6.5%	5.9%	5.3%	2.1%	3.5%	3.6%	3.7%	3.8%	3.8%	*4.0%*	*4.0%*	Retained to Com Eq	*4.5%*
47%	51%	57%	60%	71%	67%	66%	66%	66%	67%	*66%*	*66%*	All Div'ds to Net Prof	*66%*

ELECTRIC OPERATING STATISTICS

	2018	2019	2020
% Change Retail Sales (KWH)	+2.5	-2.5	-2.6
Avg. Indust. Use (MWH)	NA	NA	NA
Avg. Lg. C&I Revs. per KWH (¢)	7.05	7.25	6.61
Capacity at Peak (Mw)	NA	NA	NA
Peak Load, Summer (Mw)	NA	NA	NA
Annual Load Factor (%)	NA	NA	NA
% Change Customers (yr-end)	+.7	+.6	+.7
Fixed Charge Cov. (%)	323	300	338

BUSINESS: WEC Energy Group, Inc. (formerly Wisconsin Energy) is a holding company for utilities that provide electric, gas & steam service in WI & gas service in IL, MN, & MI. Customers: 1.6 mill. elec., 2.9 mill. gas. Acq'd Integrys Energy 6/15. Sold Point Beach nuclear plant in '07. Electric revenue breakdown: residential, 41%; small commercial & industrial, 31%; large commercial & industrial, 20%; other, 8%. Generating sources: coal, 31%; gas, 31%; renewables, 5%; purchased, 33%. Fuel costs: 32% of revenues. '20 reported deprec. rates: 2.3%-3.2%. Has 7,300 employees. Chairman: Gale E. Klappa. President & CEO: Kevin Fletcher. Inc.: WI. Address: 231 W. Michigan St., P.O. Box 1331, Milwaukee, WI 53201. Tel.: 414-221-2345. Internet: www.wecenergygroup.com.

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	2.5%	3.0%	*3.5%*
"Cash Flow"	7.5%	9.0%	*7.5%*
Earnings	8.0%	7.5%	*6.5%*
Dividends	13.5%	8.5%	*6.5%*
Book Value	7.5%	8.0%	*4.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	2286	1672	1643	2076	7679.5
2019	2377	1590	1608	1947	7523.1
2020	2108	1548	1651	1933	7241.7
2021	2691	1676	1747	*2086*	*8200*
2022	*2500*	*1700*	*1750*	*2100*	*8050*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	1.23	.73	.74	.65	3.34
2019	1.33	.74	.74	.77	3.58
2020	1.43	.76	.84	.76	3.79
2021	1.61	.87	.92	*.70*	*4.10*
2022	*1.65*	*.90*	*.90*	*.90*	*4.35*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.52	.52	.52	.52	2.08
2018	.5525	.5525	.5525	.5525	2.21
2019	.59	.59	.59	.59	2.36
2020	.6325	.6325	.6325	.6325	2.53
2021	.6775	.6775	.6775	.6775	

WEC Energy Group is about to complete another year of solid performance. The company is benefiting from the growth in its service area's economy. Favorable summer weather patterns helped. In Chicago, Peoples Gas has a regulatory mechanism that allows the utility to earn a return on its capital spending ($280 million-$300 million annually) for gas-main replacement. Another factor is increased income from nonutility renewable-energy investments (see below). Upon reporting third-quarter earnings in early September, WEC Energy raised its 2021 share-earnings target from $4.02-$4.05 to $4.05-$4.07. We raised our estimate by a nickel, to $4.10, considering that management is typically conservative in its guidance. We have also lifted our 2022 estimate by the same amount, to $4.35. This would provide 6% earnings growth, within WEC Energy's annual goal of 6%-7% (up from 5%-7% previously).

Some regulatory matters have been resolved. The Wisconsin commission granted the utility permission to build two liquefied natural gas facilities. This $370 million project is scheduled for completion in late 2023. In Illinois, North Shore Gas received an increase of $4.1 million (4.5%), effective September 15th, based on a return on equity of 9.67% and a common-equity ratio of 51.6%. Michigan Gas was granted a hike of $9.3 million (6.4%), based on an ROE of 9.85% and a common-equity ratio of 51.5%. New tariffs will take effect at the start of 2022.

Nonregulated renewable energy is a source of growth. WEC Energy has $2.3 billion of nonutility wind projects operating or under construction. These assets provide a greater return on investment than the regulated utility business.

We expect a dividend increase in early 2022. We estimate a boost of $0.18 a share (6.6%) annually. WEC Energy's target for the payout ratio is 65%-70%.

Despite WEC Energy's solid showing, the price of this untimely stock is down 2% this year. This is likely just a correction after a stellar performance in 2020. The dividend yield is a bit below the utility average, but total return potential for the 18-month period is attractive, especially on a risk-adjusted basis.

Paul E. Debbas, CFA *December 10, 2021*

(A) Diluted EPS. Excl. gains on discont. ops.: '11, 6¢; nonrecurring gain: '17, 65¢. '18 EPS don't sum due to rounding. Next earnings report due early Feb. (B) Div'ds paid in early Mar., June, Sept. & Dec. ■ Div'd reinvest. plan avail. (C) Incl. intang. In '20: $20.85/sh. (D) In mill., adj. for split. (E) Rate base: Net orig. cost. Rates all'd on com. eq. in WI in '15: 10.0%-10.3%; in IL in '15: 9.05%; in MN in '19: 9.7%; in MI in '16: 9.9%; earned on avg. com. eq., '20: 11.7%. Regulatory Climate: WI, Above Avg.; IL, Below Avg.; MN & MI, Avg.

Company's Financial Strength	A+
Stock's Price Stability	85
Price Growth Persistence	65
Earnings Predictability	100

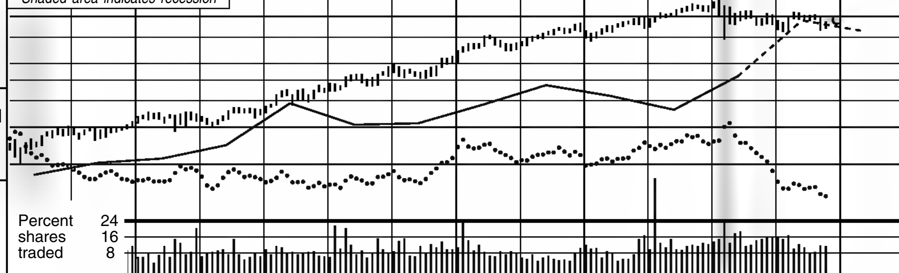
ATMOS ENERGY CORP. NYSE-ATO

RECENT PRICE 96.21 | P/E RATIO 18.1 (Trailing: 18.8; Median: 19.0) | RELATIVE P/E RATIO 0.96 | DIV'D YLD 2.9% | VALUE LINE

TIMELINESS 4 Lowered 8/20/21
SAFETY 1 Raised 6/6/14
TECHNICAL 5 Lowered 11/26/21
BETA .80 (1.00 = Market)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
High:	32.0	35.6	37.3	47.4	58.2	64.8	82.0	93.6	100.8	115.2	121.1	105.0
Low:	25.9	28.5	30.4	34.9	44.2	50.8	60.0	72.5	76.5	89.2	77.9	84.6

LEGENDS
— 0.50 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area indicates recession



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$81-$136	$109 (15%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	160	(+65%)	*16%*
Low	130	(+35%)	*10%*

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	280	256	247
to Sell	228	258	223
Hld's(000)	107949	107920	109549

Percent shares traded 24 16 8

Target Price Range 2024 2025 2026: 200, 160, 100, 80, 60, 50, 40, 30, 20

% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	3.1	55.5
3 yr.	5.4	64.6
5 yr.	38.0	104.1

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
61.75	75.27	66.03	79.52	53.69	53.12	48.15	38.10	42.88	49.22	40.82	32.23	26.01	28.00	24.32	22.41	*26.00*	*26.40*	Revenues per sh A	*35.50*
3.90	4.26	4.14	4.19	4.29	4.64	4.72	4.76	5.14	5.42	5.81	6.19	6.62	7.24	7.57	8.03	*8.75*	*9.40*	"Cash Flow" per sh	*11.00*
1.72	2.00	1.94	2.00	1.97	2.16	2.26	2.10	2.50	2.96	3.09	3.38	3.60	4.00	4.35	4.72	5.12	*5.45*	Earnings per sh AB	*6.50*
1.24	1.26	1.28	1.30	1.32	1.34	1.36	1.38	1.40	1.48	1.56	1.68	1.80	1.94	2.10	2.30	2.50	*2.72*	Div'ds Decl'd per sh C■	*3.30*
4.14	5.20	4.39	5.20	5.51	6.02	6.90	8.12	9.32	8.32	9.61	10.46	10.72	13.19	14.19	15.38	*15.05*	*18.15*	Cap'l Spending per sh	*15.15*
19.90	20.16	22.01	22.60	23.52	24.16	24.98	26.14	28.47	30.74	31.48	33.32	36.74	42.87	48.18	53.95	*60.25*	*64.00*	Book Value per sh	*87.85*
80.54	81.74	89.33	90.81	92.55	90.16	90.30	90.24	90.64	100.39	101.48	103.93	106.10	111.27	119.34	125.88	*131.00*	*135.00*	Common Shs Outst'g D	*155.00*
16.1	13.5	15.9	13.6	12.5	13.2	14.4	15.9	15.9	16.1	17.5	20.8	22.0	21.7	23.2	22.3	18.8		Avg Ann'l P/E Ratio	*22.5*
.86	.73	.84	.82	.83	.84	.90	1.01	.89	.85	.88	1.09	1.11	1.17	1.24	1.13	.99		Relative P/E Ratio	*1.25*
4.5%	4.7%	4.2%	4.8%	5.3%	4.7%	4.2%	4.1%	3.5%	3.1%	2.9%	2.4%	2.3%	2.2%	2.1%	2.2%	2.6%		Avg Ann'l Div'd Yield	*2.3%*

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
4347.6	3438.5	3886.3	4940.9	4142.1	3349.9	2759.7	3115.5	2901.8	2821.1	3407.5	*3565*	Revenues ($mill) A	*5500*
199.3	192.2	230.7	289.8	315.1	350.1	382.7	444.3	511.4	580.5	665.6	*735*	Net Profit ($mill)	*1000*
36.4%	33.8%	38.2%	39.2%	38.3%	36.4%	36.6%	27.0%	21.4%	19.5%	18.8%	*20.0%*	Income Tax Rate	*25.0%*
4.6%	5.6%	5.9%	5.9%	7.6%	10.5%	13.9%	14.3%	17.6%	20.6%	19.5%	*20.6%*	Net Profit Margin	*18.2%*
49.4%	45.3%	48.8%	44.3%	43.5%	38.7%	44.0%	34.3%	38.0%	40.0%	*38.5%*	*40.0%*	Long-Term Debt Ratio	*40.0%*
50.6%	54.7%	51.2%	55.7%	56.5%	61.3%	56.0%	65.7%	62.0%	60.0%	*61.5%*	*60.0%*	Common Equity Ratio	*60.0%*
4461.5	4315.5	5036.1	5542.2	5650.2	5651.8	6965.7	7263.6	9279.7	11323	*12835*	*14400*	Total Capital ($mill)	*22700*
5147.9	5475.6	6030.7	6725.9	7430.6	8280.5	9259.2	10371	11788	13355	*15065*	*16350*	Net Plant ($mill)	*19600*
6.1%	6.1%	5.9%	6.4%	6.6%	7.2%	6.4%	6.9%	6.1%	5.5%	*6.5%*	*6.5%*	Return on Total Cap'l	*5.5%*
8.8%	8.1%	8.9%	9.4%	9.9%	10.1%	9.8%	9.3%	8.9%	8.6%	*8.5%*	*8.5%*	Return on Shr. Equity	*7.5%*
8.8%	8.1%	8.9%	9.4%	9.9%	10.1%	9.8%	9.3%	8.9%	8.6%	*8.5%*	*8.5%*	Return on Com Equity	*7.5%*
3.3%	2.8%	4.0%	4.7%	4.9%	5.1%	4.9%	4.8%	4.6%	4.4%	*4.5%*	*4.5%*	Retained to Com Eq	*3.5%*
62%	65%	56%	50%	51%	50%	50%	48%	48%	49%	*49%*	*50%*	All Div'ds to Net Prof	*51%*

CAPITAL STRUCTURE as of 6/30/21
Total Debt $7328.9 mill. **Due in 5 Yrs** $410.0 mill.
LT Debt $7128.5 mill. **LT Interest** $370.0 mill.
(LT interest earned: 9.5x; total interest coverage: 9.5x)
Leases, Uncapitalized Annual rentals $20.4 mill.

Pfd Stock None

Pension Assets-9/20 $528.9 mill. **Oblig.** $604.2 mill.
Common Stock 130,790,813 shs. **as of 7/30/21**

MARKET CAP: $12.6 billion (Large Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	24.5	20.8	524.6
Other	433.5	450.5	590.8
Current Assets	458.0	471.3	1115.4
Accts Payable	265.0	235.8	280.4
Debt Due	464.9	.2	200.4
Other	479.5	546.4	581.7
Current Liab.	1209.4	782.4	1062.5
Fix. Chg. Cov.	990%	1306%	1315%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	-8.5%	-11.0%	*6.0%*
"Cash Flow"	5.5%	7.0%	*6.5%*
Earnings	8.0%	9.0%	*7.0%*
Dividends	5.0%	7.5%	*7.5%*
Book Value	7.5%	10.0%	*10.5%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2018	889.2	1219.4	562.2	444.7	3115.5
2019	877.8	1094.6	485.7	443.7	2901.8
2020	875.6	977.6	493.0	474.9	2821.1
2021	914.5	1319.1	605.6	568.3	3407.5
2022	*960*	*1385*	*630*	*590*	*3565*

Fiscal Year Ends	EARNINGS PER SHARE A B E Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2018	1.40	1.57	.64	.41	4.00
2019	1.38	1.82	.68	.49	4.35
2020	1.47	1.95	.79	.53	4.72
2021	1.71	2.30	.78	.37	5.12
2022	*1.84*	*2.29*	*.82*	*.50*	*5.45*

Cal-endar	QUARTERLY DIVIDENDS PAID C■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.45	.45	.45	.485	1.84
2018	.485	.485	.485	.525	1.98
2019	.525	.525	.525	.575	2.15
2020	.575	.575	.575	.625	2.35
2021	.625	.625	.625	.68	

BUSINESS: Atmos Energy Corporation is engaged primarily in the distribution and sale of natural gas to over three million customers through six regulated natural gas utility operations: Louisiana Division, West Texas Division, Mid-Tex Division, Mississippi Division, Colorado-Kansas Division, and Kentucky/Mid-States Division. Gas sales breakdown for fiscal 2020: 68.6%, residential; 26.2%, commercial; 3.6%, industrial; and 1.6% other. The company sold Atmos Energy Marketing, 1/17. Officers and directors own approximately 1.2% of common stock (12/20 Proxy). President and Chief Executive Officer: Kevin Akers. Incorporated: Texas. Address: Three Lincoln Centre, Suite 1800, 5430 LBJ Freeway, Dallas, Texas 75240. Telephone: 972-934-9227. Internet: www.atmosenergy.com.

Atmos Energy's earnings stand to rise, once again, in fiscal 2022. (The year began on October 1st.) The natural gas distribution unit, which generates the lion's share of total revenues, may enjoy increased consumption levels, if temperatures across the service territories are generally favorable. An expanded customer base ought to help, too. Moreover, we anticipate a respectable performance from the pipeline and storage division. Although uncertainties concerning COVID-19 persist, full-year profits might advance around 6%, to $5.45 a share, versus fiscal 2021's $5.12 figure. Turning to the following year, share net stands to increase at a similar percentage rate, to $5.80, as operating margins widen further.

Capital spending for the year that ended recently totaled about $1.97 billion. Approximately 88% of the expenditures were used to enhance the safety and reliability of Atmos Energy's natural gas distribution and transmission systems. Regarding the new fiscal year, the budget is expected to be $2.4 billion—$2.5 billion. It's also worth mentioning that management projects total capital spending from fiscal 2022 through fiscal 2026 to lie between $13 billion and $14 billion. A substantial portion of the funds will continue to be allocated to where they were last year. Supported by healthy corporate finances, it appears that these objectives are quite achievable.

The quarterly common stock dividend was increased almost 9%, to $0.68 a share. Moreover, we anticipate further steady hikes out to the 2024-2026 period. The payout ratio over that span ought to be in the neighborhood of 50%, which seems reasonable. However, the dividend yield is not spectacular compared to the average of *Value Line's* Natural Gas Utility Industry group.

Atmos Energy shares hold decent, risk-adjusted total return potential. Long-term capital appreciation possibilities are appealing, at the recent quotation. Dividend growth prospects look promising, as well. Meanwhile, the equity is pegged to underperform the broader market averages during the next six to 12 months (Timeliness rank 4: Below Average).

Frederick L. Harris, III November 26, 2021

(A) Fiscal year ends Sept. 30th. (B) Diluted shrs. Excl. nonrec. gains (loss): '10, 5¢; '11, (1¢); '18, $1.43; '20, 17¢. Excludes discontinued operations: '11, 10¢; '12, 27¢; '13, 14¢; '17, 13¢. Next egs. rpt. due early Feb.
(C) Dividends historically paid in early March, June, Sept., and Dec. ■ Div. reinvestment plan. Direct stock purchase plan avail.
(D) In millions.
(E) Qtrs may not add due to change in shrs outstanding.

Company's Financial Strength	A+
Stock's Price Stability	95
Price Growth Persistence	70
Earnings Predictability	100

NEW JERSEY RES. NYSE-NJR

RECENT PRICE 39.18 | P/E RATIO 17.3 (Trailing: 14.8 Median: 17.0) | RELATIVE P/E RATIO 0.92 | DIV'D YLD 3.7% | VALUE LINE

TIMELINESS	4	Lowered 8/20/21
SAFETY	2	Lowered 4/17/20
TECHNICAL	3	Raised 11/19/21

BETA 1.00 (1.00 = Market)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
High:	22.0	25.2	25.1	23.8	32.1	34.1	38.9	45.4	51.8	51.2	44.7	44.4
Low:	16.7	19.8	19.3	19.5	21.9	26.8	30.5	33.7	35.6	40.3	21.1	33.3

18-Month Target Price Range

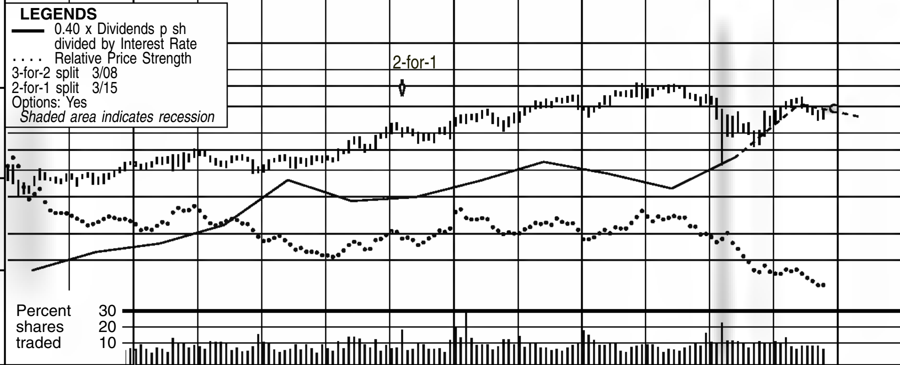
Low-High	Midpoint (% to Mid)
$20-$44	$32 (-20%)

2024-26 PROJECTIONS

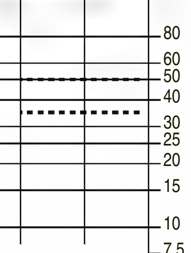
	Price	Gain	Ann'l Total Return
High	50	(+30%)	10%
Low	35	(-10%)	2%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	132	105	102
to Sell	118	139	130
Hld's(000)	71013	68468	68609



Target Price Range 2024 | 2025 | 2026



% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	34.2	55.5
3 yr.	-7.3	64.6
5 yr.	29.8	104.1

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
38.10	39.81	36.31	45.37	31.17	32.05	36.30	27.08	38.38	44.40	32.09	21.90	26.28	33.24	29.01	20.39	***20.90***	***22.95***	Revenues per sh A	***24.60***
1.31	1.37	1.22	1.81	1.58	1.63	1.70	1.86	1.93	2.73	2.52	2.46	2.68	3.72	2.99	3.30	***3.50***	***3.55***	"Cash Flow" per sh	***3.90***
.88	.93	.78	1.35	1.20	1.23	1.29	1.36	1.37	2.08	1.78	1.61	1.73	2.72	1.96	2.07	***2.20***	***2.30***	Earnings per sh B	***2.45***
.45	.48	.51	.56	.62	.68	.72	.77	.81	.86	.93	.98	1.04	1.11	1.19	1.27	***1.36***	***1.45***	Div'ds Decl'd per sh C■	***1.65***
.64	.64	.73	.86	.90	1.05	1.13	1.26	1.33	1.52	3.76	4.15	3.80	4.39	5.83	4.65	***4.10***	***4.10***	Cap'l Spending per sh	***4.00***
5.30	7.50	7.75	8.64	8.29	8.81	9.36	9.80	10.65	11.48	12.99	13.58	14.33	16.18	17.37	19.26	***20.35***	***21.40***	Book Value per sh D	***24.15***
82.64	82.88	83.22	84.12	83.17	82.35	82.89	83.05	83.32	84.20	85.19	85.88	86.32	87.69	89.34	95.80	***97.00***	***98.00***	Common Shs Outst'g E	***100.00***
16.8	16.1	21.6	12.3	14.9	15.0	16.8	16.8	16.0	11.7	16.6	21.3	22.4	15.6	24.3	17.7	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	***17.0***
.89	.87	1.15	.74	.99	.95	1.05	1.07	.90	.62	.84	1.12	1.13	.84	1.29	.91			Relative P/E Ratio	***.95***
3.1%	3.2%	3.0%	3.3%	3.5%	3.7%	3.3%	3.4%	3.7%	3.5%	3.1%	2.9%	2.7%	2.6%	2.5%	3.5%			Avg Ann'l Div'd Yield	***3.7%***
						3009.2	2248.9	3198.1	3738.1	2734.0	1880.9	2268.6	2915.1	2592.0	1953.7	***2025***	***2250***	Revenues ($mill) A	***2460***
						106.5	112.4	113.7	176.9	153.7	138.1	149.4	240.5	175.0	196.2	***215***	***225***	Net Profit ($mill)	***245***
						30.2%	7.1%	25.4%	30.2%	26.3%	15.5%	17.2%	- -	NMF	5.0%	***5.0%***	***5.0%***	Income Tax Rate	***5.0%***
						3.5%	5.0%	3.6%	4.7%	5.6%	7.3%	6.6%	8.2%	6.7%	10.0%	***10.6%***	***10.1%***	Net Profit Margin	***10.0%***
						35.5%	39.2%	36.6%	38.2%	43.2%	47.7%	44.6%	45.4%	49.8%	55.1%	***54.0%***	***54.5%***	Long-Term Debt Ratio	***53.5%***
						64.5%	60.8%	63.4%	61.8%	56.8%	52.3%	55.4%	54.6%	50.2%	44.9%	***46.0%***	***45.5%***	Common Equity Ratio	***46.5%***
						1203.1	1339.0	1400.3	1564.4	1950.6	2230.1	2233.7	2599.6	3088.9	4104.2	***4270***	***4595***	Total Capital ($mill)	***5215***
						1295.9	1484.9	1643.1	1884.1	2128.3	2407.7	2609.7	2651.0	3041.2	3983.0	***4065***	***4145***	Net Plant ($mill)	***4395***
						9.7%	9.2%	9.0%	12.1%	8.6%	6.9%	7.7%	10.1%	6.4%	5.6%	***6.0%***	***6.0%***	Return on Total Cap'l	***6.0%***
						13.7%	13.8%	12.8%	18.3%	13.9%	11.8%	12.1%	16.9%	11.3%	10.6%	***11.0%***	***11.0%***	Return on Shr. Equity	***10.0%***
						13.7%	13.8%	12.8%	18.3%	13.9%	11.8%	12.1%	16.9%	11.3%	10.6%	***11.0%***	***11.0%***	Return on Com Equity	***10.0%***
						6.2%	6.2%	5.2%	11.0%	7.0%	4.8%	5.0%	10.2%	4.6%	4.3%	***4.0%***	***4.0%***	Retained to Com Eq	***3.0%***
						55%	55%	59%	40%	50%	60%	59%	40%	59%	60%	***62%***	***63%***	All Div'ds to Net Prof	***67%***

CAPITAL STRUCTURE as of 6/30/21
Total Debt $2420.9 mill. **Due in 5 Yrs** $420.5 mill.
LT Debt $2221.6 mill. **LT Interest** $47.1 mill.
Incl. $54.9 mill. capitalized leases.
(LT interest earned: 5.0x; total interest coverage: 5.0x)
Pension Assets-9/20 $404.4 mill. **Oblig.** $643.0 mill.
Pfd Stock None

Common Stock 96,433,901 shs.
as of 8/2/21
MARKET CAP: $3.8 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	6/30/21
Cash Assets	2.7	117.0	4.7
Other	508.9	505.3	513.6
Current Assets	511.6	622.3	518.3
Accts Payable	295.9	270.1	310.8
Debt Due	46.9	152.6	199.3
Other	103.6	111.0	103.5
Current Liab.	446.4	533.7	613.6
Fix. Chg. Cov.	545%	545%	550%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	-2.5%	-6.5%	*-2.0%*
"Cash Flow"	7.0%	7.0%	*2.5%*
Earnings	6.0%	5.5%	*1.5%*
Dividends	7.0%	6.5%	*5.5%*
Book Value	7.5%	8.5%	*5.5%*

Fiscal Year Ends	QUARTERLY REVENUES ($ mill.) A Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2018	705.3	1019.1	543.4	647.3	2915.1
2019	811.8	866.2	434.9	479.1	2592.0
2020	615.0	639.6	299.0	400.1	1953.7
2021	454.3	802.2	367.6	***400.9***	***2025***
2022	***510***	***855***	***430***	***455***	***2250***

Fiscal Year Ends	EARNINGS PER SHARE A B Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2018	1.53	1.61	d.09	d.33	2.72
2019	.61	1.27	d.20	.29	1.96
2020	.44	1.12	d.06	.57	2.07
2021	.46	1.77	d.15	***.12***	***2.20***
2022	***.48***	***1.80***	***d.13***	***.15***	***2.30***

Cal-endar	QUARTERLY DIVIDENDS PAID C ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.255	.255	.255	.273	1.04
2018	.273	.273	.273	.2925	1.11
2019	.2925	.2925	.2925	.3125	1.19
2020	.3125	.3125	.3125	.3325	1.27
2021	.3325	.3325	.3325	.3625	

BUSINESS: New Jersey Resources Corp. is a holding company providing retail/wholesale energy svcs. to customers in NJ, and in states from the Gulf Coast to New England, and Canada. New Jersey Natural Gas had 558,000 cust. at 9/30/20. Fiscal 2020 volume: 215 bill. cu. ft. (14% interruptible, 21% res., 10% commercial & elec. utility, 55% capacity release programs). N.J. Natural Energy subsidiary provides unregulated retail/wholesale natural gas and related energy svcs. 2020 dep. rate: 2.8%. Has 1,156 empls. Off./dir. own 1.3% of common; BlackRock, 14.3%; Vanguard, 10.6% (12/20 Proxy). CEO, President & Director: Steven D. Westhoven. Incorporated: New Jersey. Address: 1415 Wyckoff Road, Wall, NJ 07719. Telephone: 732-938-1480. Web: www.njresources.com.

We look for New Jersey Resources to post decent financial results for fiscal 2021 (ended September 30th). (Note: The company was expected to issue its annual earnings release shortly after this report went to press.) The provider of retail and wholesale energy services appeared well positioned to post modest topline growth of about 3.5%, to roughly $2.0 billion. One primary driver this year was the incremental contributions from the nonutility operations, particularly the Energy Services segment, which performed quite well over the past 12 months. At the same time, the New Jersey Natural Gas regulated utility business continues to add new customer accounts, albeit at a slower pace than last year, owing to the resurgance of COVID-19 cases in recent months. Some uncertainty does come from an uptick in bad-debt accounts. Elsewhere, the company brought numerous capital expansion projects into service over the past year. On balance, these factors likely drove the bottom line about 6.5% higher, to $2.20 a share.

We look for this steady momentum to continue into fiscal 2022. New Jersey Resources appears well positioned for revenue growth of about 11%, to $2.25 billion thanks to new customer accounts, capital growth projects, and rate cases. To that point, the company plans to add 28,000-30,000 new customers from 2021-2023. And the NJNG division has a pending base-rate increase of $165 million that is awaiting approval. In sum, we look for NJR's bottom line to rise about 5% this year, to $2.30 a share.

The balance sheet is in decent shape. Cash reserves fell substantially from 2020's elevated levels, to $4.7 million at the end of June, the last period for which financial information is available. This was still in line with historical levels. Meanwhile, long-term debt has been steadily creeping higher, but it is on par with industry standards. Finally, the board recently authorized a 9% increase in the quarterly payout, to $0.3625.

These good-quality shares are ranked to lag the broader market averages, and are trading inside our 3- to 5-year Target Price Range, suggesting limited upside potential.

Bryan J. Fong *November 26, 2021*

(A) Fiscal year ends Sept. 30th.
(B) Diluted earnings. Qtly. revenues and egs. may not sum to total due to rounding and change in shares outstanding. Next earnings report due early Feb.
(C) Dividends historically paid in early Jan., April, July, and October. ■ Dividend reinvestment plan available.
(D) Includes regulatory assets in 2020: $527.5 million, $5.51/share.
(E) In millions, adjusted for splits.

Company's Financial Strength	A+
Stock's Price Stability	80
Price Growth Persistence	50
Earnings Predictability	55

N.W. NATURAL NYSE-NWN

RECENT PRICE **46.87** | P/E RATIO **18.4** (Trailing: 17.0 Median: 24.0) | RELATIVE P/E RATIO **0.97** | DIV'D YLD **4.1%** | VALUE LINE

TIMELINESS	5	Lowered 11/19/21
SAFETY	3	Lowered 3/19/21
TECHNICAL	3	Raised 11/19/21
BETA .85 (1.00 = Market)		

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
High:	50.9	49.0	50.8	46.6	52.6	52.3	66.2	69.5	71.8	74.1	77.3	56.8
Low:	41.1	39.6	41.0	40.0	40.1	42.0	48.9	56.5	51.5	57.2	42.3	41.7

18-Month Target Price Range

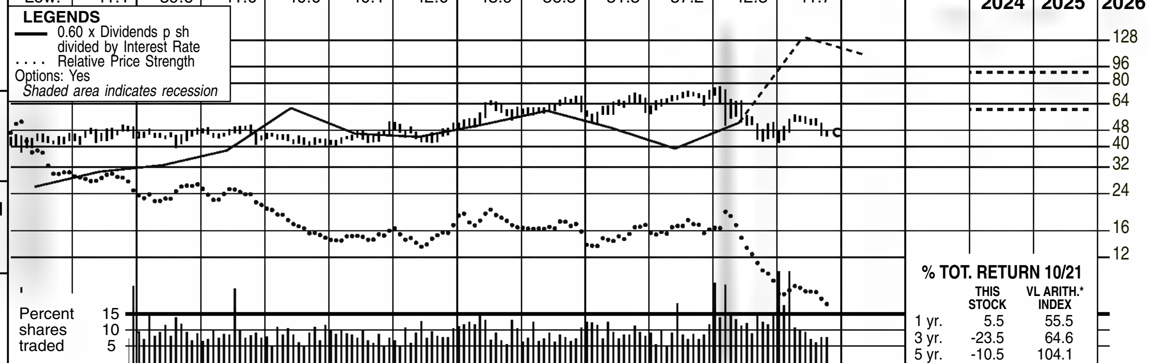
Low-High	Midpoint (% to Mid)
$38-$65	$52 (10%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	90	(+90%)	20%
Low	60	(+30%)	10%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	99	103	114
to Sell	85	89	81
Hld's(000)	22201	21451	21444



% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	5.5	55.5
3 yr.	-23.5	64.6
5 yr.	-10.5	104.1

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
33.01	37.20	39.13	39.16	38.17	30.56	31.72	27.14	28.02	27.64	26.39	23.61	26.52	24.45	24.49	25.29	*26.75*	*27.75*	Revenues per sh	*31.10*
4.34	4.76	5.41	5.31	5.20	5.18	5.00	4.94	5.04	5.05	4.91	4.93	1.04	5.28	5.15	5.69	*5.75*	*6.10*	"Cash Flow" per sh	*6.85*
2.11	2.35	2.76	2.57	2.83	2.73	2.39	2.22	2.24	2.16	1.96	2.12	d1.94	2.33	2.19	2.30	*2.50*	*2.70*	Earnings per sh A	*3.10*
1.32	1.39	1.44	1.52	1.60	1.68	1.75	1.79	1.83	1.85	1.86	1.87	1.88	1.89	1.90	1.91	*1.92*	*1.93*	Div'ds Decl'd per sh B■	*1.96*
3.48	3.56	4.48	3.92	5.09	9.35	3.76	4.91	5.13	4.40	4.37	4.87	7.43	7.43	7.95	9.18	*8.40*	*8.70*	Cap'l Spending per sh	*9.40*
21.28	22.01	22.52	23.71	24.88	26.08	26.70	27.23	27.77	28.12	28.47	29.71	25.85	26.41	28.42	29.05	*33.85*	*37.10*	Book Value per sh D	*45.30*
27.58	27.24	26.41	26.50	26.53	26.58	26.76	26.92	27.08	27.28	27.43	28.63	28.74	28.88	30.47	30.59	*31.00*	*31.00*	Common Shs Outst'g C	*32.00*
17.0	15.9	16.7	18.1	15.2	17.0	19.0	21.1	19.4	20.7	23.7	26.9	- -	26.6	30.9	25.0	*Bold figures are*	*Value Line estimates*	Avg Ann'l P/E Ratio	*24.0*
.91	.86	.89	1.09	1.01	1.08	1.19	1.34	1.09	1.09	1.19	1.41	- -	1.44	1.65	1.30			Relative P/E Ratio	*1.35*
3.7%	3.7%	3.1%	3.3%	3.7%	3.6%	3.9%	3.8%	4.2%	4.1%	4.0%	3.3%	3.0%	3.0%	2.8%	3.3%			Avg Ann'l Div'd Yield	*2.6%*
						848.8	730.6	758.5	754.0	723.8	676.0	762.2	706.1	746.4	773.7	*830*	*860*	Revenues ($mill)	*995*
						63.9	59.9	60.5	58.7	53.7	58.9	d55.6	67.3	65.3	70.3	*75.0*	*85.0*	Net Profit ($mill)	*100*
						40.4%	42.4%	40.8%	41.5%	40.0%	40.9%	- -	26.4%	16.2%	23.1%	*21.0%*	*21.0%*	Income Tax Rate	*21.0%*
						7.5%	8.2%	8.0%	7.8%	7.4%	8.7%	NMF	9.5%	8.8%	9.1%	*9.0%*	*9.9%*	Net Profit Margin	*10.1%*
						47.3%	48.5%	47.6%	44.8%	42.5%	44.4%	47.9%	48.1%	48.2%	49.2%	*49.0%*	*46.5%*	Long-Term Debt Ratio	*43.0%*
						52.7%	51.5%	52.4%	55.2%	57.5%	55.6%	52.1%	51.9%	51.8%	50.8%	*51.0%*	*53.5%*	Common Equity Ratio	*57.0%*
						1356.2	1424.7	1433.6	1389.0	1357.7	1529.8	1426.0	1468.9	1672.0	1748.8	*2050*	*2150*	Total Capital ($mill)	*2550*
						1893.9	1973.6	2062.9	2121.6	2182.7	2260.9	2255.0	2421.4	2438.9	2654.8	*2640*	*2750*	Net Plant ($mill)	*3105*
						6.2%	5.7%	5.8%	5.8%	5.5%	5.1%	NMF	5.8%	5.2%	5.2%	*4.0%*	*4.0%*	Return on Total Cap'l	*4.0%*
						8.9%	8.2%	8.1%	7.6%	6.9%	6.9%	NMF	8.8%	7.5%	7.9%	*7.5%*	*7.5%*	Return on Shr. Equity	*7.0%*
						8.9%	8.2%	8.1%	7.6%	6.9%	6.9%	NMF	8.8%	7.5%	7.9%	*7.5%*	*7.5%*	Return on Com Equity	*7.0%*
						2.4%	1.6%	1.5%	1.1%	.6%	.9%	NMF	2.1%	1.4%	1.7%	*1.5%*	*2.0%*	Retained to Com Eq	*2.5%*
						73%	80%	81%	85%	92%	87%	NMF	76%	82%	79%	*77%*	*72%*	All Div'ds to Net Prof	*63%*

CAPITAL STRUCTURE as of 9/30/21
Total Debt $1315.8 mill. **Due in 5 Yrs** $360.2 mill.
LT Debt $916.0 mill. **LT Interest** $43.1 mill.

(Total interest coverage: 3.1x)

Pension Assets-12/20 $373.9 mill. **Oblig.** $595.2 mill.

Pfd Stock None

Common Stock 30,730,274 shares as of 10/27/21

MARKET CAP $1.4 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	9/30/21
Cash Assets	9.6	30.2	19.5
Other	284.1	293.0	338.7
Current Assets	293.7	323.2	358.2
Accts Payable	113.4	97.9	97.9
Debt Due	224.2	399.9	399.8
Other	144.6	129.3	237.2
Current Liab.	482.2	627.1	734.9
Fix. Chg. Cov.	336%	335%	312%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	-3.5%	-2.0%	*4.0%*
"Cash Flow"	.5%	1.5%	*4.0%*
Earnings	-1.5%	1.5%	*5.5%*
Dividends	1.5%	.5%	*.5%*
Book Value	1.0%	- -	*8.5%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	264.7	124.6	91.2	226.7	706.1
2019	285.4	123.4	90.3	247.3	746.4
2020	285.2	135.0	93.3	260.2	773.7
2021	315.9	148.9	101.4	*263.8*	*830*
2022	*320*	*150*	*110*	*280*	*860*

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	1.46	d.01	d.39	1.27	2.33
2019	1.50	.07	d.61	1.26	2.19
2020	1.58	d.17	d.61	1.50	2.30
2021	1.94	d.02	d.67	*1.25*	*2.50*
2022	*1.96*	*.01*	*d.57*	*1.30*	*2.70*

Cal-endar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.47	.47	.47	.4725	1.88
2018	.4725	.4725	.4725	.475	1.89
2019	.475	.475	.475	.4775	1.90
2020	.4775	.4775	.4775	.48	1.91
2021	.48	.48	.48	.483	

BUSINESS: Northwest Natural Holding Co. distributes natural gas to 1000 communities, 775,000 customers, in Oregon (89% of customers) and in southwest Washington state. Principal cities served: Portland and Eugene, OR; Vancouver, WA. Service area population: 3.7 mill. (77% in OR). Company buys gas supply from Canadian and U.S. producers; has transportation rights on Northwest Pipeline system. Owns local underground storage. Rev. breakdown: residential, 37%; commercial, 22%; industrial, gas transportation, 41%. Employs 1,167. BlackRock Inc. owns 16.4% of shares; State Street, 15.4%; Off./Dir., 1.03% (4/21 proxy). CEO: David H. Anderson. Inc.: Oregon. Address: 220 NW 2nd Ave., Portland, OR 97209. Tel.: 503-226-4211. Internet: www.nwnatural.com.

Since our August review, shares of Northwest Natural Holding Co. have staged a correction. In fact, the stock's price has lost nearly 12% of its value, likely a reflection of the challenging operating environment over the past year.

Meanwhile, the regional distributor of natural gas posted lower-than-expected September-period financial results. Revenues advanced 8.7%, to $101.4 million, bolstered by new customer accounts and recently implemented rate case increases in Oregon. In fact, the company has added almost 12,000 natural gas meters over the last year. That said, the top line was still fairly below our outlook of $110 million. On the profitability front, overall expenses increased 180 basis points when viewed as a percentage of revenues. The primary driver here was higher operating and maintenance items. All told, these factors drove bottom-line losses nearly 10% deeper into the red, to a deficit of $0.67 a share.

Consequently, we have shaved a dime off our 2021 share-net estimate, bringing that figure to $2.50. Our revised outlook would still represent a healthy year-over-year advance of almost 9%. This ought to be driven by top-line growth of about 7.5%, to $830 million. A good portion of these solid results will likely come in the fourth quarter, owing to the seasonal nature of NWN's business. What's more, the rate cases in Oregon and Washington have set increases that come in over time, which augurs well for prospects and should allow the company to focus on geographic expansion and system upgrades.

The financial position is in good shape. Although cash reserves fell about 35% so far this year, that cushion still sits at $19.5 million. Meanwhile, the long-term debt load ticked 6.5% higher, to $916 million, or 51% of the capital structure, which is actually on the lower side for this industry. Finally, the board recently approved a modest increase in the quarterly dividend of just under 1%, to $0.483 per share.

These shares are ranked to lag the broader market averages in the coming year. That said, recent volatility in this space and the downturn in the stock's price leaves NWN with sizable recovery potential and a solid dividend yield.

Bryan J. Fong *November 26, 2021*

(A) Diluted earnings per share. Excludes non-recurring items: '06, ($0.06); '08, ($0.03); '09, $0.06; May not sum due to rounding. Next earnings report due in early Feb.
(B) Dividends historically paid in mid-February, May, August, and November.
■ Dividend reinvestment plan available.
(C) In millions.
(D) Includes intangibles. In 2020: $69.2 million, $2.26/share.

Company's Financial Strength	A
Stock's Price Stability	85
Price Growth Persistence	35
Earnings Predictability	10

ONE GAS, INC. NYSE-OGS

RECENT PRICE **68.97** | P/E RATIO **17.4** (Trailing: 18.1 / Median: NMF) | RELATIVE P/E RATIO **0.92** | DIV'D YLD **3.6%** | VALUE LINE

TIMELINESS **4** Lowered 6/11/21
SAFETY **2** New 6/2/17
TECHNICAL **4** Raised 11/26/21
BETA .80 (1.00 = Market)

18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$59-$103	$81 (15%)

2024-26 PROJECTIONS

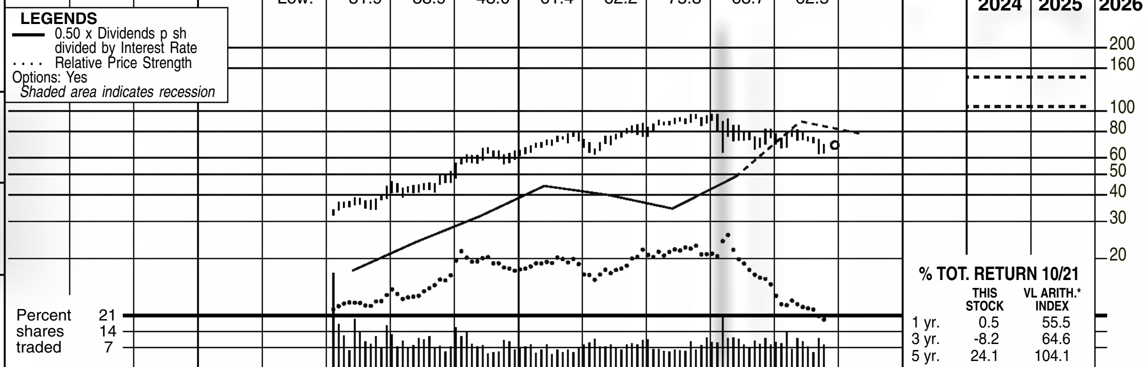
	Price	Gain	Ann'l Total Return
High	145	(+110%)	23%
Low	105	(+50%)	14%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	123	127	111
to Sell	163	144	140
Hld's(000)	42726	42395	43179

LEGENDS
— 0.50 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area indicates recession

	2014	2015	2016	2017	2018	2019	2020	2021
High:	44.3	51.8	67.4	79.5	87.8	96.7	97.0	81.9
Low:	31.9	38.9	48.0	61.4	62.2	75.8	63.7	62.5



% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	0.5	55.5
3 yr.	-8.2	64.6
5 yr.	24.1	104.1

The shares of ONE Gas, Inc. began trading "regular-way" on the New York Stock Exchange on February 3, 2014. That happened as a result of the separation of ONEOK's natural gas distribution operation. Regarding the details of the spinoff, on January 31, 2014, ONEOK distributed one share of OGS common stock for every four shares of ONEOK common stock held by ONEOK shareholders of record as of the close of business on January 21. It should be mentioned that ONEOK did not retain any ownership interest in the new company.

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
--	--	--	34.92	29.62	27.30	29.43	31.08	31.32	28.78	32.05	34.20	Revenues per sh	43.00
--	--	--	4.52	4.82	5.43	5.96	6.32	6.96	7.36	7.75	8.20	"Cash Flow" per sh	9.75
--	--	--	2.07	2.24	2.65	3.02	3.25	3.51	3.68	3.85	4.05	Earnings per sh A	5.00
--	--	--	.84	1.20	1.40	1.68	1.84	2.00	2.16	2.32	2.48	Div'ds Decl'd per sh B■	2.95
--	--	--	5.70	5.63	5.91	6.81	7.50	7.91	8.87	9.00	9.20	Cap'l Spending per sh	9.75
--	--	--	34.45	35.24	36.12	37.47	38.86	40.35	42.01	46.05	49.50	Book Value per sh	74.40
--	--	--	52.08	52.26	52.28	52.31	52.57	52.77	53.17	53.50	53.50	Common Shs Outst'g C	57.00
--	--	--	17.8	19.8	22.7	23.5	23.1	25.3	21.7	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	25.0
--	--	--	.94	1.00	1.19	1.18	1.25	1.35	1.11			Relative P/E Ratio	1.40
--	--	--	2.3%	2.7%	2.3%	2.4%	2.5%	2.3%	2.7%			Avg Ann'l Div'd Yield	2.4%
--	--	--	1818.9	1547.7	1427.2	1539.6	1633.7	1652.7	1530.3	1715	1830	Revenues ($mill)	2450
--	--	--	109.8	119.0	140.1	159.9	172.2	186.7	196.4	205	215	Net Profit ($mill)	285
--	--	--	38.4%	38.0%	37.8%	36.4%	23.7%	18.7%	17.5%	17.0%	17.5%	Income Tax Rate	22.0%
--	--	--	6.0%	7.7%	9.8%	10.4%	10.5%	11.3%	12.8%	12.0%	11.7%	Net Profit Margin	11.6%
--	--	--	40.1%	39.5%	38.7%	37.8%	38.6%	37.7%	41.5%	61.5%	60.0%	Long-Term Debt Ratio	47.0%
--	--	--	59.9%	60.5%	61.3%	62.2%	61.4%	62.3%	58.5%	38.5%	40.0%	Common Equity Ratio	53.0%
--	--	--	2995.3	3042.9	3080.7	3153.5	3328.1	3415.5	3815.7	6400	6620	Total Capital ($mill)	8000
--	--	--	3293.7	3511.9	3731.6	4007.6	4283.7	4565.2	4867.1	5150	5380	Net Plant ($mill)	6000
--	--	--	4.4%	4.7%	5.2%	5.8%	5.9%	6.4%	6.0%	5.0%	5.0%	Return on Total Cap'l	5.0%
--	--	--	6.1%	6.5%	7.4%	8.2%	8.4%	8.8%	8.8%	8.5%	8.0%	Return on Shr. Equity	6.5%
--	--	--	6.1%	6.5%	7.4%	8.2%	8.4%	8.8%	8.8%	8.5%	8.0%	Return on Com Equity	6.5%
--	--	--	3.7%	3.1%	3.5%	3.7%	3.7%	3.8%	3.7%	3.5%	3.0%	Retained to Com Eq	3.0%
--	--	--	40%	53%	52%	55%	56%	56%	58%	61%	62%	All Div'ds to Net Prof	59%

CAPITAL STRUCTURE as of 9/30/21
Total Debt $4019.1 mill. **Due in 5 Yrs** $1020.0 mill.
LT Debt $3683.1 mill. **LT Interest** $150.0 mill.
(LT interest earned: 4.8x; total interest coverage: 4.8x)
Leases, Uncapitalized Annual rentals $7.9 mill.
Pfd Stock None
Pension Assets-12/20 $987.6 mill. **Oblig.** $1077.6 mill.
Common Stock 53,587,508 shs. as of 10/25/21
MARKET CAP: $3.7 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2019	2020	9/30/21
Cash Assets	17.9	8.0	6.5
Other	488.3	531.9	746.4
Current Assets	506.2	539.9	752.9
Accts Payable	120.5	152.3	127.5
Debt Due	516.5	418.2	336.0
Other	235.7	226.6	256.6
Current Liab.	872.7	797.1	720.1
Fix. Chg. Cov.	567%	587%	600%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	--	-1.0%	6.0%
"Cash Flow"	--	8.0%	6.0%
Earnings	--	10.0%	6.5%
Dividends	--	14.5%	7.0%
Book Value	--	3.0%	10.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	638.5	292.5	238.3	464.4	1633.7
2019	661.0	290.6	248.6	452.5	1652.7
2020	528.2	273.3	244.6	484.2	1530.3
2021	625.3	315.6	273.9	500.2	1715
2022	650	355	310	515	1830

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	1.72	.39	.31	.83	3.25
2019	1.76	.46	.33	.96	3.51
2020	1.72	.48	.39	1.09	3.68
2021	1.79	.56	.38	1.12	3.85
2022	1.85	.62	.45	1.13	4.05

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.42	.42	.42	.42	1.68
2018	.46	.46	.46	.46	1.84
2019	.50	.50	.50	.50	2.00
2020	.54	.54	.54	.54	2.16
2021	.58	.58	.58	.58	

BUSINESS: ONE Gas, Inc. provides natural gas distribution services to more than two million customers. There are three divisions: Oklahoma Natural Gas, Kansas Gas Service, and Texas Gas Service. The company purchased 153 Bcf of natural gas supply in 2020, compared to 174 Bcf in 2019. Total volumes delivered by customer (fiscal 2020): transportation, 58.3%; residential, 31.7%; commercial & industrial, 9.4%; other, .6%. ONE Gas has around 3,600 employees. BlackRock owns 11.9% of common stock; The Vanguard Group, 9.7%; American Century Investment, 7.6%; officers and directors, 1.9% (4/21 Proxy). CEO: Robert S. McAnnally. Incorporated: Oklahoma. Address: 15 East Fifth Street, Tulsa, Oklahoma 74103. Tel.: 918-947-7000. Internet: www.onegas.com.

ONE Gas appears on track to register higher earnings in 2021. During the first nine months, share net of $2.73 was 5.4% higher than the year-earlier total of $2.59. This was brought about partially by benefits from new rates, primarily in Texas and Oklahoma. Another positive was customer growth in Oklahoma and Texas. The effective income tax rate was lower, as well. If there are no major pandemic-related disruptions in the fourth quarter, we expect full-year profits to increase almost 5%, to $3.85 a share, compared to the 2020 tally of $3.68. Assuming further widening of operating margins in 2022, share net might advance at a similar percentage rate, to $4.05.

The Financial Strength rating is B++. When the third quarter concluded, cash and equivalents were $6.5 million, and cash flows were decent. Furthermore, there was $664 million available (out of $1 billion) under a commercial paper program. ONE Gas also possesses a $1 billion revolving credit facility maturing in March, 2026. However, at the end of the September period, long-term debt was on the heavy side (61.4% of total capital). Nevertheless, we believe that the company will be able to handily meet its various obligations for some time.

This year's capital expenditures, including asset removal costs, are anticipated to be approximately $540 million. (That would be about 5% above the 2020 figure of $512.2 million.) Around 70% of the budget is devoted to system integrity and pipeline replacement projects. Notably, the energy company projects total spending to be $3 billion ($540 million—$640 million annually) between 2021 and 2025, with roughly the same percentage of capital allocated to where it is presently.

These good-quality shares should be of interest to total return-focused investors with a long-term bent. Capital appreciation potential out to 2024-2026 looks appealing, when stacked against the *Value Line* median. Consider, also, the healthy dividend growth prospects. But, right now, the equity is pegged to underperform the broader market averages in the next six to 12 months (Timeliness rank 4: Below Average).

Frederick L. Harris, III November 26, 2021

(A) Diluted EPS. Excludes nonrecurring gain: 2017, $0.06. Next earnings report due early Feb. Quarterly EPS for 2018 don't add up due to rounding.
(B) Dividends historically paid in early March, June, Sept., and Dec. ■ Dividend reinvestment plan. Direct stock purchase plan.
(C) In millions.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	60
Earnings Predictability	100

SOUTH JERSEY INDS. NYSE-SJI

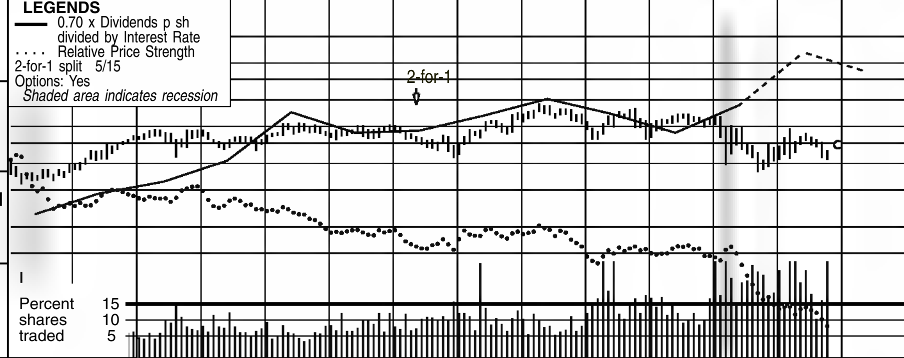
RECENT PRICE	P/E RATIO		RELATIVE P/E RATIO	DIV'D YLD
24.54	14.5	(Trailing: 14.2) (Median: 19.0)	0.77	5.3%

VALUE LINE

TIMELINESS 3 Raised 10/29/21
SAFETY 3 Lowered 8/28/20
TECHNICAL 5 Lowered 11/12/21
BETA 1.05 (1.00 = Market)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
High:	27.1	29.0	29.0	31.1	30.6	30.4	34.8	38.4	36.7	34.5	33.4	29.2
Low:	18.6	21.4	22.9	25.3	25.9	21.2	22.1	30.8	26.0	26.6	18.2	20.8

LEGENDS
— 0.70 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
2-for-1 split 5/15
Options: Yes
Shaded area indicates recession



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$9-$34	$22 (-10%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+105%)	22%
Low	35	(+45%)	13%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	110	141	132
to Sell	91	89	106
Hld's(000)	110377	102245	105367

% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	23.9	55.5
3 yr.	-13.6	64.6
5 yr.	-7.9	104.1

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
15.89	15.88	16.15	16.18	14.19	15.48	13.71	11.16	11.18	12.98	13.52	13.04	15.63	19.20	17.63	15.32	16.65	17.40	Revenues per sh	20.85
1.25	1.75	1.60	1.74	1.86	2.10	2.23	2.34	2.48	2.67	2.42	2.67	2.79	2.91	2.56	3.32	2.75	2.95	"Cash Flow" per sh	4.15
.86	1.23	1.05	1.14	1.19	1.35	1.45	1.52	1.52	1.57	1.44	1.34	1.23	1.38	1.12	1.68	1.65	1.80	Earnings per sh A	2.70
.43	.46	.51	.56	.61	.68	.75	.83	.90	.96	1.02	1.06	1.10	1.13	1.16	1.19	1.25	1.32	Div'ds Decl'd per sh B ■	1.50
1.60	1.26	.94	1.04	1.83	2.79	3.20	4.01	4.84	5.01	4.87	3.50	3.43	3.99	5.46	4.84	4.90	5.65	Cap'l Spending per sh	7.50
6.75	7.55	8.12	8.67	9.12	9.54	10.33	11.63	12.64	13.65	14.62	16.22	14.99	14.82	15.41	16.51	16.20	16.95	Book Value per sh C	20.20
57.96	58.65	59.22	59.46	59.59	59.75	60.43	63.31	65.43	68.33	70.97	79.48	79.55	85.51	92.39	100.59	112.50	115.00	Common Shs Outst'g D	120.00
16.6	11.9	17.2	15.9	15.0	16.8	18.4	16.9	18.9	18.0	17.9	21.7	27.9	22.6	28.3	14.9	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	16.0
.88	.64	.91	.96	1.00	1.07	1.15	1.08	1.06	.95	.90	1.14	1.40	1.22	1.51	.77			Relative P/E Ratio	.90
3.0%	3.2%	2.8%	3.1%	3.4%	3.0%	2.8%	3.2%	3.1%	3.4%	3.9%	3.6%	3.2%	3.6%	3.7%	4.8%			Avg Ann'l Div'd Yield	3.5%

CAPITAL STRUCTURE as of 9/30/21
Total Debt $3404.4 mill. **Due in 5 Yrs** $380.1 mill.
LT Debt $3195.9 mill. **LT Interest** $112.0 mill.

Leases, Uncapitalized Annual rentals $1.2 mill.
Pension Assets-12/20 $331 mill. **Oblig.** $481.8 mill.
Pfd Stock None

Common Stock 112,448,495 shs. as of 11/1/21

MARKET CAP: $2.8 billion (Mid Cap)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
828.6	706.3	731.4	887.0	959.6	1036.5	1243.1	1641.3	1628.6	1541.4	1875	2000	Revenues ($mill)	2500
87.0	93.3	97.1	104.0	99.0	102.8	98.1	116.2	103.0	163.0	185	200	Net Profit ($mill)	320
22.4%	10.8%	- -	- -	5.9%	42.0%	- -	- -	- -	9.9%	22.0%	21.0%	Income Tax Rate	21.0%
10.5%	13.2%	13.3%	11.7%	10.3%	9.9%	7.9%	7.1%	6.3%	10.6%	9.9%	10.0%	Net Profit Margin	12.8%
40.5%	45.0%	45.1%	48.0%	49.2%	38.5%	48.5%	62.4%	59.2%	62.6%	64.0%	64.0%	Long-Term Debt Ratio	62.5%
59.5%	55.0%	54.9%	52.0%	50.8%	61.5%	51.5%	37.6%	40.8%	37.4%	36.0%	36.0%	Common Equity Ratio	37.5%
1048.3	1337.6	1507.4	1791.9	2043.9	2097.2	2315.4	3373.9	3493.9	4437.3	5075	5400	Total Capital ($mill)	6425
1352.4	1578.0	1859.1	2134.1	2448.1	2623.8	2700.2	3653.5	4073.5	4464.2	4850	5200	Net Plant ($mill)	6000
8.9%	7.4%	6.8%	6.4%	5.4%	5.4%	5.1%	4.4%	4.0%	4.8%	5.0%	5.0%	Return on Total Cap'l	6.0%
13.9%	12.7%	11.7%	11.2%	9.5%	8.0%	8.2%	9.2%	7.2%	9.8%	10.0%	10.5%	Return on Shr. Equity	13.0%
13.9%	12.7%	11.7%	11.2%	9.5%	8.0%	8.2%	9.2%	7.2%	9.8%	10.0%	10.5%	Return on Com Equity	13.0%
6.7%	5.8%	4.8%	4.3%	2.8%	1.6%	.9%	1.7%	NMF	2.9%	2.5%	2.5%	Retained to Com Eq	6.0%
52%	55%	59%	61%	71%	80%	89%	82%	104%	70%	76%	76%	All Div'ds to Net Prof	56%

CURRENT POSITION ($MILL.)	2019	2020	9/30/21
Cash Assets	6.4	34.0	25.4
Other	646.1	472.8	546.3
Current Assets	652.5	506.8	571.7
Accts Payable	232.2	256.6	301.0
Debt Due	1316.6	739.2	208.6
Other	183.1	167.8	309.2
Current Liab.	1731.9	1163.6	818.8
Fix. Chg. Cov.	176%	238%	246%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	1.5%	6.5%	3.0%
"Cash Flow"	4.5%	3.0%	6.0%
Earnings	1.5%	-1.5%	11.5%
Dividends	6.5%	4.0%	4.5%
Book Value	5.5%	2.5%	4.5%

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	521.9	227.3	302.5	589.6	1641.3
2019	637.3	266.9	261.2	463.2	1628.6
2020	534.1	260.0	261.5	485.8	1541.4
2021	674.3	311.8	365.6	523.3	1875
2022	700	335	380	585	2000

Cal-endar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	1.19	.07	d.27	.39	1.38
2019	1.09	d.13	d.30	.46	1.12
2020	1.15	d.01	d.06	.62	1.68
2021	1.26	.02	d.17	.54	1.65
2022	1.30	.02	d.10	.58	1.80

Cal-endar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	- -	.273	.273	.553	1.10
2018	- -	.280	.280	.567	1.13
2019	- -	.287	.287	.582	1.16
2020	- -	.295	.295	.598	1.19
2021	- -	.303	.303	.303	

BUSINESS: South Jersey Industries, Inc. is a holding company. The company distributes natural gas in New Jersey and Maryland. South Jersey Gas rev. mix '20: residential, 48%; commercial, 23%; cogen. and electric gen., 9%; industrial, 20%. Acq. Elizabethtown Gas and Elkton Gas, 7/18. Nonutil. oper. incl. South Jersey Energy, South Jersey Resources Group, South Jersey Exploration, Marina Energy, South Jersey Energy Service Plus, and SJI Midstream. Has about 1,130 empl. Off./dir. own less than 1% of common; BlackRock, 14.4%; State Street Corporation, 13.9%; The Vanguard Group, 10.8% (3/21 proxy). Pres. & CEO: Michael J. Renna. Chairman: Joseph M. Rigby. Inc.: NJ. Addr.: 1 South Jersey Plaza, Folsom, NJ 08037. Tel.: 609-561-9000. Web: www.sjindustries.com.

South Jersey Industries reported mixed results for the September period. The top line increased considerably on a year-to-year basis, due mostly to greater revenue at the nonutility line. Sales growth at the utility segment was much more modest. Regardless, operating expenses also advanced dramatically, and the company posted an adjusted share deficit of $0.17 for the recent period, which was significantly wider than the year-ago level. We expect a difficult bottom-line comparison for the fourth quarter, and share net for full-year 2021 will probably come in shy of the impressive figure generated in the previous year.

Earnings growth ought to resume next year and continue thereafter. The company's utility business should further benefit from customer growth, rate relief, and infrastructure investments. We expect solid results from the nonutility side, too. Efforts by the company to control operating expenses ought to bear fruit, as well.

South Jersey has announced plans to build a $12 million renewable natural gas facility. It will be located at Oakridge Dairy, the largest dairy farm in Connecticut. The anaerobic digester is expected to be operational by September of next year. It will capture raw methane and other greenhouse gases produced by the farm. The project will also include equipment to transform the collected biogas into commercial-grade, pipeline-quality renewable natural gas that will be integrated into the distribution system of subsidiary Elizabethtown Gas. In addition to Oakridge, South Jersey has partnered with Rev LNG, a full-service supplier of liquefied natural gas, compressed natural gas, and renewable natural gas. South Jersey and Rev LNG plan to build similar plants at other sites in the year ahead.

These shares are neutrally ranked for year-ahead performance. Looking further out, we anticipate solid growth in revenues and earnings for the company in the years ahead. From the recent quotation, this stock offers worthwhile total return potential for the pull to mid-decade. This is supported by a generous dividend yield. All things considered, patient, income-oriented subscribers may want to take a closer look.

Michael Napoli, CFA *November 26, 2021*

(A) Based on economic egs. from 2007. GAAP EPS: '10, $1.11; '11, $1.49; '12, $1.49; '13, $1.28; '14, $1.46; '15, $1.52; '16, $1.56; '17, ($0.04); '18, $0.21; '19, $0.84; '20, $1.62. Excl. nonrecur. gain (loss): '10, ($0.24); '11, $0.04; '12, ($0.03); '13, ($0.24); '14, ($0.11); '15, $0.08; '16, $0.22; '17, ($1.27); '18, ($1.17); '19, ($0.28); '20, ($0.06). Next egs. rpt. due early February. (B) Div'ds paid early April, July, Oct., and late Dec. ■ Div. reinvest. plan avail. (C) Incl. reg. assets. In 2020: $674.0 mill., $6.70 per shr. (D) In mill., adj. for split.

Company's Financial Strength	B++
Stock's Price Stability	65
Price Growth Persistence	15
Earnings Predictability	65

SOUTHWEST GAS NYSE-SWX

RECENT PRICE	P/E RATIO	RELATIVE P/E RATIO	DIV'D YLD
71.28	18.3 (Trailing: 17.4; Median: 19.0)	0.97	3.4%

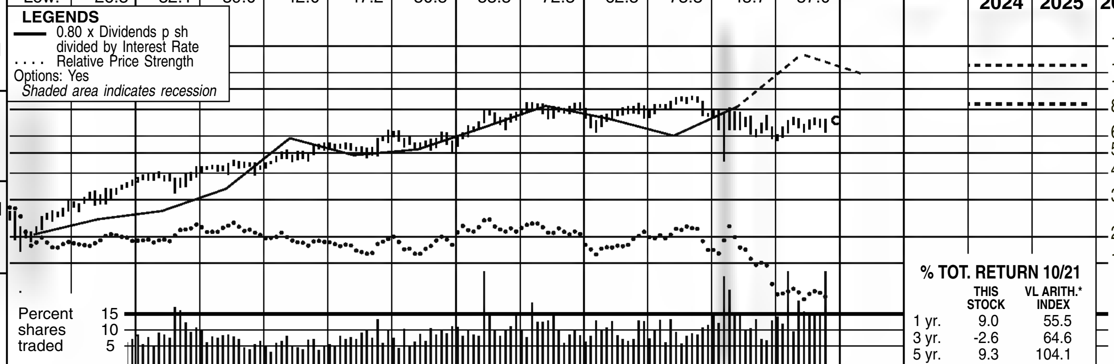
VALUE LINE

TIMELINESS — Suspended 10/29/21
SAFETY 3 Lowered 1/4/91
TECHNICAL — Suspended 10/29/21
BETA .95 (1.00 = Market)

High:	37.3	43.2	46.1	56.0	64.2	63.7	79.6	86.9	86.0	92.9	81.6	73.5
Low:	26.3	32.1	39.0	42.0	47.2	50.5	53.5	72.3	62.5	73.3	45.7	57.0

Target Price Range 2024 | 2025 | 2026

LEGENDS
— 0.80 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area indicates recession



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$32-$93	$63 (-10%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	130	(+80%)	*19%*
Low	85	(+20%)	*8%*

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	140	144	125
to Sell	123	132	137
Hld's(000)	48058	48499	48501

% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	9.0	55.5
3 yr.	-2.6	64.6
5 yr.	9.3	104.1

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
43.59	48.47	50.28	48.53	42.00	40.18	41.07	41.77	42.08	45.61	52.00	51.82	53.00	54.31	56.72	57.68	***58.35***	***67.45***	Revenues per sh	***70.60***
5.20	5.97	6.21	5.76	6.16	6.46	6.81	7.73	8.24	8.47	8.62	9.29	8.83	8.14	9.40	9.87	***9.45***	***10.80***	"Cash Flow" per sh	***15.45***
1.25	1.98	1.95	1.39	1.94	2.27	2.43	2.86	3.11	3.01	2.92	3.18	3.62	3.68	3.94	4.14	***3.80***	***4.50***	Earnings per sh A	***6.75***
.82	.82	.86	.90	.95	1.00	1.06	1.18	1.32	1.46	1.62	1.80	1.98	2.08	2.18	2.28	***2.38***	***2.48***	Div'ds Decl'd per sh B■†	***2.80***
7.49	8.27	7.96	6.79	4.81	4.73	8.29	8.57	7.86	8.53	10.30	11.15	12.97	14.44	17.06	14.43	***11.05***	***13.50***	Cap'l Spending per sh	***21.30***
19.10	21.58	22.98	23.49	24.44	25.62	26.66	28.35	30.47	31.95	33.61	35.03	37.74	42.47	45.56	46.77	***49.60***	***52.40***	Book Value per sh	***75.00***
39.33	41.77	42.81	44.19	45.09	45.56	45.96	46.15	46.36	46.52	47.38	47.48	48.09	53.03	55.01	57.19	***61.00***	***63.00***	Common Shs Outst'g C	***68.00***
20.6	15.9	17.3	20.3	12.2	14.0	15.7	15.0	15.8	17.9	19.4	21.6	22.2	20.6	21.3	16.8	*Bold figures are*		Avg Ann'l P/E Ratio	***16.0***
1.10	.86	.92	1.22	.81	.89	.98	.95	.89	.94	.98	1.13	1.12	1.11	1.13	.87	*Value Line*		Relative P/E Ratio	***.90***
3.2%	2.6%	2.6%	3.2%	4.0%	3.2%	2.8%	2.8%	2.7%	2.7%	2.9%	2.6%	2.5%	2.7%	2.6%	3.3%	*estimates*		Avg Ann'l Div'd Yield	***2.6%***

CAPITAL STRUCTURE as of 9/30/21
Total Debt $4143.1 mill. **Due in 5 Yrs** $750.9 mill.
LT Debt $3573.8 mill. **LT Interest** $100.0 mill.
(Total interest coverage: 3.7x) (54% of Cap'l)
Leases, Uncapitalized Annual rentals $13.9 mill.
Pension Assets-12/20 $1238.7 mill. **Oblig.** $1581.4 mill.

Pfd Stock None

Common Stock 60,385,084 shs. as of 10/29/21

MARKET CAP: $4.3 billion (Mid Cap)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
1887.2	1927.8	1950.8	2121.7	2463.6	2460.5	2548.8	2880.0	3119.9	3298.9	***3560***	***4250***	Revenues ($mill)	***4800***
112.3	133.3	145.3	141.1	138.3	152.0	173.8	182.3	213.9	232.3	***225***	***280***	Net Profit ($mill)	***450***
36.2%	36.2%	35.0%	35.7%	36.4%	33.9%	32.8%	25.3%	20.5%	21.6%	***21.0%***	***21.0%***	Income Tax Rate	***21.0%***
6.0%	6.9%	7.4%	6.7%	5.6%	6.2%	6.8%	6.3%	6.9%	7.0%	***6.3%***	***6.6%***	Net Profit Margin	***9.4%***
43.2%	49.2%	49.4%	52.4%	49.3%	48.2%	49.8%	48.3%	47.9%	50.5%	***54.5%***	***53.0%***	Long-Term Debt Ratio	***45.5%***
56.8%	50.8%	50.6%	47.6%	50.7%	51.8%	50.2%	51.7%	52.1%	49.5%	***45.5%***	***47.0%***	Common Equity Ratio	***54.5%***
2155.9	2576.9	2793.7	3123.9	3143.5	3213.5	3613.3	4359.3	4806.4	5407.2	***6625***	***7050***	Total Capital ($mill)	***9350***
3218.9	3343.8	3486.1	3658.4	3891.1	4132.0	4523.7	5093.2	5685.2	6176.1	***6700***	***7200***	Net Plant ($mill)	***8400***
6.4%	6.4%	6.3%	5.7%	5.5%	5.8%	5.8%	5.2%	5.4%	5.3%	***4.0%***	***5.0%***	Return on Total Cap'l	***5.5%***
9.2%	10.2%	10.3%	9.5%	8.7%	9.1%	9.6%	8.1%	8.5%	8.7%	***7.5%***	***8.5%***	Return on Shr. Equity	***9.0%***
9.2%	10.2%	10.3%	9.5%	8.7%	9.1%	9.6%	8.1%	8.5%	8.7%	***7.5%***	***8.5%***	Return on Com Equity	***9.0%***
5.3%	6.1%	6.1%	5.0%	4.0%	4.1%	4.5%	3.6%	3.9%	4.0%	***2.5%***	***4.0%***	Retained to Com Eq	***5.0%***
43%	40%	41%	47%	54%	55%	53%	55%	54%	54%	***65%***	***56%***	All Div'ds to Net Prof	***42%***

CURRENT POSITION ($MILL.)

	2019	2020	9/30/21
Cash Assets	49.5	83.4	186.7
Other	810.4	787.6	1205.9
Current Assets	859.9	871.0	1392.6
Accts Payable	238.9	231.3	223.0
Debt Due	374.5	147.4	569.3
Other	466.5	533.3	562.9
Current Liab.	1079.9	912.0	1355.2
Fix. Chg. Cov.	340%	379%	373%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	2.5%	4.0%	*4.0%*
"Cash Flow"	4.0%	1.5%	*9.0%*
Earnings	7.5%	5.5%	*9.5%*
Dividends	8.5%	8.0%	*4.5%*
Book Value	6.0%	7.0%	*9.0%*

Cal-endar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	754.3	670.9	668.1	786.7	2880.0
2019	833.6	713.0	725.2	848.1	3119.9
2020	836.3	757.2	791.2	914.2	3298.9
2021	885.9	821.4	888.7	***964.0***	***3560***
2022	***1100***	***975***	***1025***	***1150***	***4250***

Cal-endar	EARNINGS PER SHARE A D Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2018	1.63	.44	.25	1.36	3.68
2019	1.77	.41	.10	1.67	3.94
2020	1.31	.68	.32	1.82	4.14
2021	2.03	.43	d.19	***1.53***	***3.80***
2022	***2.05***	***.50***	***.20***	***1.75***	***4.50***

Cal-endar	QUARTERLY DIVIDENDS PAID B■† Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.450	.495	.495	.495	1.94
2018	.495	.520	.520	.520	2.06
2019	.520	.545	.545	.545	2.16
2020	.545	.570	.570	.570	2.26
2021	.570	.595	.595		

BUSINESS: Southwest Gas Holdings, Inc. is the parent holding company of Southwest Gas and Centuri Group. Southwest Gas is a regulated gas distributor serving 2.1 million customers in Arizona, Nevada, and California. Centuri provides construction services. 2020 margin mix: residential and small commercial, 85%; large commercial and industrial, 3%; transportation, 12%. Total through-put: 2.2 billion therms. Has 11,149 employees. Off. & dir. own .8% of common; BlackRock, Inc., 12.3%; The Vanguard Group, Inc., 9.8%; Lazard Asset Management LLC, 9.4% (3/21 Proxy). Chairman: Michael J. Melarkey. Pres. & CEO: John P. Hester. Inc.: DE. Addr.: 8360 S. Durango Drive, P.O. Box 98510 Las Vegas, Nevada 89193. Tel.: 702-876-7237. Web: www.swgas.com.

Shares of Southwest Gas have risen in price lately on news that activist investor Carl Icahn was looking to purchase a stake in the company. The billionaire investor was also seeking to replace Southwest's board. He was looking for support from other stockholders and offering to purchase shares at $75 each. Icahn Enterprises has announced that should a third party make a better offer, the firm would either raise its own bid or support the third party's offer. In particular, Mr. Icahn has objected to Southwest's decision to purchase Questar Pipeline from Dominion Energy for roughly $2 billion. For its part, Southwest Gas has responded that the deal was priced fairly and would contribute to earnings beginning next year. The company believes that this addition would expand its regulated business, diversify its earnings mix, and generate additional cash flow. The company also defended its returns and management practices, which it believes are in the best interest of shareholders. It has taken measures to reduce the chance that anyone will gain control of the company without sufficiently compensating stockholders. Most recently, the board unanimously rejected the tender offer, stating that it undervalues the company and is not in the best interest of shareholders.

Prospects for the years ahead appear favorable. The utility business should further benefit from rate relief and expansion in the customer base. Infrastructure investments should also pay off. Centuri will likely capitalize on the need of utilities to replace aging infrastructure.

This stock offers healthy appreciation potential for the pull to mid-decade. We anticipate solid bottom-line growth for the company during this time frame. Moreover, the equity has a respectable dividend yield for a utility, and the payout should continue to increase going forward. Southwest Gas earns good marks for Financial Strength, Price Stability, and Earnings Predictability. Long-term investors seeking exposure to the utility space may want to take a closer look. In the coming months, the outcome of the aforementioned proxy battle could have an important, albeit unpredictable, impact on the stock price.

Michael Napoli, CFA *November 26, 2021*

(A) Diluted earnings. Excl. nonrec. gains (losses): '05, (11¢); '06, 7¢. Next egs. report due late February. (B) Dividends historically paid early March, June, September, and December. ■† Div'd reinvestment and stock purchase plan avail. (C) In millions. (D) Totals may not sum due to rounding.

Company's Financial Strength	A
Stock's Price Stability	80
Price Growth Persistence	45
Earnings Predictability	95

SPIRE INC. NYSE-SR

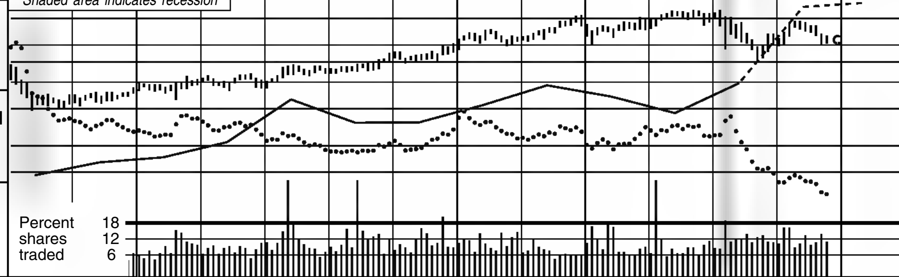
RECENT PRICE 63.61 | P/E RATIO 15.7 (Trailing: 13.3 / Median: 19.0) | RELATIVE P/E RATIO 0.83 | DIV'D YLD 4.3% | VALUE LINE

TIMELINESS 4 Lowered 8/20/21
SAFETY 2 Raised 6/20/03
TECHNICAL 4 Raised 11/19/21
BETA .85 (1.00 = Market)

High:	37.8	42.8	44.0	48.5	55.2	61.0	71.2	82.9	81.1	88.0	88.0	77.9
Low:	30.8	32.9	36.5	37.4	44.0	49.1	57.1	62.3	60.1	71.7	50.6	59.3

LEGENDS
— 0.35 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
Options: Yes
Shaded area indicates recession

Target Price Range 2024 | 2025 | 2026



18-Month Target Price Range

Low-High	Midpoint (% to Mid)
$45-$74	$60 (-5%)

2024-26 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	130	(+105%)	22%
Low	95	(+50%)	14%

Institutional Decisions

	4Q2020	1Q2021	2Q2021
to Buy	131	124	112
to Sell	148	139	126
Hld's(000)	41028	42475	42992

Percent shares traded 18 / 12 / 6

% TOT. RETURN 10/21

	THIS STOCK	VL ARITH.* INDEX
1 yr.	16.3	55.5
3 yr.	-4.2	64.6
5 yr.	17.7	104.1

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	© VALUE LINE PUB. LLC	24-26
75.43	93.51	93.40	100.44	85.49	77.83	71.48	49.90	31.10	37.68	45.59	33.68	36.07	38.78	38.30	35.96	42.30	37.75	Revenues per sh A	58.20
2.98	3.81	3.87	4.22	4.56	4.11	4.62	4.58	3.12	3.87	6.15	6.16	6.54	7.55	7.12	5.25	8.75	8.10	"Cash Flow" per sh	10.50
1.90	2.37	2.31	2.64	2.92	2.43	2.86	2.79	2.02	2.35	3.16	3.24	3.43	4.33	3.52	1.44	4.70	4.00	Earnings per sh A B	5.50
1.37	1.40	1.45	1.49	1.53	1.57	1.61	1.66	1.70	1.76	1.84	1.96	2.10	2.25	2.37	2.49	2.60	2.74	Div'ds Decl'd per sh C■	3.10
2.84	2.97	2.72	2.57	2.36	2.56	3.02	4.83	4.00	3.96	6.68	6.42	9.08	9.86	16.15	12.37	11.35	10.95	Cap'l Spending per sh	11.45
17.31	18.85	19.79	22.12	23.32	24.02	25.56	26.67	32.00	34.93	36.30	38.73	41.26	44.51	45.14	44.19	47.95	50.90	Book Value per sh D	70.60
21.17	21.36	21.65	21.99	22.17	22.29	22.43	22.55	32.70	43.18	43.36	45.65	48.26	50.67	50.97	51.60	52.00	53.00	Common Shs Outst'g E	55.00
16.2	13.6	14.2	14.3	13.4	13.7	13.0	14.5	21.3	19.8	16.5	19.6	19.8	16.7	22.8	NMF	14.4		Avg Ann'l P/E Ratio	20.5
.86	.73	.75	.86	.89	.87	.82	.92	1.20	1.04	.83	1.03	1.00	.90	1.21	NMF	.76		Relative P/E Ratio	1.15
4.4%	4.3%	4.4%	3.9%	3.9%	4.7%	4.3%	4.1%	4.0%	3.8%	3.5%	3.1%	3.1%	3.1%	3.0%	3.4%	3.8%		Avg Ann'l Div'd Yield	2.8%

CAPITAL STRUCTURE as of 6/30/21
Total Debt $3510.8 mill. **Due in 5 Yrs** $1720.0 mill.
LT Debt $2939.0 mill. **LT Interest** $135.0 mill.
(Total interest coverage: 2.0x)

Leases, Uncapitalized Annual rentals $8.8 mill.
Pension Assets-9/20 $897.9 mill. **Oblig.** $1401.3 mill.
Pfd Stock $242.0 mill. **Pfd Div'd** $14.8 mill.
Common Stock 51,684,120 shs. as of 7/31/21

MARKET CAP: $3.3 billion (Mid Cap)

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		24-26
1603.3	1125.5	1017.0	1627.2	1976.4	1537.3	1740.7	1965.0	1952.4	1855.4	2200	2000	Revenues ($mill) A	3200
63.8	62.6	52.8	84.6	136.9	144.2	161.6	214.2	184.6	88.6	245	210	Net Profit ($mill)	300
31.4%	29.6%	25.0%	27.6%	31.2%	32.5%	32.4%	32.4%	15.7%	12.3%	20.0%	21.0%	Income Tax Rate	23.5%
4.0%	5.6%	5.2%	5.2%	6.9%	9.4%	9.3%	10.9%	9.5%	4.8%	11.1%	10.5%	Net Profit Margin	9.4%
38.9%	36.1%	46.6%	55.1%	53.0%	50.9%	50.0%	45.7%	45.0%	49.0%	52.0%	51.0%	Long-Term Debt Ratio	45.0%
61.1%	63.9%	53.4%	44.9%	47.0%	49.1%	50.0%	54.3%	55.0%	51.0%	48.0%	49.0%	Common Equity Ratio	55.0%
937.7	941.0	1959.0	3359.4	3345.1	3601.9	3986.3	4155.5	4625.6	4946.0	5700	6000	Total Capital ($mill)	7500
928.7	1019.3	1776.6	2759.7	2941.2	3300.9	3665.2	3970.5	4352.0	4680.1	5050	5350	Net Plant ($mill)	6800
8.1%	7.9%	3.3%	3.1%	5.1%	4.9%	5.0%	6.3%	5.1%	2.9%	6.0%	5.0%	Return on Total Cap'l	5.5%
11.1%	10.4%	5.0%	5.6%	8.7%	8.2%	8.1%	9.5%	7.3%	3.5%	9.0%	7.0%	Return on Shr. Equity	7.5%
11.1%	10.4%	5.0%	5.6%	8.7%	8.2%	8.1%	9.5%	7.9%	3.2%	9.0%	7.0%	Return on Com Equity	7.5%
4.9%	4.3%	1.0%	1.5%	3.7%	3.3%	3.3%	4.7%	2.7%	NMF	3.5%	2.0%	Retained to Com Eq	3.0%
56%	59%	81%	73%	58%	59%	60%	51%	66%	NMF	61%	69%	All Div'ds to Net Prof	62%

CURRENT POSITION ($MILL.)

	2019	2020	6/30/21
Cash Assets	5.8	4.1	23.9
Other	608.7	586.5	874.4
Current Assets	614.5	590.6	898.3
Accts Payable	301.5	243.3	352.1
Debt Due	783.2	708.4	571.8
Other	384.1	497.5	367.9
Current Liab.	1468.8	1449.2	1291.8
Fix. Chg. Cov.	272%	373%	385%

ANNUAL RATES

of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '18-'20 to '24-'26
Revenues	-8.0%	--	7.5%
"Cash Flow"	4.5%	8.5%	8.0%
Earnings	1.5%	4.5%	10.0%
Dividends	4.5%	6.0%	4.5%
Book Value	7.0%	5.5%	7.5%

QUARTERLY REVENUES ($ mill.) A

Fiscal Year Ends	Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2018	561.8	813.4	350.6	239.2	1965.0
2019	602.0	803.5	321.3	225.6	1952.4
2020	566.9	715.5	321.1	251.9	1855.4
2021	512.6	1104.9	327.8	254.7	2200
2022	530	892	325	253	2000

EARNINGS PER SHARE A B F

Fiscal Year Ends	Dec.31	Mar.31	Jun.30	Sep.30	Full Fiscal Year
2018	2.39	2.03	.52	d.51	4.33
2019	1.32	3.04	d.09	d.74	3.52
2020	1.24	2.54	d1.87	d.45	1.44
2021	1.65	3.55	.03	d.53	4.70
2022	1.75	2.78	.05	d.58	4.00

QUARTERLY DIVIDENDS PAID C ■

Cal-endar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2017	.525	.525	.525	.525	2.10
2018	.5625	.5625	.5625	.5625	2.25
2019	.5925	.5925	.5925	.5925	2.37
2020	.6225	.6225	.6225	.6225	2.49
2021	.65	.65	.65	.65	

BUSINESS: Spire Inc., formerly known as the Laclede Group, Inc., is a holding company for natural gas utilities, which distributes natural gas across Missouri, including the cities of St. Louis and Kansas City, Alabama, and Mississippi. Has roughly 1.7 million customers. Acquired Missouri Gas 9/13, Alabama Gas Co 9/14. Utility therms sold and transported in fiscal 2020: 3.3 bill. Revenue mix for regulated operations: residential, 68%; commercial and industrial, 22%; transportation, 6%; other, 4%. Has about 3,583 employees. Officers and directors own 3.0% of common shares; BlackRock, 12.0% (1/21 proxy). Chairman: Edward Glotzbach; CEO: Suzanne Sitherwood. Inc.: Missouri. Address: 700 Market Street, St. Louis, Missouri 63101. Tel.: 314-342-0500. Internet: www.spireenergy.com.

Spire Inc. probably closed the book on a prosperous fiscal 2021, which ended on September 30th. (Please be aware that fourth-quarter numbers were not available when this report went to press.) Through the first nine months, earnings per share were $5.23, some 2.7 times higher than the year-ago tally of $1.91 (squeezed by the impact of COVID-19). That was brought about partially by the Gas Utility division, helped by increased Infrastructure System Replacement Surcharge (ISRS) revenues for the Missouri operations, the effects of colder weather, plus rate adjustments at Spire Alabama. Moreover, favorable market conditions, especially in February when Winter Storm Uri struck parts of the United States, lifted the performance of the Gas Marketing operation. If there were no major stumbling blocks during the fourth quarter, full-year earnings might have soared more than threefold, to $4.70 a share, relative to the fiscal 2020 tally of $1.44. Regarding fiscal 2022, we look for the company to register lower, though still respectable, share net of $4.00, since fiscal 2021's second-quarter figure will be a challenge to beat.

It appears that capital expenditures for the year that just concluded were around $590 million. (This is 7.5% lower than the fiscal 2020 amount of approximately $638 million.) Funds were deployed to such segments as infrastructure upgrades at the utilities and new business development initiatives. The fiscal 2022 budget is estimated to be roughly $580 million. Management adds that it expects total spending from fiscal 2021 through fiscal 2025 to be in the vicinity of $3 billion. Assuming that finances remain healthy, Spire ought to have minimal difficulty accomplishing these goals.

There are some things to like about the equity. Capital appreciation potential over the 3- to 5-year horizon is considerable, reflecting recent stock-price weakness. Consider, too, the healthy dividend yield and good prospects for further steady hikes in the payout. Other pluses include the 2 (Above Average) Safety rank and below-market Beta coefficient. But these shares possess a 4 (Below Average) rank for Timeliness.

Frederick L. Harris, III November 26, 2021

(A) Fiscal year ends Sept. 30th. (B) Based on diluted shares outstanding. Excludes nonrecurring loss: '06, 7¢. Excludes gain from discontinued operations: '08, 94¢. Next earnings report due late Jan. (C) Dividends paid in early January, April, July, and October. ■ Dividend reinvestment plan available. (D) Incl. deferred charges. In '20: $1,171.6 mill., $22.71/sh. (E) In millions. (F) Qtly. egs. may not sum due to rounding or change in shares outstanding.

Company's Financial Strength	B++
Stock's Price Stability	95
Price Growth Persistence	50
Earnings Predictability	45

Summary of
Discounted Cash Flow Analysis (DCF)

DCF formula: $K = (D_1/P_0) + g$

<u>Combination Utility Group:</u>

Dividend Yield (D_1/P_0):	**3.2%**	**Page 2**
Dividend Growth (g):	**5.7%**	**Page 3**
DCF Cost of Equity *(K):*	**8.9%**	

S&P Global Dividend Yield Data

Combination Utility Group	**Dividend Yield (12/28/21) D_0/P_0**
Alliant Energy (LNT)	2.7%
Black Hills Corp. (BKH)	3.4%
CMS Energy Corp. (CMS)	2.7%
Consolidated Edison (ED)	3.7%
Eversource Energy (ES)	2.7%
MGE Energy Inc. (MGEE)	2.0%
Northwestern (NWE)	4.5%
Sempra Energy (SRE)	3.4%
WEC Energy Group (WEC)	3.1%
Combination Utility Group Average	**3.1%**

Forward Dividend Yields:

Average Dividend Yield, adjusted for growth by (1 + 0.5g)

$D_1/P_0 = D_0/P_0 * (1 + 0.5g) = 3.10\% * [1 + 0.5(0.057)] =$ **3.2%**

Use for forward yield (D_1/P_0): **3.2%**

Value Line Growth Rates

Combination Utility Group

	Earnings Per Share			Dividends Per Share			Book Value Per Share			
Company Name	10 Years	5 Years	Forecasted	10 Years	5 Years	Forecasted	10 Years	5 Years	Forecasted	
Alliant Energy (LNT)	7.0%	6.5%	5.5%	6.5%	7.0%	6.0%	5.0%	6.5%	5.0%	6.1%
Black Hills Corp. (BKH)	10.0%	5.0%	5.0%	3.5%	5.5%	5.5%	3.5%	5.5%	5.0%	5.4%
CMS Energy Corp. (CMS)	7.5%	7.0%	6.0%	11.5%	7.0%	5.5%	5.0%	5.5%	7.5%	6.9%
Consolidated Edison (ED)	2.5%	1.5%	3.0%	2.5%	3.0%	3.0%	4.0%	4.5%	2.5%	2.9%
Eversource Energy (ES)	5.5%	5.5%	6.5%	8.5%	6.5%	6.0%	6.5%	4.0%	4.5%	5.9%
MGE Energy Inc. (MGEE)	5.0%	3.0%	5.5%	3.5%	4.5%	5.0%	5.5%	6.0%	5.5%	4.8%
Northwestern (NWE)	5.5%	3.5%	3.0%	5.5%	6.5%	3.5%	6.0%	5.5%	3.0%	4.7%
Sempra Energy (SRE)	3.0%	5.0%	10.0%	10.0%	8.0%	6.0%	5.5%	6.0%	7.5%	6.8%
WEC Energy Group (WEC)	8.0%	7.5%	6.5%	13.5%	8.5%	6.5%	7.5%	8.0%	4.0%	7.8%
Average	**6.0%**	**4.9%**	**5.7%**	**7.2%**	**6.3%**	**5.2%**	**5.4%**	**5.7%**	**4.9%**	**5.7%**

Source: Value Line
See Attachment LDC-2, pages 1-9.

Summary of
Discounted Cash Flow Analysis (DCF)

DCF formula: $K = (D_1/P_0) + g$

Gas LDC Group:

Dividend Yield (D_1/P_0):	**3.8%**	**Page 2**
Dividend Growth (g):	**6.0%**	**Page 3**
DCF Cost of Equity *(K):*	**9.8%**	

S&P Global Dividend Yield Data

Gas LDC Companies:	**Global Dividend Yield $D0/P_0$** 12/28/2021
Atmos Energy Corp. (ATO)	2.6%
New Jersey Res. (NJR)	3.6%
N.W. Natural (NWN)	4.0%
One Gas, Inc.(OGS)	3.0%
South Jersey Inds. (SJI)	4.8%
Southwest Gas (SWX)	3.4%
Spire, Inc. (SR)	4.3%
Gas Utility Group Average	**3.7%**

Forward Dividend Yields:

Average Dividend Yield, adjusted for growth by (1 + 0.5g)

$D_1/P_0 = D_0/P_0 * (1 + 0.5g) = 3.7\% * [1 + 0.5(0.064)] =$ **3.8%**

Use for forward yield (D1/P0): **3.8%**

DCF Model

Summary of Growth Rates (g)

STANDARD VALUE LINE COMPANIES -- Gas LDC Group

Company Name	Earnings Per Share			Dividends Per Share			Book Value Per Share			
	10 Years	5 Years	Forecasted	10 Years	5 Years	Forecasted	10 Years	5 Years	Forecasted	Average
Atmos Energy Corp. (ATO)	8.0%	9.0%	7.0%	5.0%	7.5%	7.5%	7.5%	10.0%	10.5%	8.0%
New Jersey Res. (NJR)	6.0%	5.5%	1.5%	7.0%	6.5%	5.5%	7.5%	8.5%	5.5%	5.9%
N.W. Natural (NWN)	-1.5%	1.5%	5.5%	1.5%	0.5%	5.0%	1.0%	n/a*	8.5%	3.4%
ONE Gas, Inc. (OGS)	n/a*	10.0%	6.5%	n/a*	14.5%	7.0%	n/a*	3.0%	10.5%	8.6%
South Jersey Inds. (SJI)	1.5%	-1.5%	11.5%	6.5%	4.0%	4.5%	5.5%	2.5%	4.5%	5.1%
Southwest Gas (SWX)	7.5%	5.5%	9.5%	8.5%	8.0%	4.5%	6.0%	7.0%	9.0%	7.3%
Spire Inc. (SR)	1.5%	4.5%	10.0%	4.5%	6.0%	4.5%	7.0%	5.5%	7.5%	5.7%
Average - Historical & Forecasted	**4.9%**	**6.0%**	**7.4%**	**5.5%**	**6.7%**	**5.5%**	**5.8%**	**6.1%**	**8.0%**	**6.2%**
Average - Using 7.0% EPS for SJI, SWX and SR			**5.9%**							**6.0%**

Source: *Value Line Investment Survey, November 26, 2021.*

* *Value Line did not list data for these entries.*
Negative percentages were not included in the average calculations.

Approximately 20 basis points are added to the final 6.2% average because of the unsustaina
EPS forecasts for South Jersey, Southwest Gas, and Spire.
The average forecasted EPS of the other 4 utilities is 5.1%. (20.5 / 4).
Using a 7.0% forecasted EPS growth rate for SJI, SWX, and SR lowers the average forecaste
EPS to 5.9%. [7.0+1.5+5.5+6.5+7.0+7.0+7.0] / 7
The final average is 6.0% instead of 6.2%.
[4.9 + 6.0 + 5.9 + 5.5 + 6.7 + 5.5 + 5.8 + 6.1 + 8.0] / 9 = 6.0%
Therefore, the DCF for the Gas LDC group would be 9.8% instead of 10.0%. See page 1.

CAPM Cost of Equity Summary -- Combination Utility Group

CAPM Formula: $K = R_f + b(R_m - R_f)$

Risk Free Rate (R_f) - Duff & Phelps	2.50%
Beta (β) - Value Line	0.87
Risk Premium *(Geometric Approach - Long Term Bonds)* 10.20% - 6.10%	4.10%
Risk Premium *(Arithmetic Approach - Long Term Bonds)* 12.20% - 6.40%	5.80%
Risk Premium *(Geometric and Arithmetic Average - Long Term Bonds) 5.70% + 4.10% / 2*	4.95%
Required Return (K) (Long Term Bonds) Using 4.95%	9.29%

Yields on U.S. Treasury Securities
January 2021 - December 2021

Month	Treasury Bonds	10 Year Treasury Bonds	20 Year Treasury Bonds	30 Year Treasury Bonds
January 2021	0.36%	0.93%	1.46%	1.66%
February 2021	0.42%	1.09%	1.66%	1.84%
March 2021	0.71%	1.45%	2.11%	2.23%
April 2021	0.90%	1.69%	2.24%	2.34%
May 2021	0.84%	1.63%	2.18%	2.30%
June 2021	0.81%	1.62%	2.22%	2.30%
July 2021	0.89%	1.48%	2.01%	2.07%
August 2021	0.66%	1.20%	1.77%	1.86%
September 2021	0.78%	1.31%	1.84%	1.92%
October 2021	0.93%	1.48%	1.99%	2.04%
November 2021	1.20%	1.58%	2.01%	1.98%
December 2021	1.15%	1.43%	1.84%	1.77%
Average Last 3 months	**1.09%**	**1.50%**	**1.95%**	**1.93%**
Average Last 6 months	**0.94%**	**1.41%**	**1.91%**	**1.94%**
Average Last 12 months	**0.80%**	**1.41%**	**1.94%**	**2.03%**

Source: *www.treasury.gov*

Duff and Phelps Normalized Risk Free Rate =	**2.50%**

Risk Free Rate (R_f) Range and Estimate

	Yield Calculations
Range	**0.80% to 2.03%**
Risk Free Rate (R_f)	**2.50%**

Beta for Combination Utility Group

Company Name	**Value Line Betas***
Alliant Energy (LNT)	0.85
Black Hills Corp. (BKH)	1.00
CMS Energy Corp. (CMS)	0.80
Consolidated Edison (ED)	0.75
Eversource Energy (ES)	0.90
MGE Energy Inc. (MGEE)	0.75
Northwestern Corp. (NWE)	0.95
Sempra Energy (SRE)	1.00
WEC Energy Group (WEC)	0.80
Gas Utility Group Average	**0.87**

* See Attachment LDC-3, pages 1-9.

Market Risk Premiums

Total Returns, 1926-2020

	Stocks	Long-term Bonds
Geometric Mean	10.20%	6.10%
Arithmetic Mean	12.20%	6.40%

Market Risk Premiums (R_m - R_f)

		Long-term Bonds
Geometric Mean		4.10%
Arithmetic Mean		5.80%
Average Market Risk Premium		**4.95%**

Source: *Duff & Phelps, SBBI Classic Ibbotson Yearbook, 2021.*

CAPM Cost of Equity Summary -- Gas LDC Group

CAPM Formula: $K = R_f + b(R_m - R_f)$

Risk Free Rate (R_f) - Duff and Phelps	2.50%
Beta (β) - Value Line	0.90
Risk Premium *(Geometric Approach - Long Term Bonds)* 10.20% - 6.10%	4.10%
Risk Premium *(Arithmetic Approach - Long Term Bonds)* 12.10% - 6.40%	5.80%
Risk Premium *(Average of Geometric and Arithmetic - Long Term Bonds)* 5.80% + 4.10% / 2 (Rm - Rf)	4.95%
Required Return (K) *(Long Term Bonds)* Using 4.95%	9.46%

Yields on U.S. Treasury Securities
January 2021 - December 2021

Month	Treasury Bonds	10 Year Treasury Bonds	20 Year Treasury Bonds	30 Year Treasury Bonds
January 2021	0.36%	0.93%	1.46%	1.66%
February 2021	0.42%	1.09%	1.66%	1.84%
March 2021	0.71%	1.45%	2.11%	2.23%
April 2021	0.90%	1.69%	2.24%	2.34%
May 2021	0.84%	1.63%	2.18%	2.30%
June 2021	0.81%	1.62%	2.22%	2.30%
July 2021	0.89%	1.48%	2.01%	2.07%
August 2021	0.66%	1.20%	1.77%	1.86%
September 2021	0.78%	1.31%	1.84%	1.92%
October 2021	0.93%	1.48%	1.99%	2.04%
November 2021	1.20%	1.58%	2.01%	1.98%
December 2021	1.15%	1.43%	1.84%	1.77%
Average Last 3 months	**1.09%**	**1.50%**	**1.95%**	**1.93%**
Average Last 6 months	**0.94%**	**1.41%**	**1.91%**	**1.94%**
Average Last 12 months	**0.80%**	**1.41%**	**1.94%**	**2.03%**

Source: *www.treasury.gov*

Duff and Phelps Normalized Risk Free Rate =	**2.50%**

Risk Free Rate (R_f) Range and Estimate

	Yield Calculations
Range	**0.80% to 2.03%**
Risk Free Rate (R_f)	**2.50%**

Beta for Gas Utility Group

Company Name	**Value Line Betas***
Atmos Energy Corp. (ATO)	0.80
New Jersey Res. (NJR)	1.00
N.W. Natural (NWN)	0.85
ONE Gas, Inc. (OGS)	0.80
South Jersey Industries (SJI)	1.05
Southwest Gas (SWX)	0.95
Spire, Inc. (SR)	0.85
Gas Utility Group Average	**0.90**

Market Risk Premiums

Total Returns, 1926-2020

	Stocks	Long-term Bonds
Geometric Mean	10.20%	6.10%
Arithmetic Mean	12.20%	6.40%

Market Risk Premiums (R_m - R_f)

		Long-term Bonds
Geometric Mean		4.10%
Arithmetic Mean		5.80%
Average Market Risk Premium		**4.95%**

Source: *Duff & Phelps, SBBI Classic Ibbotson Yearbook, 2021.*

DUFF & PHELPS
A KROLL BUSINESS

Cost of Capital in the Current Environment

COVID-19 Update – September 2021

U.S. Cost of Capital Inputs

Data as of September 20, 2021

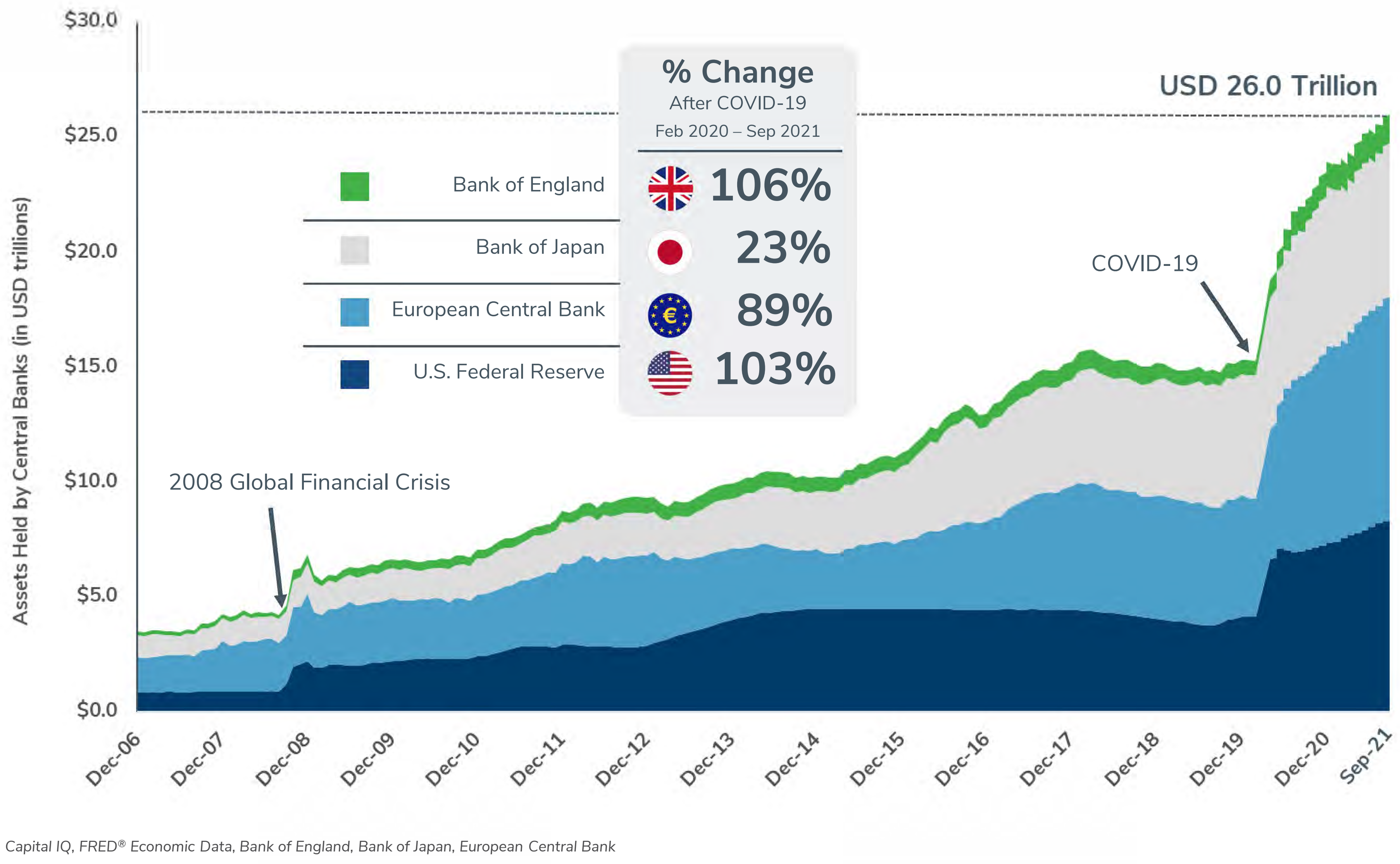
5.5%	Duff & Phelps-Recommended Equity Risk Premium
2.5%	Normalized Risk-Free Rate

Duff & Phelps, A Kroll Business continues to monitor risk-free rates and other cost of capital inputs closely. If and when (i) long-term spot yields increase to a level that approaches the Duff & Phelps-recommended U.S. normalized risk-free rate (e.g., differences are lower than 50 b.p.), and (ii) there is evidence that this increase in spot yields is not transitory, we will then consider recommending a return to using spot 20-year U.S. Treasury Yields as the basis for the risk-free rate to be used in conjunction with our recommended U.S. Equity Risk Premium.

For more information, visit: www.duffandphelps.com/costofcapital

Total Assets Held by Major Central Banks Over Time

Data as of September 20, 2021



Sources: Capital IQ, FRED® Economic Data, Bank of England, Bank of Japan, European Central Bank

Global Market Volatility

Data as of September 22, 2021

	VIX Index (U.S.)	VSTOXX® (Europe)
MAX during 2008 Global Financial Crisis	80.9	87.5
MAX during COVID-19 crisis	82.7	85.6
Long-term Average	20.0	23.7
Current level	20.9	22.8

Global Credit Spreads

Data as of September 22, 2021

	U.S. Corporate Credit Spreads	Euro-Denominated Corporate Credit Spreads
MAX during 2008 Global Financial Crisis	14.9%	18.8%
MAX during COVID-19 crisis	6.7%	7.7%
Long-term Average	3.8%	5.2%
Current Level	2.0%	2.7%

Sources: *Capital IQ, FRED® Economic Data, Morningstar Direct*

U.S. Corporate Credit Spreads are based on the difference in effective yields between the ICE BofA U.S. High Yield Index and the ICE BofA US Corporate Index. Euro-Denominated Corporate Credit Spreads based on the difference in effective yields between the Bloomberg Barclays Pan-European High Yield Index (EUR) and the Bloomberg Barclays Euro Aggregate Corporate Bond Index. Long-term averages based on 1995 to present for VIX daily series, 1999 to present for VSTOXX daily series, 1996 to present for U.S. credit spread daily series, and 1998 to present for EUR-denominated credit spread monthly series.

Stock Market Performance Since the Wuhan Lockdown*

Data as of September 22, 2021

MSCI All Country World Index	S&P 500	STOXX® Europe 600
25.8%	32.2%	10.3%
DAX 30	**CAC 40**	**IBEX 35**
15.8%	11.1%	-7.5%
CSI 300	**TOPIX**	**FTSE 100**
20.4%	18.1%	-5.7%

Source: Capital IQ

*The first lockdown due to COVID-19 began on January 23, 2020, in Wuhan, China.

Global 10-Year Government Bond Yields

Data as of September 22, 2021

Region			
Americas	U.S. 1.32%	Canada 1.29%	Brazil 10.65%
Eurozone	Eurozone -0.31%	Germany -0.46%	Netherlands -0.16%
Eurozone	France -0.07%	Spain 0.31%	Italy 0.66%
Europe – Other	UK 0.70%	Switzerland -0.26%	Sweden 0.28%
Asia	China 2.90%	India 6.14%	Japan 0.05%

Sources: Bloomberg (Brazil, India), European Central Bank (Eurozone aggregate yield), Capital IQ (other countries)

U.S. and Eurozone Consumer Sentiment vs. Business Confidence

Data as of September 20, 2021

		Pre-COVID-19 (February 2020)	Post-COVID-19 (Latest Available*)	Long-Term Avg.
Consumer Sentiment	U.S.	101.0	↓ 71.0	(1952–2021) 86.5
	Eurozone	107.1	↑ 111.9	(1985–2021) 100.0
Business Confidence	U.S.	99.0	↑ 101.5	(1950–2021) 100.0
	Eurozone	99.5	↑ 117.6	(1985–2021) 100.0

Sources: *Michigan University's Index of Consumer Sentiment, OECD's Business Confidence Index, European Commission business and consumer surveys* [The same methodology that the European Commission uses to standardize its Economic Sentiment Indicator (ESI) was applied to the Eurozone Consumer Confidence and Business Climate Indicator series.]

*Data through September 2021 for U.S. and Eurozone Consumer Sentiment.. Data through August 31, 2021, for U.S. and Eurozone Business Confidence.

U.S. vs. Eurozone Unemployment Rate

Data as of September 20, 2021

	U.S.	Eurozone
March 2020	4.4%	7.1%
June 2020	11.1%	8.0%
September 2020	7.8%	8.7%
December 2020	6.7%	8.1%
March 2021	6.0%	8.1%
June 2021	5.9%	7.8%
Latest Available*	5.2%	7.6%

Source: U.S. Bureau of Labor Statistics, Eurostat

* Data through August 2021 for the United States and July 2021 for the Eurozone.

> "Risk has subsided since the outbreak of COVID-19, but economic recovery is still progressing at different speeds among regions. The Delta variant is leading to downward revisions in real GDP growth for some geographies."
>
> – Carla Nunes, CFA, Managing Director, Duff & Phelps, A Kroll Business

Real GDP Growth – Q1 and Q2 2021

Data as of September 22, 2021

		U.S.	Eurozone	UK	China	Japan
QUARTER-ON-QUARTER GROWTH (%)	Q1	1.5% ↑	-0.3% ↓	-1.6% ↓	0.4% ↑	-1.1% ↓
	Q2	1.6% ↑	2.2% ↑	4.8% ↑	1.3% ↑	0.5% ↑
ANNUALIZED QUARTER-ON-QUARTER GROWTH (%)	Q1	6.3% ↑	-1.1% ↓	-6.2% ↓	1.6% ↑	-4.2% ↓
	Q2	6.6% ↑	9.2% ↑	20.7% ↑	5.3% ↑	1.9% ↑

Sources: *FRED® Economic Data (Eurozone, Japan, U.S.), National Bureau of Statistics of China, UK's Office for National Statistics*

Quarter-on-quarter growth based on the growth rate from Q4 2020 to Q1 2021 and Q1 2021 to Q2 2021. This rate is annualized by computing the compounded growth rate for four quarters as follows: (1 + Real GDP Q/Q Growth)^4. The annualized rate shows what the quarterly change would be if it lasted a full year.

Real GDP Growth (%) Estimates (Median)

Data as of September 20, 2021

		Compound Annual Growth Rates (%) 2020 to 2021	Cumulative Growth (%) 2020-2021	After COVID-19: 2020	2021	2022
WORLD	Before COVID-19	2.6	5.3	-3.4	5.7	4.4
	After COVID-19	1.0	2.1			
U.S.	Before COVID-19	1.9	3.8	-3.4	6.0	4.3
	After COVID-19	1.2	2.4			
EUROZONE	Before COVID-19	1.1	2.3	-6.5	4.9	4.4
	After COVID-19	-1.0	-1.9			
CHINA	Before COVID-19	5.7	11.8	2.3	8.4	5.7
	After COVID-19	5.3	10.9			

Sources: *OECD, International Monetary Fund, World Bank, Blue Chip Economic Indicators, Consensus Economics, Economic Intelligence Unit, Fitch Ratings, IHS Markit, Moody's Analytics, Oxford Economics, S&P Global Ratings*

Before COVID-19 median estimates are based on data released in December 2019 and early January of 2020. After COVID-19 median estimates are based on data available as of the date noted above.

Compound annual growth rate (CAGR) is calculated as the annualized rate of return of median real GDP growth rate estimates from the end of 2019 through the end of 2021: [(1 + 2020 Real GDP Growth Rate) * (1 + 2021 Real GDP Growth Rate)] ^ (1/2) – 1. Cumulative growth is calculated as the total (cumulative) growth rates of median real GDP estimates from the end of 2019 through the end of 2021: (1 + 2020 Real GDP Growth Rate) * (1 + 2021 Real GDP Growth Rate) – 1. These metrics show the annualized and cumulative real GDP growth rates that were expected at the end of 2019 (Before COVID- 19) for the 2020–2021 period vs. what the expectations are currently (After COVID-19).

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Congressional Budget Office
Nonpartisan Analysis for the U.S. Congress

An Update to the Budget and Economic Outlook: 2021 to 2031

JULY | 2021

The Congressional Budget Office regularly publishes reports presenting projections of what federal budget deficits, debt, revenues, and spending—and the economic path underlying them—would be for the current year and for the following 10 years if current laws governing taxes and spending generally remained unchanged. This report presents the agency's most recent budget and economic projections, which are based on the laws in effect as of May 18, 2021. This presentation of CBO's projections is much shorter than usual. The information is less detailed so that CBO can provide it to lawmakers as quickly as possible. CBO will publish more detailed information about its projections later this month.[1]

The Budget

In CBO's budget projections (called the baseline), the federal budget deficit for fiscal year 2021 is $3.0 trillion, nearly $130 billion less than the deficit recorded in 2020 but triple the shortfall recorded in 2019. Relative to the size of the economy, this year's deficit is projected to total 13.4 percent of gross domestic product (GDP), making it the second largest since 1945, exceeded only by the 14.9 percent shortfall recorded last year. The economic disruption caused by the 2020–2021 coronavirus pandemic and the legislation enacted in response continue to weigh on the deficit (which was already large by historical standards before the pandemic).

Baseline deficits under current law are significantly smaller after 2021 and average $1.2 trillion from 2022 to 2031. They average 4.2 percent of GDP through 2031, well above their 50-year average of 3.3 percent. In CBO's projections, the deficit declines to about 3 percent of GDP in 2023 and 2024 before increasing again, reaching 5.5 percent in 2031 (see Table 1). By the end of the period, both primary deficits (which exclude net outlays for interest) and interest outlays are increasing in nominal terms and as a share of GDP.

With such deficits, federal debt held by the public—which stood at $21.0 trillion, or 100 percent of GDP, at the end of 2020—would total $23.0 trillion, or 103 percent of GDP, at the end of 2021. As recently as 2007, at the start of the previous recession, federal debt equaled 35 percent of GDP. Projected federal debt dips just below 100 percent of GDP between 2023 and 2025 before rising again, reaching 106 percent in 2031, about the same as the amount recorded in 1946, which stands as the highest in the nation's history.

Revenues in CBO's baseline increase to 17 percent of GDP in 2021 and are relatively stable thereafter, averaging 18 percent from 2022 through 2031. Outlays are projected to decline from 31 percent of GDP this year to about 21 percent from 2023 through 2025 as pandemic-related spending wanes and low interest rates persist. Outlays then increase relative to GDP, owing to rising interest costs and greater spending for major entitlement programs.

Compared with its estimates from February 2021, CBO's estimate of the deficit for 2021 is now $745 billion (or 33 percent) larger, and its projection of the cumulative deficit between 2022 and 2031, $12.1 trillion, is now $173 billion (or 1 percent) smaller. In 2021, recently enacted legislation—primarily the American Rescue Plan Act of 2021 (Public Law 117-2)—increases the projected deficit by $1.1 trillion, mostly as a result of higher spending. The largest budgetary effects stem from additional funding for recovery rebates for individuals, for state and local governments, for educational institutions, and for an extension of expanded unemployment

1. CBO plans to publish additional information about its latest budget and economic projections on July 21, 2021.

Notes: Unless this report indicates otherwise, all years referred to when describing the budget outlook are federal fiscal years, which run from October 1 to September 30 and are designated by the calendar year in which they end. Years referred to in describing the economic outlook are calendar years. Numbers in the text and tables may not add up to totals because of rounding.

Table 1.

CBO's Baseline Budget Projections, by Category

	Actual, 2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total 2022–2026	Total 2022–2031
							In Billions of Dollars							
Revenues														
Individual income taxes	1,609	1,952	2,328	2,334	2,353	2,383	2,586	2,792	2,871	2,979	3,091	3,209	11,984	26,926
Payroll taxes	1,310	1,346	1,391	1,504	1,550	1,588	1,644	1,703	1,768	1,834	1,900	1,968	7,677	16,849
Corporate income taxes	212	238	317	379	390	402	401	391	393	393	393	397	1,889	3,857
Other	291	306	355	381	378	359	354	367	364	366	371	382	1,827	3,676
Total	**3,421**	**3,842**	**4,390**	**4,597**	**4,671**	**4,734**	**4,984**	**5,253**	**5,396**	**5,572**	**5,754**	**5,957**	**23,376**	**51,308**
On-budget	2,456	2,863	3,401	3,513	3,542	3,566	3,773	3,995	4,091	4,218	4,352	4,506	17,796	38,957
Off-budget[a]	965	979	989	1,085	1,128	1,168	1,211	1,258	1,306	1,354	1,402	1,451	5,581	12,351
Outlays														
Mandatory	4,577	4,862	3,589	3,461	3,488	3,711	3,907	4,088	4,418	4,446	4,780	5,025	18,155	40,912
Discretionary	1,628	1,652	1,649	1,610	1,592	1,625	1,660	1,701	1,746	1,778	1,827	1,877	8,136	17,065
Net interest	345	331	306	315	344	396	467	541	628	712	808	910	1,826	5,425
Total	**6,550**	**6,845**	**5,544**	**5,386**	**5,423**	**5,731**	**6,033**	**6,330**	**6,792**	**6,935**	**7,415**	**7,812**	**28,118**	**63,402**
On-budget	5,598	5,846	4,469	4,231	4,191	4,418	4,642	4,854	5,222	5,268	5,647	5,939	21,950	48,880
Off-budget[a]	953	999	1,075	1,155	1,233	1,313	1,391	1,476	1,570	1,667	1,769	1,873	6,167	14,521
Deficit (-) or Surplus	**-3,129**	**-3,003**	**-1,153**	**-789**	**-753**	**-998**	**-1,049**	**-1,077**	**-1,395**	**-1,363**	**-1,661**	**-1,855**	**-4,741**	**-12,093**
On-budget	-3,142	-2,984	-1,067	-718	-648	-852	-869	-859	-1,131	-1,050	-1,294	-1,434	-4,155	-9,923
Off-budget[a]	13	-19	-86	-71	-104	-146	-180	-218	-264	-313	-367	-422	-587	-2,170
Debt Held by the Public	21,017	23,012	24,392	25,156	25,959	26,967	28,062	29,185	30,733	32,119	33,913	35,827	n.a.	n.a.
Memorandum:														
Gross Domestic Product	21,000	22,401	24,323	25,356	26,191	27,076	28,033	29,103	30,195	31,305	32,449	33,670	130,980	287,702
							As a Percentage of Gross Domestic Product							
Revenues														
Individual income taxes	7.7	8.7	9.6	9.2	9.0	8.8	9.2	9.6	9.5	9.5	9.5	9.5	9.1	9.4
Payroll taxes	6.2	6.0	5.7	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.8	5.9	5.9
Corporate income taxes	1.0	1.1	1.3	1.5	1.5	1.5	1.4	1.3	1.3	1.3	1.2	1.2	1.4	1.3
Other	1.4	1.4	1.5	1.5	1.4	1.3	1.3	1.3	1.2	1.2	1.1	1.1	1.4	1.3
Total	**16.3**	**17.2**	**18.1**	**18.1**	**17.8**	**17.5**	**17.8**	**18.0**	**17.9**	**17.8**	**17.7**	**17.7**	**17.8**	**17.8**
On-budget	11.7	12.8	14.0	13.9	13.5	13.2	13.5	13.7	13.5	13.5	13.4	13.4	13.6	13.5
Off-budget[a]	4.6	4.4	4.1	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Outlays														
Mandatory	21.8	21.7	14.8	13.7	13.3	13.7	13.9	14.0	14.6	14.2	14.7	14.9	13.9	14.2
Discretionary	7.8	7.4	6.8	6.3	6.1	6.0	5.9	5.8	5.8	5.7	5.6	5.6	6.2	5.9
Net interest	1.6	1.5	1.3	1.2	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.7	1.4	1.9
Total	**31.2**	**30.6**	**22.8**	**21.2**	**20.7**	**21.2**	**21.5**	**21.7**	**22.5**	**22.2**	**22.9**	**23.2**	**21.5**	**22.0**
On-budget	26.7	26.1	18.4	16.7	16.0	16.3	16.6	16.7	17.3	16.8	17.4	17.6	16.8	17.0
Off-budget[a]	4.5	4.5	4.4	4.6	4.7	4.9	5.0	5.1	5.2	5.3	5.5	5.6	4.7	5.0
Deficit (-) or Surplus	**-14.9**	**-13.4**	**-4.7**	**-3.1**	**-2.9**	**-3.7**	**-3.7**	**-3.7**	**-4.6**	**-4.4**	**-5.1**	**-5.5**	**-3.6**	**-4.2**
On-budget	-15.0	-13.3	-4.4	-2.8	-2.5	-3.1	-3.1	-3.0	-3.7	-3.4	-4.0	-4.3	-3.2	-3.4
Off-budget[a]	0.1	-0.1	-0.4	-0.3	-0.4	-0.5	-0.6	-0.7	-0.9	-1.0	-1.1	-1.3	-0.4	-0.8
Debt Held by the Public	100.1	102.7	100.3	99.2	99.1	99.6	100.1	100.3	101.8	102.6	104.5	106.4	n.a.	n.a.

Data source: Congressional Budget Office. See www.cbo.gov/publication/57218#data.

n.a. = not applicable.

a. The revenues and outlays of the Social Security trust funds and the net cash flow of the Postal Service are classified as off-budget.

compensation. The effects of a stronger economy as well as technical changes (that is, changes that are neither legislative nor economic) partially offset the deficit effects of recently enacted legislation. For subsequent years, CBO has increased its projections of both revenues and outlays—the former by more than the latter.

Projected revenues over the next decade are now higher because of the stronger economy and consequent higher taxable incomes. In addition, tax collections in 2020 and 2021—particularly amounts collected from individual income taxes—were stronger than the amounts implied by currently available data on economic activity and the past relationship with revenues. In CBO's projections, that unexpected strength dissipates over the next few years. Besides resulting from the direct effects of recent legislation, the changes to outlays since February over the projection period are largely attributable to higher interest rates (which boost net interest costs) and higher projected inflation and wages (which increase the costs of major benefit programs).

CBO's projections are constructed in accordance with the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177) and the Congressional Budget Act of 1974 (P.L. 93-344). Those laws require CBO to construct its baseline projections under the assumption that current laws governing revenues and spending will generally stay the same and that discretionary appropriations in future years will match current funding, with adjustments for inflation.[2]

CBO's baseline is not intended to provide a forecast of future budgetary and economic outcomes; rather, it provides a benchmark that policymakers can use to assess the potential effects of future policy decisions. Future legislative action could lead to markedly different outcomes. Even if federal laws remained unaltered for the next decade, actual budgetary outcomes would probably differ from CBO's baseline—not only because of unanticipated economic developments, but also as a result of many other factors that affect federal revenues and outlays.

2. In consultation with the House and Senate Committees on the Budget, however, CBO deviated from those standard procedures when constructing its current baseline for discretionary spending. Because of the unusual size and nature of the emergency funding provided in response to the coronavirus pandemic, the agency did not extrapolate the $184 billion in discretionary budget authority that has been provided for such purposes so far in 2021. Other emergency funding was projected to continue in the future, with increases for inflation each year after 2021.

The Economy

As the pandemic eases and demand for consumer services surges, real (inflation-adjusted) GDP is projected to increase by 7.4 percent and surpass its potential (maximum sustainable) level by the end of 2021 (see Table 2). The annual growth of real GDP averages 2.8 percent during the five-year period from 2021 to 2025, exceeding the 2.0 percent growth rate of real potential GDP. Over the 2026–2031 period, real GDP growth averages 1.6 percent, which is less than its long-term historical average, primarily because the labor force is expected to grow more slowly than it has in the past.

In CBO's projections, employment grows quickly in the second half of 2021—reflecting increased demand for goods and services and the waning of factors dampening the supply of labor, including health concerns and enhanced unemployment insurance benefits. Employment surpasses its prepandemic level in mid-2022. The unemployment rate declines through 2022 and then remains near or below 4.0 percent for several years.

Inflation rises sharply in 2021 and then moderates. The price index for personal consumption expenditures (PCE) rises by 2.8 percent this year, as increases in the supply of goods and services lag behind increases in the demand for them, adding to inflationary pressures. By 2022, increases in supply keep up with increases in demand, and PCE price inflation falls to 2.0 percent during the year. After 2022, PCE price inflation remains at 2.1 percent through 2025, above its rate before the pandemic. The interest rate on 10-year Treasury notes remains low but rises as the economy continues to expand, reaching 2.7 percent by the end of 2025.

Compared with its estimates in February 2021, CBO now projects stronger economic growth. Three main factors are responsible for that result. First, the agency expects recently enacted fiscal policies to boost output. Second, CBO projects that the effects of social distancing on economic activity in 2021 will be smaller than the effects it projected in February, reflecting a more rapid return to normalcy. Third, CBO has raised its estimate of the consumer spending that results from the additional savings that households accumulated during the pandemic. As a result, the agency's projections of inflation are also higher than the projections it made in February, as output now exceeds its potential level sooner and by a larger amount than previously anticipated. Interest rates are also projected to be higher than CBO expected in February, reflecting the more positive outlook for economic growth.

Table 2.

CBO's Economic Projections for Calendar Years 2021 to 2031

	Actual, 2020	2021	2022	2023	Annual Average 2024–2025	Annual Average 2026–2031
	Percentage Change From Fourth Quarter to Fourth Quarter					
Gross Domestic Product						
Real[a]	-2.4	7.4	3.1	1.1	1.2	1.6
Nominal	-1.2	10.7	5.3	3.3	3.4	3.7
Inflation						
PCE price index	1.2	2.8	2.0	2.1	2.1	2.1
Core PCE price index[b]	1.4	2.4	2.0	2.2	2.2	2.1
Consumer price index[c]	1.2	3.4	2.3	2.3	2.4	2.4
Core consumer price index[b]	1.6	2.7	2.4	2.5	2.5	2.4
GDP price index	1.3	3.0	2.1	2.2	2.1	2.1
Employment Cost Index[d]	2.8	3.7	3.3	3.6	3.4	3.1
	Fourth-Quarter Level (Percent)					
Unemployment Rate	6.8	4.6	3.6	3.8	4.2[e]	4.5[f]
	Percentage Change From Year to Year					
Gross Domestic Product						
Real[a]	-3.5	6.7	5.0	1.5	1.2	1.6
Nominal	-2.3	9.7	7.2	3.8	3.4	3.7
Inflation						
PCE price index	1.2	2.6	2.1	2.1	2.1	2.1
Core PCE price index[b]	1.4	2.2	2.0	2.2	2.2	2.1
Consumer price index[c]	1.2	3.3	2.5	2.3	2.4	2.4
Core consumer price index[b]	1.7	2.5	2.5	2.5	2.5	2.4
GDP price index	1.2	2.9	2.1	2.2	2.2	2.1
Employment Cost Index[d]	2.9	3.5	3.2	3.5	3.5	3.1
	Annual Average					
Unemployment Rate (Percent)	8.1	5.5	3.8	3.7	4.1	4.4
Payroll Employment (Monthly change, in thousands)[g]	-760	587	417	70	4	42
Interest Rates (Percent)						
3-month Treasury bills	0.4	*	0.1	0.2	0.7	1.9
10-year Treasury notes	0.9	1.6	1.9	2.0	2.4	3.2
Tax Bases (Percentage of GDP)						
Wages and salaries	44.6	43.7	43.3	43.4	43.6	43.7
Domestic corporate profits[h]	8.1	9.9	9.8	9.1	8.6	7.8

Data sources: Congressional Budget Office; Bureau of Economic Analysis; Bureau of Labor Statistics; Federal Reserve. See www.cbo.gov/publication/57218#data.

GDP = gross domestic product; PCE = personal consumption expenditures; * = between zero and 0.05 percentage points.

a. Real values are nominal values that have been adjusted to remove the effects of changes in prices.

b. Excludes prices for food and energy.

c. The consumer price index for all urban consumers.

d. The employment cost index for wages and salaries of workers in private industries.

e. Value for the fourth quarter of 2025.

f. Value for the fourth quarter of 2031.

g. The average monthly change, calculated by dividing by 12 the change in payroll employment from the fourth quarter of one calendar year to the fourth quarter of the next.

h. Adjusted to remove distortions in depreciation allowances caused by tax rules and to exclude the effect of inflation on the value of inventories.

This document is one of a series of reports on the state of the budget and the economy that the Congressional Budget Office issues each year. It satisfies the requirement in section 202(e) of the Congressional Budget Act of 1974 for CBO to submit to the Committees on the Budget periodic reports about fiscal policy and to provide baseline projections of the federal budget. In keeping with CBO's mandate to provide objective, impartial analysis, this report makes no recommendations.

The estimates in this report are the work of more than 100 staff members at CBO. Barry Blom wrote the report, with assistance from Jeffrey Schafer. Christina Hawley Anthony, Theresa Gullo, Leo Lex, John McClelland, Sam Papenfuss, Joshua Shakin, and Jeffrey Werling provided guidance.

Mark Doms, Mark Hadley, Jeffrey Kling, and Robert Sunshine reviewed the report. Caitlin Verboon was the editor, and Jorge Salazar was the graphics editor. This report is available on CBO's website (www.cbo.gov/publication/57218).

CBO continually seeks feedback to make its work as useful as possible. Please send any comments to communications@cbo.gov.

Phillip L. Swagel
Director

BY TIM SABLIK

Forecasting Inflation

For policymakers and market participants, inflation can be challenging to predict

In recent months, inflation has climbed to levels not seen in a generation. The Fed's preferred measure of inflation, the Personal Consumption Expenditures (PCE) price index, increased to 4.4 percent in September 2021 compared to the same month the previous year. The last time the index reached such heights, George H.W. Bush was president, and Alan Greenspan was just finishing his first term as chair of the Fed's Board of Governors.

Maintaining price stability is one half of the Fed's dual mandate, so Fed officials have been watching this spike in inflation closely. According to the monetary policy framework adopted by the Fed last year, it judges inflation that averages 2 percent over time to be consistent with its price stability mandate. While inflation measures in recent months have come in above that 2 percent threshold, that hasn't been entirely unexpected nor unwelcome. Prices fell last year as the pandemic rippled through the global economy. Some of the current surge in prices is actually "reflation" as the economy ramps back up after months of lockdowns, and the Fed's new framework was designed to allow periods of higher inflation following periods when inflation is below target. (See "The Fed's New Framework," *Econ Focus*, First Quarter 2021.)

But Fed officials have also admitted that inflation has proven more lasting than they initially anticipated. As the economy has reopened, consumer demand has outpaced supply for some goods and services. Lingering supply chain disruptions have led to product shortages and price increases that are more than just a return to pre-pandemic trends. The challenge facing Fed policymakers now is trying to predict whether inflation will remain elevated in the absence of monetary policy intervention or gradually return to levels consistent with the Fed's target once the shocks from the pandemic fade.

In April, when inflation pressures began emerging, Fed Chair Jerome Powell said that it seemed "unlikely" that inflation would move up in a persistent way. But at his press conference following the Federal Open Market Committee's (FOMC) meeting in September, he noted that the supply bottlenecks contributing to rising prices in many sectors "have been larger and longer lasting than anticipated."

Past experience during the 1970s and 1980s taught the Fed that it can be costly to tame inflation after it has run too high for too long. But the Fed's new framework was built with the lessons of the Great Recession in mind, which highlighted the benefits of waiting as long as possible to normalize monetary policy after an economic downturn. Choosing the right approach, then, requires some estimate of where inflation is headed — a forecast that can be quite challenging to make.

MAKING SENSE OF THE DATA

When Fed officials talk about inflation, they are taking a broader view than the typical household or business might. On its website, the Fed Board of Governors explains that "inflation cannot be measured by an increase in the cost of one product or service, or even several products or services. Rather, inflation is a general increase in the overall price level of the goods and services in the economy."

One way to look at how prices are moving across the economy is to use a price index like PCE or the Consumer Price Index (CPI). These measure the price change in a basket of goods and services consumed by the average household. Prices for some commonly consumed items are more volatile than others and can swing indexes in either direction month to month. (See "Is Your Inflation Different?" *Econ Focus*, Second/Third Quarter 2021.)

To get a clearer sense of the general price trend in the economy, Fed officials often turn to indexes that attempt to strip out some of that volatility. Core PCE and core CPI exclude food and energy prices, for example, while the Dallas Fed's trimmed mean PCE excludes categories that experience the most extreme price changes each month. Another measure, the Atlanta Fed's sticky-price CPI, focuses on components of the CPI that change prices infrequently.

Each of these indexes shows an uptick in inflation in recent months, some more pronounced than others. (See chart.) But even these attempts to smooth out volatility can be overwhelmed by extreme events, such as a once-in-a-century global pandemic. Prices have behaved in unexpected ways over the past year. In the spring and early summer of 2021, the average cost of plywood surged before falling in September to roughly the same level as the beginning of the year. Used cars and trucks appreciated sharply starting in the spring of 2021 as the supply of new vehicles has been constrained by a shortage of computer chips and other essential components. While used car price growth seems to have leveled off, prices have not yet decreased to their previous level.

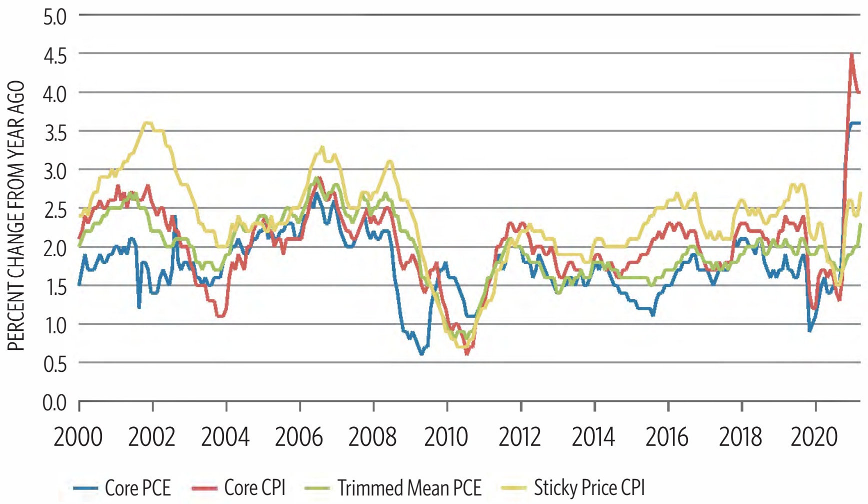
It can be hard for policymakers and economic forecasters to interpret what such incoming data points might signal about future inflation. Are they outliers that ought to be disregarded, or early signals of more lasting price pressures?

Richmond Fed economist Alexander Wolman dug into this question in a September *Economic Brief*. Rather than trying to smooth or strip out volatile components of PCE, he broke the index down into its components to see what was driving inflation in 2021. In March through June, the 5 percent of consumption categories with the largest price increases accounted for between 48 percent and 60 percent of overall inflation. But in July, that share fell to 42 percent, suggesting that inflation had become more broad-based. He also compared the behavior of prices in recent months to the last 25 years, when inflation has been low and stable, and this too provided some evidence of a persistent upward shift in inflation.

"If a similar pattern appears in the coming months, it would represent tentative evidence that the increase in inflation is a more persistent phenomenon that reflects monetary factors and will not dissipate without an adjustment of monetary policy," Wolman wrote.

Inflation Has Moved Up — But For How Long?

Four measures of core inflation



NOTE: Seasonally adjusted

SOURCES: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, Federal Reserve Bank of Dallas, Federal Reserve Bank of Atlanta

SEPARATING SIGNAL FROM NOISE

Even when comparing incoming inflation data to the past, it can be difficult to determine whether those data signal a change in the long-run trend of inflation or temporary volatility. That's why many forecasters rely on models to help them.

There's no shortage of ways to model the inflation process. Economic theory points to many different potential drivers of inflation, from the amount of slack in the labor market, to the level of interest rates relative to the economy's natural rate of interest, to the size of the money supply relative to the economy's productive capacity. But some of these variables are not directly observable, and it can be hard to know which might be driving inflation in the moment.

"Inflation is a relatively volatile process affected by many different factors, making it hard to figure out why inflation is evolving the way it is and predict its future path," says Richmond Fed economist Paul Ho.

One solution to this dilemma is to use a purely statistical approach that is more agnostic about the shocks hitting the economy. Signal extraction models take incoming inflation data and separate it into two components: a "signal" about where underlying inflation is trending and "noise" — temporary volatility that will average out to zero over the long run.

"If successive inflation measures are moving in a particular direction, the model will assign more weight to that being a signal about underlying inflation rather than noise," says Richmond Fed economist Pierre-Daniel Sarte.

In a recent *Economic Brief* with fellow Richmond Fed economist John O'Trakoun, Sarte used a signal extraction model to analyze decades of core CPI and core PCE inflation data. For the 1960s through the 1980s, the model predicted underlying inflation that was high and volatile, consistent with the rising inflation of that period. For the period since the 1990s, the model treated the fluctuations of incoming PCE and CPI data as mostly noise, predicting that trend inflation will remain stable. When looking at data from April 2021 and extrapolating it out through the second quarter, Sarte and O'Trakoun estimated a slight increase in trend inflation, although it still remained close to the Fed's long-term 2 percent target.

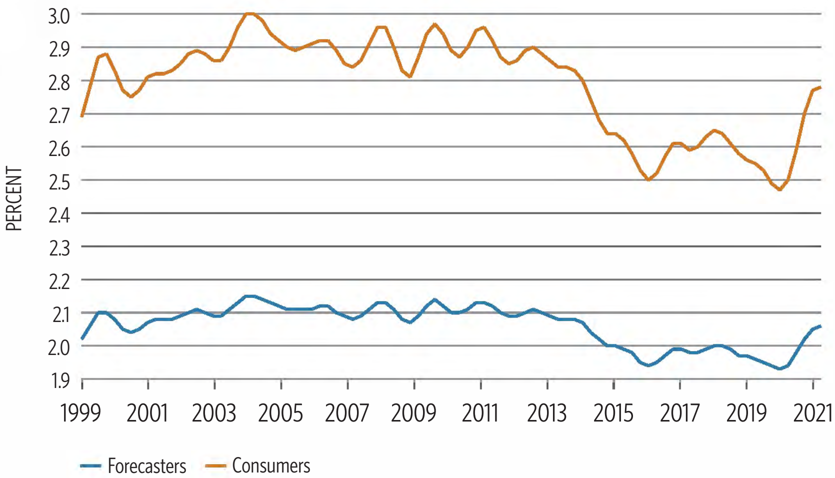
But how reliable are statistical methods at predicting sudden changes in trend inflation? Not very, according to Ricardo Reis, an economist at the London School of Economics and Political Science who studies inflation.

"If you are trying to predict inflation over the next two or three months, the statistical forecasting methods tend to do pretty well — with one exception, which is when there are big regime changes," says Reis.

In a June *Economic Brief*, Ho wrote about the challenges that have plagued economic forecasters since the pandemic began. In such periods of high uncertainty, researchers need to decide whether the assumptions in their models are still correct, or whether volatility has simply increased temporarily. Ho argued that forecasters should clearly communicate the assumptions

Tracking Inflation Expectations

The Fed's Index of Common Inflation Expectations



NOTE: The Index of Common Inflation Expectations (CIE) summarizes the movement of 21 inflation expectations measures based on a dynamic factor model. The "forecasters" measure shows the index projected onto the Survey of Professional Forecasters 10-year-ahead PCE inflation expectations. The "consumers" measure, also known as the alternative CIE, shows the index projected onto the University of Michigan Surveys of Consumers inflation expectations for the next five to 10 years.
SOURCE: Federal Reserve Board of Governors

underlying their models. That way, even if someone disagrees with those assumptions, he or she could still learn something from the model by seeing how those assumptions influence the forecast.

LEARNING FROM OTHERS

Another option for Fed policymakers looking to understand where inflation may be headed is to seek the wisdom of the crowds. This can be particularly useful in the case of inflation because there is a self-fulfilling aspect to the public's expectations for future inflation. For example, if business owners believe that their competitors and suppliers are going to raise prices, they will raise their prices as well. If enough firms do this, then their expectations of higher prices become reality.

Because of this dynamic, policymakers pay close attention to surveys that ask households, businesses, and professional forecasters about their inflation expectations. Many such surveys exist, including the University of Michigan's Surveys of Consumers and the Philadelphia Fed's Survey of Professional Forecasters. The Fed Board of Governors collects data from 21 different inflation expectation measures and synthesizes them into a single Index of Common Inflation Expectations. That index shows that inflation expectations have increased in recent months. (See chart.)

Despite the theoretical ties between expected inflation and actual inflation, there is also plenty of evidence that households, businesses, and even professional forecasters often guess wrong. In a 2019 working paper with Anmol Bhandari of the University of Minnesota and Jaroslav Borovička of New York University, Ho found that household expectations of future inflation were biased upward on average, and that bias increased during recessions.

In a recent article, Cleveland Fed economists Randal Verbrugge and Saeed Zaman concluded that the expectations of professional economists and business owners were more accurate predictors of future inflation than household expectations, but a simple inflation forecasting model also proved to be just as accurate. Indeed, Sarte and O'Trakoun also compared the forecasts from their signal extraction model to surveys of inflation expectations and found that the most significant difference was that the model-based forecasts of PCE inflation were about half a percentage point lower than the surveys on average.

Policymakers can also look to the stock market for information about inflation expectations. One market-based measure is the breakeven rate between regular Treasury Securities and Treasury Inflation-Protected Securities (TIPS). Created in 1997, TIPS offer investors protection against inflation and deflation by adjusting their interest payments and principal based on changes in the CPI. The TIPS breakeven rate is the difference between nominal Treasuries and TIPS of the same maturity, providing a real-time measure of the market's inflation expectations. Another source of the market's inflation expectations can be found by looking at inflation swap contracts, which allow one party to transfer inflation risk to another for a fee.

In theory, one might expect market participants to pay closer attention to inflation dynamics since they are putting their money at stake. But a 2015 study by Michael Bauer of the University of Hamburg and Erin McCarthy, formerly of the San Francisco Fed, suggests that such market-based indicators of future inflation may not be any more accurate than surveys or simple forecasting rules. They found that market measures largely reflected current and past inflation movements and did not provide a lot of useful information about future inflation.

WATCHING THE ANCHOR

Although surveys and market measures of expectations may not be reliable for forecasting future inflation, they still provide a useful signal of where the public expects inflation to head.

Under its new monetary policy framework, the Fed has made it clear that it is less concerned about inflation fluctuating in the short run as long as it averages 2 percent in the long run. Another way of putting that is that the Fed wants long-run inflation anchored at 2 percent. Throughout the year, Chair Powell and other Fed officials have indicated that if long-run inflation expectations were to drift from that 2 percent anchor, the Fed would intervene.

"We are committed to our longer-run goal of 2 percent inflation and to having longer-term inflation expectations well-anchored at this goal," Powell said at a press conference following the FOMC's November policy meeting. "If we were to see signs that the path of inflation, or longer-term inflation expectations, was moving materially and persistently beyond levels consistent with our goal, we would use our tools to preserve price stability."

This commitment stems in large part from the lessons the Fed learned during the Great Inflation of the 1970s. In that decade, inflation expectations became unmoored, drifting higher and fluctuating wildly with changes in the market. To reestablish the anchor, the Fed needed to convince the public that it would do whatever it took to stabilize long-run inflation. That meant allowing the federal funds rate, the Fed's key policy interest rate, to rise above 20 percent in the early 1980s until long-run inflation expectations fell, prompting a long and severe economic recession.

Could Fed officials in the 1960s and 1970s have detected that inflation expectations were drifting earlier — and responded sooner? Reis of the London School of Economics and Political Science thinks so. Although many of the various surveys of inflation expectations available today did not exist at the time, Reis collected data from market prices, professional surveys, and household surveys. In his paper discussed at the *Brookings Papers on Economic Activity* conference in September, he found that while no individual data series contained a perfect forecast of inflation, the disagreement between these series did provide a signal about how well-anchored inflation expectations were.

"When you just look at the average expectation of inflation from surveys, it tends to move super sluggishly," says Reis. "Once you combine sluggish movement with a lot of noise, it becomes very hard to see much. But when you measure the standard deviation and skewness across surveys, which I call disagreement, you get a much better idea of where expectations are heading."

Since individual survey respondents differ in how closely they pay attention to inflation and how quickly they adjust to new information about price changes, looking at the average of several different surveys provides a muddled picture. But tracking how expectations differ across surveys can provide a clearer picture of where the inflation anchor is headed. Applying this approach to the data, Reis found that the inflation anchor began to drift as early as 1967.

What about the anchor today? Applying the same approach to current expectations data, Reis found that the anchor has drifted, but it was still early in that process. Several other recent papers have looked at this question as well. In a May National Bureau of Economic Research working paper, Bernardo Candia and Yuriy Gorodnichenko of the University of California, Berkeley, and Olivier Coibion of the University of Texas at Austin examined a survey of U.S. firms' inflation expectations. They found evidence that the expectations of business managers appeared "far from anchored." Similarly, a July article by Chicago Fed researchers Gadi Barlevy, Jonas Fisher, and May Tysinger measured how well-anchored long-term expectations were by looking at how sensitive short-term expectations were to news about inflation. If long-run expectations are well-anchored, they should not respond to news that affects short-run inflation. But they found that the sensitivity of long-run expectations to news about short-term inflation changes has increased, particularly in recent months.

Economic theory and history suggest that fiscal and monetary policy play an important role in ensuring that inflation expectations remain anchored. Atlanta Fed economist Federico Mandelman has examined inflation in the aftermath of World War II. After the war, pent-up demand from years of rationing was released, and inflation shot up from 2 percent to 20 percent from 1946 to 1947. But that spike was short-lived — by 1949, inflation had fallen back to 2 percent. Mandelman credited well-anchored inflation expectations inherited from the Great Depression as well as contractionary fiscal and monetary policy for quickly returning inflation to normal levels.

"In the end, it is policy that pins down inflation, not expectations," says Reis. "A credible central bank uses monetary policy to make expectations that differ from its target unsustainable, ensuring that expectations and actual inflation are ultimately the same." **EF**

READINGS

Candia, Bernardo, Olivier Coibion, and Yuriy Gorodnichenko. "The Inflation Expectations of U.S. Firms: Evidence from a New Survey." National Bureau of Economic Research Working Paper No. 28836, May 2021.

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Stock, James H., and Mark W. Watson. "Core Inflation and Trend Inflation." *Review of Economics and Statistics*, October 2016, vol. 98, no. 4, pp. 770-784.

Cause No. 45621
Northern Indiana Public Service Company LLC's
Objections and Responses to
Indiana Office of Utility Consumer Counselor's Twelfth Set of Data Requests

OUCC Request 12-021:
For the portion of NIPSCO/NiSource pension funds that are invested in equities, what rate of return does NIPSCO/NiSource assume the pension funds will earn over what period of time? Please explain why that rate of return was used.
Objections:
Response:
7.66% is the forward looking rate of return for the pension assets invested in equities. The rate of return is for a 30 year time period. We use our investment consultant LCG Associates and our actuary AON as the basis for the estimate and compare it versus other actuaries and investment consultants for reasonableness. The equity rate of return considers various economic inputs including interest rates, GDP growth estimates and inflation.

Cause No. 45621
Northern Indiana Public Service Company LLC's
Objections and Responses to
Indiana Office of Utility Consumer Counselor's Twelfth Set of Data Requests

OUCC Request 12-022:
For the portion of NIPSCO/NiSource OPEB funds that are invested in equities, what rate of return does NIPSCO/NiSource assume the OPEB funds will earn over what period of time? Please explain why that rate of return was used.
Objections:
Response:
7.50%* is the forward looking rate of return for the NIPSCO Union OPEB assets invested in equities. The rate of return is for a 30 year time period. 7.57%* is the forward looking rate of return for the Non Union OPEB assets invested in equities. The rate of return is for a 30 year time period. *The rate of return is a blended rate of return and the asset allocations of the OPEB pools differ slightly. We use our investment consultant LCG Associates and our actuary AON as the basis for the estimate and compare it versus other actuaries and investment consultants for reasonableness. The equity rate of return considers various economic inputs including interest rates, GDP growth estimates and inflation.

Cause No. 45621
Northern Indiana Public Service Company LLC's
Objections and Responses to
NIPSCO Industrial Group's Eighth Set of Data Requests

Industrials Request 8-020:
Referring to Petitioner's Exhibit 15, Mr. Rea developed a financial leverage adjustment or market-to-book ratio adjustment. Please state whether or not the IURC has accepted the use of this methodology as proposed by Mr. Rea. If in the affirmative, please provide the Cause No., Subject Utility, Date of Order, and a copy of or link to the Commission's Order where a financial leverage adjustment or market-to-book ratio adjustment was accepted.
Objections:
NIPSCO objects to this Request on the grounds and to the extent that this Request seeks publicly available information. NIPSCO further objects to this Request on the separate and independent grounds and to the extent that the Industrial Group has the data to perform this analysis itself. NIPSCO further objects to this Request on the separate and independent grounds and to the extent that this Request is overly broad and unduly burdensome in that this Request is not limited to a specific time.
Response:
Subject to and without waiver of the foregoing general and specific objections, NIPSCO is providing the following response: Although Mr. Rea has not conducted a comprehensive evaluation of all historical rate proceedings in Indiana where a financial leverage adjustment to the cost of equity has been proposed, he is familiar with NIPSCO's 2020 TDSIC filing (Cause No. 45330-TDSIC-1), previous gas rate case (Cause No. 44988) and previous electric rate case (Cause No. 45159), where in all three of these cases the Company proposed the use of a financial leverage adjustment. Considering that the Commission's Order in each of these proceedings was silent on the matter of the NIPSCO's proposed financial leverage adjustment, the Commission neither explicitly approved nor explicitly rejected the Company's proposed leverage adjustment.

UTILITY STOCKS AND THE SIZE EFFECT: AN EMPIRICAL ANALYSIS

Annie Wong*

I. Introduction

The objective of this study is to examine whether the firm size effect exists in the public utility industry. Public utilities are regulated by federal, municipal, and state authorities. Every state has a public service commission with board and varying powers. Often their task is to estimate a fair rate of return to a utility's stockholders in order to determine the rates charged by the utility. The legal principles underlying rate regulation are that "the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks," and that the return to a utility should be sufficient to "attract capital and maintain credit worthiness." However, difficulties arise from the ambiguous interpretation of the legal definition of *fair and reasonable rate of return* to an equity owner.

Some finance researchers have suggested that the Capital Asset Pricing Model (CAPM) should be used in rate regulation because the CAPM beta can serve as a risk measure, thus making risk comparisons possible. This approach is consistent with the spirit of a Supreme Court ruling that equity owners sharing similar level of risk should be compensated by similar rate of return.

The empirical studies of Banz (1981) and Reinganum (1981) showed that small firms tend to earn higher returns than large firms after adjusting for beta. This phenomenon leads to the proposition that firm size is a proxy for omitted risk factors in determining stock returns. Barry and Brown (1984) and Brauer (1986) suggested that the omitted risk factor could be the differential information environment between small and large firms. Their argument is based on the fact that investors often have less publicly available information to assess the future cash flows of small firms than that of large firms. Therefore, an additional risk premium should be included to determine the appropriate rate of return to shareholders of small firms.

The samples used in prior studies are dominated by industrial firms, no one has examined the size effect in public utilities. The objective of this study is to extend the empirical findings of the existing studies by investigating whether the size effect is also present in the utility industry. The findings of this study have important implications for investors, public utility firms, and state regulatory agencies. If the size effect does exist in the utility industry, this would suggest that the size factor should be considered when the CAPM is being used to determine the fair rate of return for public utilities in regulatory proceedings.

II. Information Environment of Public Utilities

In general, utilities differ from industriales in that utilities are heavily regulated and they follow similar accounting procedures. A public utility's financial reporting is mainly regulated by the Securities and Exchange Commission (SEC) and the Federal Energy Regulatory Commission (FERC). Under the Public Utility Holding Company Act of 1935, the SEC is empowered to regulate the holding company systems of electric and gas utilities. The Act requires registration of public utility holding companies with the SEC. Only under strict conditions would the purchase, sale or issuance of securities by these holding companies be permitted. The purpose of the Act is to keep the SEC and investors informed of the financial conditions of these firms. Moreover, the FERC is in charge of the interstate operations of electric and gas companies. It requires utilities to follow the accounting procedures set forth in its Uniform Systems of Accounts. In particular, electric and gas utilities must request their Certified Public Accountants to certify that certain schedules in the financial reports are in conformity with the Commission's accounting requirements. These detailed reports are submitted annually and are open to the public.

*Western Connecticut State University. The author thanks Philip Perry, Robert Hagerman, Eric Press, the anonymous referee, and Clay Singleton for their helpful comments.

The FERC requires public utilities to keep accurate records of revenues, operating costs, depreciation expenses, and investment in plant and equipment. Specific financial accounting standards for these purposes are also issued by the Financial Accounting Standards Board (FASB). Uniformity is required so that utilities are not subject to different accounting regulations in each of the states in which they operate. The ultimate objective is to achieve comparability in financial reporting so that factual matters are not hidden from the public view by accounting flexibility.

Other regulatory reports tend to provide additional financial information about utilities. For example, utilities are required to file the FERC Form No. 1 with the state commission. This form is designed for state commissions to collect financial and operational information about utilities, and serves as a source for statistical reports published by state commissions.

Unlike industriales, a utility's earnings are predetermined to a certain extent. Before allowed earnings requests are approved, a utility's performance is analyzed in depth by the state commission, interest groups, and other witnesses. This process leads to the disclosure of substantial amount of information.

III. Hypothesis and Objective

Due to the Act of 1935, the Uniform Systems of Accounts, the uniform disclosure requirements, and the predetermined earnings, all utilities are reasonably homogeneous with respect to the information available to the public. Barry and Brown (1984) and Brauer (1986) suggested that the difference of risk-adjusted returns between small and large firms is due to their differential information environment. Assuming that the differential information hypothesis is true, then uniformity of information availability among utility firms would suggest that the size effect should not be observed in the public utility industry. The objective of this paper is to provide a test of the size effect in public utilities.

IV. Methodology

1. Sample and Data

To test for the size effect, a sample of public utilities and a sample of industriales matched by equity value are formed so that their results can be compared. Companies in both samples are listed on the Center for Research in Security Prices (CRSP) Daily and Monthly Returns files. The utility sample includes 152 electric and gas companies. For each utility in the sample, two industrial firms with similar firm size (one is slightly larger and the other is slightly smaller than the utility) are selected. Thus, the industrial sample includes 304 non-regulated firms.

The size variable is defined as the natural logarithm of market value of equity at the beginning of each year. Both the equally-weighted and value-weighted CRSP indices are employed as proxies for the market returns. Daily, weekly and monthly returns are used. The Fama-MacBeth (1973) procedure is utilized to examine the relation between risk-adjusted returns and firm size.

2. Research Design

All utilities in the sample are ranked according to the equity size at the beginning of the year, and the distribution is broken down into deciles. Decile one contains the stocks with the lowest market values while decile ten contains those with the highest market values. These portfolios are denoted by MV_1, MV_2, ..., and MV_{10}, respectively.

The combinations of the ten portfolios are updated annually. In the year after a portfolio is formed, equally-weighted portfolio returns are computed by combining the returns of the component stocks within the portfolio. The betas for each portfolio at year t, $\hat{\beta}_{pt}$'s, are estimated by regressing the previous five years of portfolio returns on market returns:

$$\tilde{R}_{pt} = \alpha_p + \hat{\beta}_{pt}\tilde{R}_{mt} + \tilde{U}_{pt} \qquad (1)$$

where

R_{pt} = periodic return in year t on portfolio p

R_{mt} = periodic market return in year t

U_{pt} = disturbance term.

Banz (1981) applied both the ordinary and generalized least squares regressions to estimate β; and concluded that the results are essentially identical (p.8). Since adjusting for heteroscedasticity does not necessarily lead to more efficient estimators, the ordinary least squares procedures are used in this study to estimate β in equation (1).

The following cross-sectional regression is then run for the portfolios to estimate γ_{it}, i = 0, 1, and 2:

$$R_{pt} = \gamma_{0t} + \gamma_{1t}\hat{\beta}_{pt} + \gamma_{2t}\hat{S}_{pt} + U_{pt} \qquad (2)$$

where

$\hat{\beta}_{pt}$ = estimated beta for portfolio p at year t, t=1968, ..., 1987

$\hat{S}_{pt}$ = mean of the logarithm of firm size in portfolio p at the beginning of year t

U_{pt} = disturbance term.

Depending on whether daily, weekly or monthly returns are used, a portfolio's average return changes periodically while its beta and size only change once a year. The γ_1 and γ_2 coefficients are estimated over the following four subperiods: 1968-72, 1973-77, 1978-82 and 1983-1987. If portfolio betas can fully account for the differences in returns, one would expect the average coefficient for the beta variable to be positive and for the size variable to be zero. A t-statistic will be used to test the hypothesis. The coefficients of a matched sample are also examined so that the results between industrial and utility firms can be compared.

V. Analysis of Results

1. Equity Value of the Utility Portfolios

The mean equity values of the ten size-based utility portfolios are reported in Table 1. Panels A and B present the average firm size of these portfolios at the beginning and end of the test period, 1968-1987. The first interesting observation from Table 1 is that the difference in magnitude between the smallest and the largest market value utility portfolios is tremendous. In Panel A, the average size of MV_1 is about \$31 million while that of MV_{10} is over \$1.4 billion. In Panel B, that is twenty years later, they are \$62 million and \$5.2 billion, respectively. Another interesting finding is that there is a substantial increase in average firm size from MV_9 to MV_{10}. Since these two findings are consistent over the entire test period, the average portfolio market values for interim years are not reported. These results are similar to the empirical evidence provided by Reinganum (1981).

The utility sample in this study contains 152 firms whereas Reinganum's sample contains 535 firms that are mainly industrial companies. Two conclusions may be drawn from the results of the Reinganum study and this one. First, utilities and industriales are similar in the sense that their market values vary over a wide spectrum. Second, the fact that there is a huge jump in firm size from MV_9 to MV_{10} indicates that the distribution of firm size is positively skewed. To correct for the skewness problem, the natural logarithm of the mean equity value of each portfolio is calculated. This variable is then used in later regressions instead of the actual mean equity value.

2. Betas of the Utility and Industrial Samples

The betas based on monthly, weekly and daily returns are reported for the utility and industrial samples. For simplicity, they will be referred to as monthly, weekly, and daily betas. In all cases, five years of returns are used to estimate the systematic risk. The betas estimated over the 1963-67 time period are used to proxy for the betas in 1968, which is the beginning of the test period. By the same token, the betas obtained from the time period 1982-86 are used as proxies for the betas in 1987, which is the end of the test period.

The betas from using the equally-weighted and value-weighted indices are calculated in order to check whether the results are affected by the choice of market index. Since the results are similar, only those obtained from the equally-weighted index are reported and analyzed.

Table 2 reports the monthly, weekly and daily betas of the two samples at the beginning and end of the test period. Panel A shows the various betas of the industrial portfolios. Two conclusions may be drawn. First, in the 1960's, smaller market value portfolios tend to have relatively larger betas. This is consistent with the empirical findings by Banz (1981) and Reinganum (1981). Second, this trend seems to vanish in the 1980's, especially when weekly and daily returns are used.

The betas of the utility portfolios are presented in Panel B. The table shows that none of the utility betas are greater than 0.71. A comparison between Panels A and B reveals that utility portfolios are relatively less risky than industrial portfolios after controlling for firm size. The comparison also reveals that, unlike industrial stocks, betas of the utility portfolios are not related to the market values of equity.

The negative correlation between firm size and beta in the industrial sample may introduce a multicolinearity problem in estimating equation (2). Banz (p.11) had addressed this issue and concluded that the test results are not sensitive to the multicolinearity problem. For the utility sample, this problem does not exist.

3. Tests on the Coefficients of Beta and Size

The beta and firm size are used to estimate γ_1 and γ_2 in equation (2). A t-statistic is used to test if the mean values of the gammas are significantly different from zero. The tests were performed for four 5-year periods which are reported in Table 3. The mean of the gammas and their t-statistic are presented in Panel A for the utilities and in Panel B for the industrial firms.

The empirical results for the utility sample are reported in Panel A of Table 3. When monthly returns are used, 60 regressions were run to obtain 60 pairs of gammas for each of the 5-year periods. When daily returns are used, over 1200 regressions were run for each period to obtain the gammas. The results are similar: in all of the time periods tested, none of the average coefficients for beta and size are significantly different from zero. When weekly returns are used, 260 pairs of gammas were obtained. The average coefficients for beta are not significant in any test period, and the average coefficients for size are not significant in three of the test periods. For the test period of 1978-82, the average coefficient for size is significantly negative at a 5% level.

The test results for the industrial sample are reported in Panel B of Table 3. When monthly returns are used, the average coefficient estimates for size and beta are significant and have the expected sign only in the 1983-87 test period. When weekly returns are used, only the size variable is significantly negative in the 1978-82 period. When daily returns are used, the coefficient estimates for betas and size are not significant at any conventional level.

According to the CAPM, beta is the sole determinant of stock returns. It is expected that the coefficient for beta is significantly positive. However, the empirical findings reported in this study and in Fama and French (1992) only provide weak support for beta in explaining stock returns. The empirical findings in this study also suggest that the size effect varies over time. It is not unusual to document the firm size effect at certain time periods but not at others. Banz (1981) found that the size effect is not stable over time with substantial differences in the magnitude of the coefficient of the size factor (p.9, Table 1). Brown, Kleidon and Marsh (1983) not only have shown that size effect is not constant over time but also have reported a reversal of the size anomaly for certain years.

The research design of this study allows us to keep the sample, test period, and methodology the same with the holding-period being the only variable. The size effect is documented for the industrial sample in one of the four test periods when monthly returns are used and in another when weekly returns are used. When daily returns are used, no size effect is observed. For the utility sample, the size effect is significant in only one test period when weekly returns are used. When monthly and daily returns are used, no size effect is found. Therefore, this study concludes that the size effect is not only time-period specific but also holding-period specific.

VI. Concluding Remarks

The fact that the two samples show different, though weak, results indicates that utility and industrial stocks do not share the same characteristics. First, given firm size, utility stocks are consistently less risky than industrial stocks. Second, industrial betas tend to decrease with firm size but utility betas do not. These findings may be attributed to the fact that all public utilities operate in an environment with regional monopolistic power and regulated financial structure. As a result, the business and financial risks are very similar among the utilities regardless of their sizes. Therefore, utility betas would not necessarily be expected to be related to firm size.

The objective of this study is to examine if the size effect exists in the utility industry. After controlling for equity values, there is some weak evidence that firm size is a missing factor from the CAPM for the industrial but not for the utility stocks. This implies that although the size phenomenon has been strongly documented for the industriales, the findings suggest that there is no need to adjust for the firm size in utility rate regulations.

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Table 1

Average Equity Size of the Utility Portfolios at the Beginning and End of the Test Period
(Dollar figures in millions)

	A: Beginning (1968)	B: End (1987)
MV_1	$31	$62
MV_2	$77	$177
MV_3	$113	$334
MV_4	$161	$475
MV_5	$220	$715
MV_6	$334	$957
MV_7	$437	$1,279
MV_8	$505	$1,805
MV_9	$791	$2,665
MV_{10}	$1,447	$5,399

Table 2

Betas of the Two Samples at the Beginning and End of the Test Period

	Monthly Betas		Weekly Betas		Daily Betas	
	1963-67	1982-86	1963-67	1982-86	1963-67	1982-86
Panel A: Industrial Firms						
MV_1	0.89	1.00	1.15	0.95	1.11	0.92
MV_2	0.94	0.87	1.07	1.01	1.14	1.01
MV_3	0.88	0.82	1.12	0.86	1.14	1.04
MV_4	0.69	0.74	1.00	0.83	1.03	0.86
MV_5	0.73	0.80	1.05	0.96	1.13	1.01
MV_6	0.66	0.82	1.03	1.01	1.05	1.04
MV_7	0.64	0.81	0.97	1.04	0.98	1.09
MV_8	0.62	0.75	0.97	1.11	1.00	1.20
MV_9	0.52	0.78	0.84	1.06	0.94	1.16
MV_{10}	0.43	0.65	0.78	1.01	0.86	1.22
Panel B: Public Utilities						
MV_1	0.30	0.37	0.31	0.43	0.30	0.40
MV_2	0.28	0.38	0.37	0.47	0.36	0.44
MV_3	0.22	0.42	0.33	0.42	0.31	0.49
MV_4	0.27	0.35	0.36	0.52	0.34	0.54
MV_5	0.25	0.45	0.37	0.61	0.35	0.62
MV_6	0.25	0.41	0.39	0.54	0.40	0.65
MV_7	0.20	0.35	0.34	0.54	0.37	0.63
MV_8	0.17	0.38	0.34	0.65	0.33	0.68
MV_9	0.19	0.34	0.35	0.60	0.34	0.71
MV_{10}	0.18	0.29	0.38	0.59	0.39	0.71

Table 3

Tests on the Mean Coefficients of Beta (γ_1) and Size (γ_2)

$$R_{pt} = \gamma_{\alpha t} + \gamma_{1t}\hat{\beta}_{pt} + \gamma_{2t}\hat{S}_{pt} + U_{pt}$$

Returns Used:		Monthly (t-value)	Weekly (t-value)	Daily (t-value)
Panel A: Utility Sample				
1968-72	γ_1	-0.46% (-0.26)	-0.32% (-0.42)	-0.02% (-0.18)
	γ_2	-0.07% (-0.78)	-0.01% (-0.51)	-0.00% (-0.46)
1973-77	γ_1	-0.28% (-0.13)	0.14% (0.14)	-0.03% (-0.21)
	γ_2	-0.11% (-0.70)	-0.03% (-0.67)	-0.00% (-0.53)
1978-82	γ_1	0.55% (0.36)	0.54% (1.00)	0.05% (0.43)
	γ_2	-0.10% (-0.75)	-0.05% (-1.71)*	-0.01% (-1.60)
1983-87	γ_1	1.74% (1.28)	-0.24% (-0.51)	-0.02% (-0.18)
	γ_2	-0.16% (-1.54)	-0.03% (-0.86)	-0.01% (-0.63)
Panel B: Industrial Sample				
1968-72	γ_1	-0.36% (-0.27)	-0.28% (-0.55)	-0.02% (-0.32)
	γ_2	0.07% (0.43)	-0.01% (-0.19)	0.00% (0.51)
1973-77	γ_1	1.34% (0.64)	-0.23% (-0.31)	0.14% (1.45)
	γ_2	-0.01% (-0.06)	-0.04% (-0.85)	-0.00% (-0.64)
1978-82	γ_1	-0.84% (-0.28)	-0.56% (-0.91)	-0.09% (-0.81)
	γ_2	-0.29% (-0.75)	-0.01% (-1.72)*	-0.00% (-1.33)
1983-87	γ_1	2.51% (1.83)*	0.34% (0.64)	0.11% (1.40)
	γ_2	-0.25% (-1.90)*	-0.01% (-0.43)	0.00% (0.14)

* Significant at the 5% level based on a one-tailed test.

RRA REGULATORY FOCUS

Average authorized gas ROE slightly up; electric largely unchanged

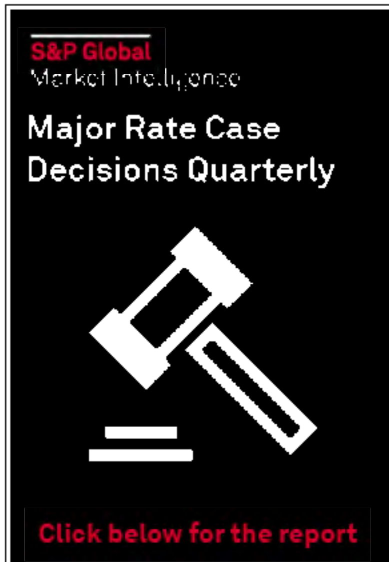
Thursday, October 28, 2021 1:16 PM ET

By Lisa Fontanella
Market Intelligence

The average return on equity authorized electric utilities was 9.41% in rate cases decided in the first nine months of 2021, in line with the 9.44% average for cases in full-year 2020. There were 33 electric ROE determinations in the first nine months of 2021 versus 55 in full year 2020.

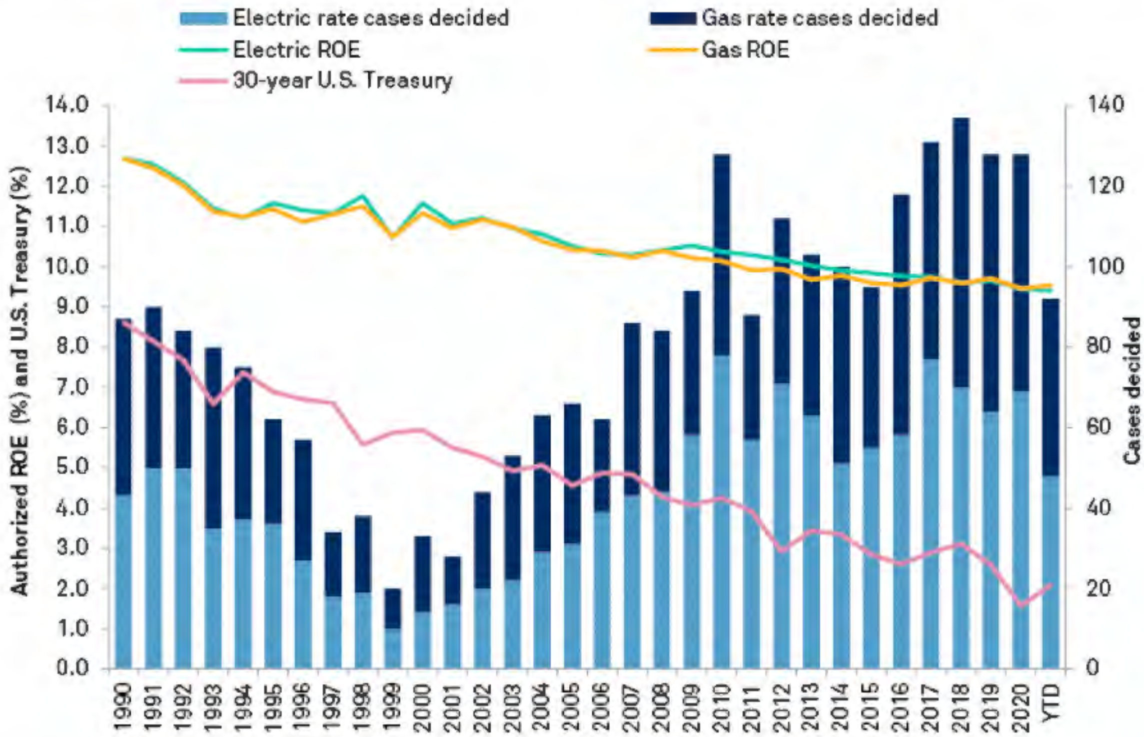
The average ROE authorized gas utilities was 9.54% in cases decided in the first nine months of 2021 versus 9.46% in full year 2020. There were 26 gas cases that included an ROE determination in the first nine months of 2021 versus 34 gas cases in full year 2020.

The electric data set includes several limited-issue rider cases. Excluding these cases, the average authorized ROE was 9.42% in electric general rate cases decided in the first nine months of 2021, versus 9.39% observed in full-year 2020. There is, however, little difference between the ROE averages including rider cases and those excluding rider cases for the first nine months of 2021. Historically, the annual average authorized ROEs in electric cases that involve limited-issue riders have been meaningfully higher than those approved in general rate cases, driven primarily by substantial ROE premiums authorized in generation-related limited-issue rider proceedings in Virginia. These premiums were approved for limited durations and have since begun to expire, and as a result, the gap between the average ROE observed in the rider cases and that observed in general rate cases has narrowed. Limited-issue rider cases in which a separate ROE is determined have had little use in the gas industry, as most of the gas riders rely on ROEs approved in a previous base rate case.



October 28, 2021
Read the full report
See the related databook

Average electric and gas authorized ROEs and number of rate cases decided



Data compiled Oct. 26, 2021.
YTD=year-to-date, through Sept. 30, 2021
Source: Regulatory Research Associates, a group within S&P Global Market Intelligence

In the first nine months of 2021, the median ROE authorized in all electric utility rate cases was 9.38%, versus 9.45% in full year 2020. For gas utilities, the metric was 9.52% in the first nine months of 2021, versus 9.42% in full year 2020.

Looking at the last 12 months ended Sept. 30, 2021, the average ROE authorized in all electric utility rate cases was 9.38% and the median was 9.40%, while for gas utilities, the average was 9.51% and the median was 9.52%.

For a chronological listing of the major energy rate case decisions issued during 2020 as well as historical summary data going back to 1990, see RRA's latest Rate Case Decisions Quarterly Update.

Regulatory Research Associates is a group within S&P Global Market Intelligence.

For a full listing of past and pending rate cases, rate case statistics and upcoming events, visit the S&P Capital IQ Pro Energy Research Home Page.

For a complete, searchable listing of RRA's in-depth research and analysis, please go to the S&P Capital IQ Pro Energy Research Library.

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Cause No. 45621
Northern Indiana Public Service Company LLC's
Objections and Responses to
Indiana Office of Utility Consumer Counselor's First Set of Data Requests

OUCC Request 1-003:
Please provide a copy of all Requests for Proposals sent to potential rate case consultants in relation to obtaining services for this rate case. (Please include all requests for accounting, legal, engineering, cost of service, depreciation studies, and cost of equity services, along with any other requests for rate case services sent by Petitioner.)
Objections:
NIPSCO objects to this Request on the grounds and to the extent that this Request seeks information that is confidential, proprietary and/or trade secret.
Response:
Subject to and without waiver of the foregoing general and specific objections, NIPSCO is providing the following response: NIPSCO had existing relationships with all external consultants. Given the accelerated timeline and the Company's assumption that those with knowledge of NIPSCO and its previous rate cases would be able to pursue a case more efficiently and expeditiously, NIPSCO engaged existing contractors.

SUPREME COURT OF MISSOURI
en banc

SPIRE MISSOURI, INC., F/K/A LACLEDE GAS COMPANY,	)	*Opinion issued February 9, 2021*
Appellant,	)	
v.	)	
PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI,	)	No. SC97834
Respondent,	)	
and	)	
OFFICE OF PUBLIC COUNSEL,	)	
Intervenor.	)	

APPEAL FROM THE MISSOURI PUBLIC SERVICE COMMISSION

Spire Missouri, Inc. ("Spire), formerly known as Laclede Gas Co., is an investor-owned public utility regulated by the Public Service Commission ("PSC"). In April 2017, Spire filed tariffs to increase its general rates for gas services in its Spire Missouri East and Spire Missouri West territories.[1] The PSC suspended Spire's new

[1] Spire East was formerly known as Laclede Gas Company, and Spire West was formerly known as Missouri Gas Energy. For ease of use, only currently existing business entities and

tariffs until March 2018 and established a test year. The cases were consolidated, and several parties were granted intervention. The PSC issued its Amended Report and Order in March 2018. Among the PSC's conclusions, the Amended Report and Order disallowed a portion of Spire's rate case expenses, included some of the proceeds from the 2014 sale of a facility in setting Spire's new rates, and determined Spire East's prepaid pension asset was $131.4 million (or approximately $28.8 million less than Spire contended). Spire appeals. This Court has jurisdiction pursuant to article V, section 10 of the Missouri Constitution. The Amended Report and Order is affirmed in part and reversed in part, and the case is remanded for further proceedings consistent with this opinion.

Background

In April 2017, Spire filed tariffs with the PSC that would implement general rate increases in its Spire East and Spire West service areas. The tariffs would have increased annual gas revenue for Spire East by approximately $58.1 million. Because approximately $29.5 million of this already was being recovered through Spire's infrastructure system replacement surcharge ("ISRS"), the net increase in revenue for Spire East would be $28.5 million. The tariffs would have increased annual gas revenue for Spire West by approximately $50.4 million. Because approximately $13.4 million of this already was being recovered through Spire West's ISRS, the net increase in revenue for Spire West would be $37 million.

corresponding service areas are referenced herein, even though those entities had not yet been formed during a part of the time period at issue in this case.

The PSC suspended Spire's general rate increase tariffs until March 2018 and established a test year for the 12-month period ending December 31, 2016, to be updated for known and measurable changes through June 30, 2017. Several parties, including the Office of Public Counsel, were granted intervention,[2] and the cases were consolidated for hearing purposes. The PSC held local public hearings. The PSC then held evidentiary hearings and true-up hearings followed by briefing. Several issues were resolved by stipulations unopposed by any of the non-signatory parties, and the PSC approved those stipulations. The PSC then issued its consolidated Amended Report and Order on March 7, 2018, which became effective March 17, 2018.

Among the many issues before it, the PSC considered what portion of Spire's rate case expenses ought to be included in Spire's new base rates (and, therefore, paid for by Spire's customers rather than its investors). The PSC concluded that, because it is required under section 393.130.1[3] to set rates that are "just and reasonable," it had the broad discretion to determine whether it was just and reasonable for Spire's shareholders to share the burden of rate case expenses with ratepayers. As of September 30, 2017, Spire's total rate case expenses were $1,393,399. The PSC's staff of technical and subject matter experts ("Staff") recommended disallowing expenses relating to the

[2] These parties also included: Missouri Industrial Energy Consumers; Midwest Energy Consumers Group; Missouri Department of Economic Development – Division of Energy; Missouri School Board Association; the City of St. Joseph; National Housing Trust; Environmental Defense Fund; MoGas Pipeline, LLC; USW Local 11-6, which intervened only in the Spire East case; and Kansas City Power & Light Company and KCP&L Greater Missouri Operations, which intervened only in the Spire West case.

[3] All statutory references are to RSMo 2016.

procurement of a Cash Working Capital study by the consultant firm ScottMadden. The Office of Public Counsel recommended disallowing expenses related to Spire's expert witness Thomas Flaherty because of the high hourly rate charged. The PSC determined that approximately half the litigated issues in this case were driven by Spire and among these issues were the proposed use of various shareholder-favorable ratemaking tools, including a revenue stabilization mechanism, a rate of return on equity of 10.35 percent (which would have been the highest of any large utility in Missouri), tracking mechanisms to limit shareholder risk, and earnings-based incentive compensation. The PSC further determined Spire "padded" its revenue requirement by pursing positions it did not expect to win. Accordingly, the PSC determined Spire should recover the entire cost of customer notices, totaling $436,000, and Spire's depreciation study,[4] totaling $54,114, but only 50 percent of Spire's remaining rate case expenses. The PSC ordered these allowed rate case expenses normalized over four years.

The PSC also considered whether some of the proceeds of Spire's sale of one of its service centers should be used to offset Spire's purchase of a more expensive service center and, therefore, inure to the benefit of ratepayers. Spire East owned and operated three district service centers providing leak detection, leak repair, construction, maintenance, and marking services. One of the service centers was located near Forest Park in the city of St. Louis ("the Forest Park property"). In 2013, Spire acquired two properties adjacent to the Forest Park property for additional leverage in negotiations.

[4] Gas utilities are required to file a depreciation study every five years pursuant to 20 C.S.R. § 4240-3.160(1)(A).

Then, in 2014, as part of a restructuring of Spire following the acquisition of Spire West, Spire sold the Forest Park property (and the two adjacent properties) to the Cortex Innovation Community in St. Louis, which purchased the properties for construction of an IKEA retail store. The sale price for the Forest Park property included a gain of approximately $7.6 million, excluding the $1.8 million undepreciated book value of recent capital improvements to the facilities, and an allowance of $5.7 million for relocation expenses. Of the relocation expense allowance, Spire used $1.95 million to purchase furniture and fixtures for its new offices at 700 and 800 Market Street in the city of St. Louis and $200,000 to lease a temporary space during the move. The evidence did not show how much (if any) of the remaining relocation expenses were necessitated by the move from the Forest Park property to the new Manchester center. Spire contributed $1.5 million from the gain as a civic contribution to further downtown St. Louis rehabilitation.

In November 2016, Spire opened the newly constructed Manchester Avenue facility in the city of St. Louis as a partial replacement for the Forest Park property. The Manchester Avenue facility has a greater capital cost ($7.7 million base rate value), but it is more efficient to operate than the aging Forest Park facility. Pursuant to section 393.190, gas utilities must obtain authorization from the PSC to sell any part of its system that is necessary or useful in the performance of its duties to the public, but Spire did not obtain this authorization prior to selling its Forest Park property.

The PSC was required to decide whether to consider all, some, or none of the proceeds from the sale of the Forest Park property in setting Spire's new rates. Per Staff's recommendation, the PSC ordered nearly $3.6 million from the sale (the $5.7 million relocation costs, less documented relocation expenses and the cost of furniture and fixtures for the new offices) be used to offset the cost of the more expensive capital asset of the Manchester Avenue facility. The PSC ordered this amount amortized over five years.

Finally, the PSC considered the amount of Spire's pension contributions to include in base rates. Spire makes contributions to its pension plan pursuant to a collective bargaining agreement with its union employees. A prepaid pension asset is a regulatory asset representing the amount Spire has contributed to its pension plan but has not yet recovered from ratepayers. A pension liability is the opposite; it arises when Spire collects more from ratepayers than it has contributed to its pension plan. It is undisputed that Spire West has a pension liability of $28.4 million, but the amount of Spire East's pension asset (or liability) was in dispute. Staff and Spire agree that at least $131.4 million has accumulated in Spire East's pension asset since 1996, but they disagree as to what amount (if any) accumulated prior to that time. Spire argued the pension asset includes an additional $28.8 million, which accumulated between 1990 and 1996, during which time Spire East filed rate cases in 1990 (i.e., rates for 1990-1992), 1992 (i.e., rates for 1992-1994), and 1994 (i.e., rates for 1994-1996).

The disagreement between Staff and Spire centers on whether Spire East used the cash or accrual method of accounting to account for the pension asset in its 1990, 1992, and 1994 rate cases. FAS 87 and FAS 88 are Financial Accounting Standards articulating generally accepted accounting principles in accounting for the accrual of a pension asset. These are used routinely in reporting but less regularly in ratemaking. Staff argued Spire East did not begin to use both FAS 87 and FAS 88 to calculate its pension asset in rate cases until the 1996 rate case in that it used neither standard in the 1990 and 1992 cases and only FAS 87 (but not FAS 88) in the 1994 rate case. Spire concedes there is evidence suggesting its pension expense was calculated on a cash basis in the 1992 rate case but argues it had been using FAS 87 for financial reporting purposes since 1987 and, therefore, FAS 87 and FAS 88 would had to have been (and were) used in the 1990, 1992, and 1994 rate cases. With respect to the 1994 rate case, Spire contends the explicit references to FAS 87 necessarily included reference to FAS 88 because the two are inseparably intertwined and the former would not have been used without the latter. The amount in dispute from 1990 through 1994 is $19.8 million, and the amount in dispute between 1994 and 1996 is $9 million.

In its Amended Report and Order, the PSC rejected Spire's position and adopted, instead, the testimony of Staff witness Young. Among his lengthy and complex testimony, Young testified that – even though Spire has used FAS 87 for reporting since 1987 – neither Spire East's nor Staff's accounting schedules in the 1990, 1992, and 1994 rate cases itemized a pension asset using FAS 87 and FAS 88. This was supported by the record in the 1992 rate case, which seems clearly to rely upon the cash accounting approach. Staff contends only FAS 87, but not FAS 88, was used in the 1994 rate case. Because the PSC determined Spire East used the cash method in all three rate cases, it disallowed \$19.8 million in claimed pension assets for 1990 through 1994 and \$9 million in claimed pension assets for 1994 to 1996. As a result, the PSC determined Spire East's pension asset was \$131.4 million, to be amortized over eight years.

Discussion

I. General principles governing the PSC and judicial review

Before proceeding to the merits of this case and analyzing Spire's points on appeal, three principles fundamental to the law governing public utility regulation warrant emphasis.

A PSC decision is presumed valid and the burden is on the party challenging it to demonstrate the decision is unlawful or unreasonable. *Mo. Pub. Serv. Comm'n v. Union Elec. Co.*, 552 S.W.3d 532, 538-39 (Mo. banc 2018). *See also* § 386.510 (providing for judicial review of "the reasonableness or lawfulness of the original order" from the PSC). The decision is lawful where the PSC has statutory authority to render its decision. *Union Elec. Co.*, 552 S.W.3d at 539. It is reasonable if supported by substantial, competent evidence on the whole record, it is not arbitrary and capricious, and is not based on an abuse of discretion. *Id.* *See also* § 536.140.2 (providing for judicial review of agency decisions to determine whether the action of the agency: "(1) Is in violation of constitutional provisions; (2) Is in excess of the statutory authority or jurisdiction of the agency; (3) Is unsupported by competent and substantial evidence upon the whole record; (4) Is, for any other reason, unauthorized by law; (5) Is made upon unlawful procedure or without a fair trial; (6) Is arbitrary, capricious or unreasonable; (7) Involves an abuse of discretion").

This two-step analysis of lawfulness and reasonableness is required by, and instituted in furtherance of, article V, section 18 of the Missouri Constitution, which provides that judicial review of administrative decisions "shall include the determination whether the same are authorized by law, and in cases in which a hearing is required by law, whether the same are supported by competent and substantial evidence upon the whole record." Analyzing the constitutional standard that administrative decisions must be supported by competent and substantial evidence on the whole record, this Court explained that judicial review of administrative factfinding ***does not*** view the evidence and all reasonable inferences in the light most favorable to the award or decision. *Hampton v. Big Boy Steel Erection*, 121 S.W.3d 220, 223 (Mo. banc 2003). Instead:

> A court must examine the whole record to determine if it contains sufficient competent and substantial evidence to support the award, i.e., whether the award is contrary to the overwhelming weight of the evidence. Whether the award is supported by competent and substantial evidence is judged by examining the evidence in the context of the whole record. An award that is contrary to the overwhelming weight of the evidence is, in context, not supported by competent and substantial evidence.

Id. at 222-23 (citations and footnotes omitted). This approach gives weight to the administrative agency's role as the finder of fact without abdicating the requirement in article V, section 18 that the judiciary stand as an independent check against abuse by the executive branch when it undertakes a judicial or quasi-judicial function.

Second, a public utility is entitled to recover from ratepayers all its costs (plus a reasonable return on its investments) by way of rates that are "just and reasonable." *Office of Pub. Counsel v. Mo. Pub. Serv. Comm'n*, 409 S.W.3d 371, 376 (Mo. banc 2013). *Accord Mo. Pub. Serv. Comm'n*, 552 S.W.3d at 534 ("As a general matter, utilities ... recover their costs (plus a reasonable return on their investments) through the sale of [gas] at the rates set by the [PSC]."); § 393.150.2 ("At any hearing involving a rate sought to be increased, the burden of proof to show that the increased rate or proposed increased rate is ***just and reasonable*** shall be upon the gas corporation ....") (emphasis added). "Just and reasonable" rates, therefore, allow public utilities to recover expenses that are (1) fair to both investors and ratepayers and (2) prudently incurred. The PSC ordinarily applies a presumption of prudence in determining whether a utility reasonably incurred its expenses. *Office of Pub. Counsel*, 409 S.W.3d at 376. This presumption of prudence will "not survive a showing of inefficiency or improvidence that creates serious doubt as to the prudence of an expenditure." *Id.* (quotation omitted). "If such a showing is made, the presumption drops out and the applicant has the burden of dispelling these doubts and proving the questioned expenditure to have been prudent." *Id.*

Finally, the PSC is prohibited from engaging in retroactive ratemaking. This is one of the bedrock principles long governing the PSC's role in setting rates. As this Court has explained:

> The [PSC] has the authority to determine the rate [t]o be charged. In so determining it may consider past excess recovery insofar as this is relevant to its determination of what rate is necessary to provide a just and reasonable return in the future, and so avoid further excess recovery. It may not, however, redetermine rates already established and paid without depriving the utility (or the consumer if the rates were originally too low) of his property without due process .... The utilities take the risk that rates filed by them will be inadequate, or excessive, each time they seek rate approval. To permit them to collect additional amounts simply because they had additional past expenses not covered by either clause is retroactive rate making, i. e., the setting of rates which permit a utility to recover past

> losses or which require it to refund past excess profits collected under a rate that did not perfectly match expenses plus rate-of-return with the rate actually established. Past expenses are used as a basis for determining what rate is reasonable to be charged in the future in order to avoid further excess profits or future losses, but under the prospective language of the statutes, they cannot be used to set future rates to recover for past losses due to imperfect matching of rates with expenses.

State ex rel. Utility Consumers' Council of Mo., Inc. v. Pub. Serv. Comm'n, 585 S.W.2d 41, 58-59 (Mo. banc 1979) ("*UCCM*") (citations omitted), *superseded on other grounds by* § 386.266. In other words, the PSC must determine a rate that is just and reasonable using a utility's past expenses *only* as a way to estimate the utility's future costs (and fair return); not to allow a utility to recover past losses or to force it to refund ratepayers past excess profits.

II. Rate Case Expenses

Spire, in its first point, argues the PSC's decision to exclude a portion[5] of Spire's rate case expenses is contrary to law because the PSC did not find that any of those expenses were imprudent. In its second point, Spire argues this exclusion was unreasonable, arbitrary and capricious, unsupported by competent and substantial evidence, or an abuse of discretion. Both points are denied.

The PSC did not err by excluding a portion of Spire's rate case expenses when calculating Spire's new rates. The expenses Spire sought to recover included: (a) the procurement of a Cash Working Capital study by the consultant firm ScottMadden;

[5] Spire's metronomic insistence that the PSC denied "half" or "almost half" of its rate case expenses is both inaccurate and unavailing. Spire's total rate case expenses were nearly $1.4 million as of September 2017. The PSC allowed full recovery of the cost of customer notices ($436,000) and the depreciation study ($54,000). Accordingly, even after the PSC disallowed

(b) unreasonably high hourly fees paid to Spire's expert witness Thomas J. Flaherty; and (c) various shareholder-oriented (and unlikely to succeed) ratemaking strategies such as a revenue stabilization mechanism, a 10.35-percent rate of return on equity (the highest of any large utility in Missouri), tracking mechanisms to limit shareholder risk, and earnings-based incentive compensation. In terms of their reasonableness, these expenditures were entitled to a presumption of prudence, and the ***prudence*** of the expenditures was never called into question. Nonetheless, the PSC concluded that including all of these expenditures in setting Spire's future rates was not ***just*** because some of the expenses were not fair to ratepayers in that they only were incurred to benefit (if anyone) Spire's shareholders. *See Office of Pub. Counsel*, 409 S.W.3d at 376. Implicit in Spire's argument is an assertion that it is entitled to recover all prudent expenditures in its rates. This is not so. In setting rates, the PSC has broad discretion to include or exclude expenditures to arrive at rates it deems to be "just and reasonable," subject, of course, to judicial review that the PSC's conclusions are supported by competent and substantial evidence and not arbitrary, capricious, or an abuse of discretion.

Generally, ratepayers benefit from rate cases because they have an interest in ensuring the financial well-being of the utilities that serve them. Therefore, ratepayers justly and reasonably can be expected to pay a utility's expenses in bringing such a case. But this does not mean there cannot be limits. A utility cannot spend any amount it

approximately $452,000 of the remaining expenses, Spire recovered approximately $942,000 (or 68 percent) of its total rate case expenses.

pleases secure in the knowledge or expectation that ratepayers will foot the bill, particularly when those expenses include items seeking to subordinate ratepayers' interests to those of the utility's investors. Here, even assuming there was no basis in the evidence to reject the presumption of prudence with respect to one or more of Spire's rate case expenses, the PSC did not err in its decision to exclude a portion of those expenses in setting "just and reasonable" rates because they served only to benefit shareholders and minimize shareholder risk with no accompanying benefit (or potential benefit) to ratepayers. To be sure, the PSC's decision to exclude 50 percent of Spire's remaining rate case expenses (after allowing full recovery of the cost of notices and the depreciation study) was not the result of a decision to include or exclude expenses on an item-by-item basis. This is not to say, however, that the PSC's decision was unsupported by competent and substantial evidence on the whole record, and it was far from the sort of irrational or unconsidered approached properly characterized as arbitrary, capricious, or an abuse of discretion. *Cf. Cox v. Kan. City Chiefs Football Club, Inc.*, 473 S.W.3d 107, 114 (Mo. banc 2015) ("A ruling constitutes an abuse of discretion when it is clearly against the logic of the circumstances then before the court and is so unreasonable and arbitrary that it shocks the sense of justice and indicates a lack of careful, deliberate consideration.").

The PSC expressly identified those issues (and related expenses) Spire pursued that benefitted only its shareholders and not its ratepayers, and the PSC decided what proportion of the total case (and expenses) they represented.[6] Nothing in the PSC's

[6] Spire also argues the PSC's determination to disallow a portion of its rate case expenses is inconsistent with Spire's low average expenses in other cases and contends the PSC's

authorizing statutes or this Court's precedents requires the PSC to conduct an item-by-item analysis when the issue is the degree to which a utility's case expenses should be included in calculating "just and reasonable" rates rather rejecting a particular expense as imprudent. Accordingly, the PSC did not err in excluding a portion of Spire's rate case expenses, and Spire's Points I and II are denied.

III. Forest Park Property Sale

Spire next argues the PSC erred by ordering that nearly $3.6 million in relocation proceeds from the sale of the Forest Park property be used to reduce rates. In its second point, Spire claims this constitutes prohibited retroactive ratemaking and, alternatively, that it was arbitrary and capricious in that it was contrary to the traditional treatment of gains on the sale of utility property.[7] This point is denied.

The PSC did not engage in prohibited retroactive ratemaking. Retroactive ratemaking is setting rates for the future in order to redress imprecision in setting prior rates, i.e., to allow the utility to recover prior losses or force it to disgorge excessive profits. *UCCM*, 585 S.W.2d at 58. This does not mean, however, that the prohibition

disallowance amounts to a penalty for Spire exercising its right to prosecute a rate case as it sees fit. The first argument is unconvincing and largely irrelevant because Spire's expenses in other cases are not the issue in and formed no part of the PSC's decision now before the Court. Spire's claim that it is being penalized fares no better because nothing in the PSC's decision restricts what Spire can and cannot raise in a rate case. Instead, it merely addresses who (between the shareholder and the ratepayers) should be burdened with the cost of the decisions Spire makes in this regard.

[7] This point is multifarious in that it asserts the PSC's decision regarding relocation expenses was error for two separate and distinct reasons. *Bowers v. Bowers*, 543 S.W.3d 608, 615 n.9 (Mo. banc 2018). Multifarious points preserve nothing for appellate review because they fail to comply with Rule 84.04(d). *Id.* This Court, however, has discretion to review, *ex gratia*, multifarious points on the merits and elects to exercise that discretion here. *Id.*

against retroactive ratemaking bars all reference to events occurring outside the test year. *See State ex rel. GTE N., Inc. v. Mo. Pub. Serv. Comm'n*, 835 S.W.2d 356, 368 (Mo. App. 1992) (approving such reference when the "adjustment is (1) 'known and measurable,' (2) promotes the proper relationship of investment, revenues and expenses, and (3) is representative of the conditions anticipated during the time the rates will be in effect"). It is important that the trees do not obscure the forest. The use of the test year concept, the adjustments made to that year, and reference to events outside that year, are merely tools for the PSC to wield in pursuit of identifying rates that are "just and reasonable" as required by § 393.130.1.

For Spire East's future rates to be "just and reasonable," the PSC determined those rates needed to reflect the impact of the sale of the Forest Park property even though that sale occurred outside the test year. Specifically, the PSC determined (among other related matters) that: a) section 393.190.1 required Spire to obtain prior approval of this sale from the PSC but it failed to do so; b) the new service center was a more expensive capital asset than the Forest Park property; and c) the evidence did not establish how much (if any) of the nearly $3.6 million in unspecified relocation expenses were incurred in the move from the Forest Park property to the Manchester property. Spire's point relied on does not claim these findings (or others underlying the PSC's treatment of the Forest Park property sale) were not supported by competent and substantial evidence on the record as a whole, only that this treatment was retroactive ratemaking and inconsistent with the PSC's prior practice. Because there is no suggestion the PSC was setting Spire's new rates to account for profits or losses resulting from prior rates, Spire's claim that this was prohibited, retroactive ratemaking is denied.

The Court also rejects Spire's contention that the PSC's decision regarding the sale of the Forest Park property was arbitrary and capricious because it departed from approaches taken by the PSC in prior cases. "[A]n administrative agency is not bound by *stare decisis,* nor are PSC decisions binding precedent on this Court." *State ex rel. AG Processing, Inc. v. Pub. Serv. Comm'n of Mo.*, 120 S.W.3d 732, 736 (Mo. banc 2003). Therefore, even if the Court assumes (without deciding) that the PSC's approach was a departure from its prior practice, this alone does not render the PSC's approach so illogical or unreasonable as to justify a conclusion that it was arbitrary, capricious, or an abuse of discretion. *Cf. Cox*, 473 S.W.3d at 114 (An abuse of discretion occurs when decision is "clearly against the logic of the circumstances then before the court and is so unreasonable and arbitrary that it shocks the sense of justice and indicates a lack of careful, deliberate consideration."). Because the PSC's decision shows a reasoned, careful approach to what may well be a new or newly increasing problem, this Court rejects Spire's claim that it was arbitrary, capricious, or an abuse of discretion merely because it may have departed from prior decisions on similar issues.

IV. Spire East's Pension Asset

In its final point, Spire argues the PSC's decision to eliminate $28.8 million from Spire East's pension asset was arbitrary, capricious, or unsupported by competent and substantial evidence because it was inconsistent with Spire's evidence that the pension asset was calculated using FAS 87 and FAS 88 throughout Spire's 1990, 1992, and 1994 rate cases. This claim is rejected in part and granted in part.

Spire concedes the pension asset was determined on a cash basis in the 1992 rate case. Nevertheless, Spire points to testimony in the 1990 rate case by Staff witness Rackers that Spire contends supports the conclusion that the pension asset in that case was calculated pursuant to FAS 87 and FAS 88 accounting standards. And, because no departure from this approach was explicitly authorized in the 1992 rate case, Spire argues this could support a finding in its favor regarding that case as well. But this argument was in stark contrast to the testimony of Staff witness Young, who testified that neither Spire East nor Staff included an itemized pension asset based on FAS 87 and FAS 88 in their accounting schedules for Spire's rate cases between 1987 and 1994. Accordingly, there was competent and substantial evidence for the PSC to decide either way with respect to how the pension asset was calculated in the 1990 and 1992 cases. This Court will not substitute its judgment for that of the PSC as to how such a complex question should be resolved where the evidence was in such near equipoise. *See Hampton*, 121 S.W.3d at 222-23.

But the evidentiary scales were not so nearly balanced with respect to how Spire's pension liability was accounted for in the 1994 rate case. Spire showed (and Staff clearly recognized) that Spire East began to use FAS 87 beginning with the 1994 rate case. But, because Staff argues that there was no similar showing with respect to Spire East's use of FAS 88, Staff claimed the cash accounting must have been used to calculate the pension asset in the 1994 rate case and the $9 million accruing between 1994 and 1996 should be excluded. But Spire's evidence (which was uncontroverted) showed that FAS 87 and FAS 88 are inextricably linked, that the former would not have been used without the latter, and that reference to FAS 87 was simply shorthand for reference to both FAS 87 and FAS 88. Moreover, the record in the 1994 rate case suggests the dispute was not over whether FAS 88 would be used but rather how it would be used. In light of this, the Court holds the PSC's decision to extend the period in which it determined Spire East used cash accounting to value its pension asset from 1994 to 1996 was not supported by competent and substantial evidence on the record as a whole. Viewed in isolation, there was evidence to support the PSC's decision in this respect, but this Court's review does not use this approach. *Id.*[8] Instead, the PSC's decision must be supported by competent and substantial evidence on the whole record, including the evidence the PSC rejected. In this very close case, the Court is persuaded it was not. Accordingly, though the Court affirms the PSC's Amended Report and Order in all other respects, the Amended Report and Order is reversed to this extent and the matter remanded to the PSC to add the $9 million in pension assets that accrued between 1994 and 1996 to Spire East's $131.4 million prepaid pension asset. Because this increase in the amount of Spire East's

[8] After *Hampton*, this Court revisited the issue to emphasize that judicial review of an administrative agency finding is not at all like appellate review of a circuit court finding. *Seck v. Dep't of Transp.*, 434 S.W.3d 74, 78-79 (Mo. banc 2014). In reviewing a circuit court's finding, an appellate court considers only the evidence and reasonable inferences that support that finding and examines that evidence and those inferences only in the light most favorable to the finding the circuit court made. *Id.* at 78-79. In reviewing a factual finding made by an administrative agency, on the other hand, judicial review is governed by article V, section 18 of the Missouri Constitution and "must consider all of the evidence that was before the agency and all of the reasonable inferences … including the evidence and inferences that the agency rejected in making its findings." *Id.* at 79.

pension asset might bear on its amortization, the case is remanded for further proceedings consistent with this opinion.

CONCLUSION

For the reasons set forth above, the PSC's Amended Report and Order is affirmed in part and reversed in part, and the case is remanded for further proceedings consistent with this opinion.

____
Paul C. Wilson, Judge

All concur.

Account Number: [redacted]
Statement Date: 11/09/2021
5092

Contact Us

Phone
Customer Service
1-800-464-7726
7 A.M. - 7 P.M. CT Mon. - Fri.

Emergency Service 24/7
1-800-634-3524
For gas leaks or odor of gas
1-800-464-7726
Report electric lines down or power outage

Pay by credit/debit card
Call 1-855-763-6277 (Paymentus convenience fee will apply)

For hearing-impaired TDD
1-800-635-0952

Web
Make payments and access your account at NIPSCO.com

Mail Payments
NIPSCO
P.O. BOX 13007
Merrillville, IN 46411-3007

Authorized Payment Locations
Find locations online at NIPSCO.com

Account Profile

Customer Name: [redacted]

Account Number: [redacted]

Your Contact Information: [redacted]

Type of Customer:
Residential
Gas Service
Automatic Payment
Paperless Billing

- Is your contact information correct? Make all changes on the reverse side.

Account Summary

Previous Balance on 10/12/2021	$14.98
Payments Received on 10/29/2021	-$14.98
Balance on 11/09/2021	$0.00
Charges for Gas Service This Period	+$27.62
Current Charges Due by 11/29/2021	**$27.62**

- If paid after 11/29/2021, a late payment charge of $0.98 will be applied and your new current amount due will be $28.60.
- For more information regarding these charges, see the Detail Charges section.

An automatic bill payment of $27.62 will be made on 11/29/2021 by your Financial Institution.

Thank you for your excellent payment history.
We know that the COVID-19 pandemic may cause financial hardship for our customers. Any customer who is having trouble paying his/her bill should call 1-800-464-7726 to discuss payment arrangements and/or financial assistance programs. Flexible payment plans are available to customers who indicate either an impact or hardship as a result of COVID-19.

Your Safety

Gas Safety
In case of an emergency, such as odor of gas, carbon monoxide or fire:

1. Leave the building or area immediately.
2. Leave windows and doors in their positions and avoid doing anything that could cause a spark.
3. From a safe place, away from the building or area, call **911** and NIPSCO at **1-800-634-3524.**

Always Call 8-1-1 Before You Dig
If you're planning a home or landscaping project, call Indiana 811 at least two business days before digging. A representative will mark the approximate location of underground utility lines for free.

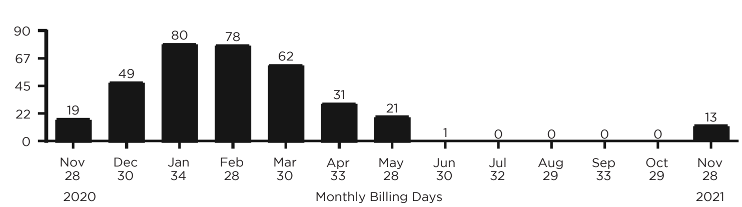
Indiana811

Employee Identification
All our employees and contractors carry photo identification. Ask to see it before allowing anyone who claims to be a utility representative into your home. Call the police if you see suspicious activity.

Monthly Message Board

Detecting a Gas Leak
If you even THINK you smell gas inside your home or business, take action. STOP what you are doing. LEAVE the area immediately. CALL 911 and NIPSCO at our emergency number, 1-800-634-3524, 24 hours a day. NIPSCO will send someone to check the source of the odor FREE OF CHARGE, whether there is a leak or not. To learn more about leak detection and natural gas safety, visit NIPSCO.com/staysafe.

13 Month Usage History



13 Month Usage History continued on next page

▼ Please fold on the perforation below, detach and return with your payment.

[redacted]

P.O. BOX 13018
MERRILLVILLE, IN 46411-3018 NIPSCO

Web
NIPSCO.com

Phone
1-800-464-7726

Account Number: [redacted]
Automatic Bill Payment on 11/29/2021: $27.62
If paid after 11/29/2021, the amount due will be $28.60

[redacted]

NIPSCO
P.O. BOX 13007
MERRILLVILLE, IN 46411-3007

25342000522001000000000980000000027627

Helpful Definitions

Gas Service Definitions

Gas Delivery Charges are the costs of delivering gas to retail customers. The charges for these services are regulated and these services must be purchased from the local distribution company.

Gas Supply Charges include the commodity cost of natural gas, interstate pipeline charges, storage costs, and related charges and is passed through to customers at cost without markup.

Therm (thm) is equal to 100,000 Btus and is the basic billing unit for gas.

Legal Notices

Rate Schedule information is available upon request and at NIPSCO.com.

13 Month Usage History *continued*

Meter Number:
G0170384

Service Address:
[redacted]

Meter Readings - 28 Billing Days

Actual Reading on 11/09		1165
Actual Reading on 10/12	-	1152
Gas Used (Ccf)		**13**
Conversion to Therms	x	1.063
Total Gas Used (Therms)		**13.8**

Usage Comparison - Therms

Month	Therms	Avg Temp	Therms Per Day
Nov 20	19.2	50.0°	0.7
Oct 21	0.0	66.2°	0.0
Nov 21	**13.8**	**49.6°**	**0.5**

Your next scheduled meter reading date is between 12/10/2021 - 12/14/2021.

Detail Charges

Charges for Residential Gas Service - Rate 111

Gas Supply Charges	
Gas Commodity Charge	$5.11
Interstate Transportation and Storage Charges	$1.58
Total	**+$6.69**
Delivery Charges	
Delivery Charges	$19.12
Total	**+$19.12**
Indiana Sales Tax	+$1.81
Total Charges for Gas Service This Period	**$27.62**

- All Gas Supply Charges should be considered when comparing gas pricing alternatives.
- Gas Commodity Charges: Oct 2021 $0.3550 per therm; Nov 2021 $0.4025 per therm
- Interstate Pipeline Transportation and Contract Storage Charges: Oct 2021 $0.1302 per therm; Nov 2021 $0.0812 per therm

Change Contact Information

By providing NIPSCO a telephone number, it enables us to call you about your utility service, future service appointments and other important information pertaining to your account and you're agreeing to receive autodialed and prerecorded voice calls. Please notify us if you wish to opt out or if you no longer use this number. Thank you in advance.

Address

City

State Zip Code

Phone Number

Add or Edit Email

Message Board

- Take the seasonal highs and lows out by dividing your yearly energy use into 12 equal monthly payments – for budgeting that's a whole lot easier. Learn more at NIPSCO.com/BudgetPlan.
- Billing, Payment and Pricing Options: NIPSCO offers a variety of options to fit your lifestyle. To learn more, call us or visit NIPSCO.com/BillingPayment.

RECEIVED NOV 1 5 1997

SEP 14 1976

PUBLIC COUNSELORS OF INDIANA

ORIGINAL

STATE OF INDIANA

PUBLIC SERVICE COMMISSION OF INDIANA

IN THE MATTER OF THE ADOPTION AND PROMULGATION OF RULES, REGULATIONS, AND STANDARDS OF SERVICE FOR GAS PUBLIC UTILITIES WITHIN THE STATE OF INDIANA.	CAUSE NO: 34613 APPROVED: SEP 1 3 1976

BY THE COMMISSION:

On July 1, 1976, the Public Service Commission of Indiana issued orders in this cause finding that new Rules, Regulations and Standards of Service for Gas Public Utilities operating within the State of Indiana (hereinafter sometimes referred to as "Gas Rules") should be adopted and promulgated as set forth in Appendix A, attached to said order.

The Commission set the new Gas Rules for hearing on August 3, 1976, at 9:30 A.M., EST., in Room 908, State Office Building, Indianapolis, Indiana. Notice of the hearing was published as required by the provisions of I.C. 1971, 4-22-2-4 and, pursuant to this notice, the hearing was held at the time and place indicated.

Notice of the time and place of this hearing was also given by mail to 50 gas utilities operating within the State of Indiana and to the office of the Public Counselor. Proof of publication of the notices published in this cause was incorporated into the record and placed in the official files of the Commission.

At least five (5) copies of the proposed new Gas Rules were continuously on file in the office of the Secretary of the Commission for public inspection prior to the hearing.

The Commission, having considered the statements and briefs of all interested parties now finds that:

1. Although the new Gas Rules adopted hereby are, per se, applicable only to the public (investor owned) gas utilities operating within Indiana, the Citizens Gas and Coke Utility of Indianapolis, (hereafter Citizens Gas), a municipal utility, participated in the rule promulgation hearing and submitted post-hearing comments to the Commission. In addition, Citizens Gas has agreed to adopt the Commission's Gas Rules as its rules for customer service. Pursuant to the provisions of I.C. 1971, 19-3-24-3(9), the Public Service Commission has jurisdiction over not only Citizens Gas'rates but also its rules for service to its customers. Approval of Citizens Gas' service

rules is only to be granted after notice of hearing and hearing on the proposed rules. The published notice of the hearing and the hearing of this cause satisfy the procedural requirements of I.C. 1971, 19-3-24-3(9) and, consequently, the new Gas Rules should be applicable not only to the public gas utilities within Indiana but also to Citizens Gas.

2. Counsel for consumers objected to the provisions of Rule 15, which authorizes a security deposit of up to 1/3 of the estimated annual bills of certain gas customers. However, the Commission finds this deposit justified because the bills for customers having gas heat greatly fluctuate and a deposit of this size would cover two months of peak usage of an average residential heating customer. In fact, as shown by Citizens Gas, under certain conditions, a deposit of 1/3 of the estimated annual cost of gas service may not even be sufficient to cover two months of peak usage.

3. Consumers also argued that such a deposit is unjustified for customers not using gas for heating. However, the annual bills of those customers are so low that a deposit of 1/3 of the estimated annual bill will not require a large cash outlay.

   In any event, under the provisions of the new Gas Rules, only a very small percentage of all gas customers will be required to furnish a gas utility with a cash deposit. The Commission therefore finds that it is in the interests of both the majority of gas customers who promptly pay their bills and the gas companies that those customers determined to be poor credit risks and those who have been delinquent on their bills in the recent past, should be required to make a reasonable security deposit.

4. Because of the wide fluctuations in gas usage referred to above, the Commission finds it reasonable and appropriate to adopt a longer time period than provided in the Electric Rules after which a customer will automatically obtain a refund of his deposit. Otherwise, a customer required to furnish a deposit might be entitled to an automatic refund of his deposit after having promptly paid his bills during nine months of low usage and prior to the high bills of the winter heating season.

5. The new Gas Rules which are attached hereto and made a part hereof as Appendix A, are fair, reasonable, and just, are in the public interest, and should therefore be approved.

IT IS THEREFORE ORDERED BY THE PUBLIC SERVICE COMMISSION OF INDIANA that the new Rules and Regulations of Service for Gas Public Utilities in Indiana, attached hereto and made a part hereof as

Appendix A, be, and the same hereby are adopted.

IT IS FURTHER ORDERED that the new Rules and Regulations of Service for Gas Public Utilities in Indiana as set forth in Appendix A, attached hereto and made a part hereof, shall be in full force and effect immediately upon having been approved as to legality by the Attorney General of the State of Indiana and approved by the Governor of the State of Indiana, and the original approved copy thereof filed with the Secretary of State of Indiana.

IT IS FURTHER ORDERED that the Gas public utility companies within the State of Indiana and the Citizens Gas and Coke Utility shall comply with the new rules within 180 days of their becoming effective.

IT IS FURTHER ORDERED that the Secretary of the Commission submit six (6) copies of the order and the attached Appendix A to the Attorney General of Indiana for his approval as to the legality of the same, and then submit said copies to the Governor of the State of Indiana for his approval, and thereafter file the original approved copy and one duplicate thereof with the Secretary of State of Indiana and one duplicate with the Indiana Legislative Council.

WALLACE AND PLASKETT CONCUR; POWERS CONCURS IN PART AND DISSENTS IN PART:

APPROVED: SEP 1 3 1976

In I.C. 1971, 8-1-2-61 (Burns 54-415) the General Assembly of Indiana has set forth the statutory procedure a public utility must follow in requesting an increase in its rates. In this statute the legislature has defined the notice a public utility must give when it seeks an increase in its rates. The majority Order, in effect, changes that statute. The rule now, and not the statute, dictates the notice a public utility must give. I dissent in the adoption of Rule 16.2(c).

I wholeheartedly concur in all the rest of the new rules.

I hereby certify that the above is a true and correct copy of the Order as approved.

Max W. Tucker

MAX W. TUCKER, SECRETARY

RULES AND REGULATIONS OF SERVICE FOR
GAS PUBLIC UTILITIES IN INDIANA

INDEX

Exceeding 1,000 cubic feet per hour rated capacity. $40.00

(C) This rule shall not interfere with the practice of a public utility in its tests of gas service meters except that, in the event of a written application to the Commission by a customer for a test, the utility shall not knowingly remove or interfere with said meter without the consent previously given in writing by the customer.

Rule 13 Bills for Gas Service.

(A) Bills rendered periodically to customers for gas service shall show at least the following information:

(1) The dates and meter readings of the meter at the beginning and end of the period for which the bill is rendered and the billing date, and

(2) The number and kind of units of service supplied,

(3) The billing rate code,

(4) The previous balance, if any,

(5) The amount of the bill,

(6) The sum of the amount of the bill and the late payment charge,

(7) The date on which the bill becomes delinquent and on which the late payment charge will be added to the bill,

(8) If the bill is estimated, a clear and conspicuous coding or other indication identifying the bill as an estimated bill must be shown,

(9) Printed statements and/or actual figures on either side of the bill shall inform the customer of the seventeen (17) day non-penalty period,

(10) An explanation, which can be readily understood, of all codes and/or symbols shall be shown on the bill.

(B) Delinquencies

(1) A utility service bill which has remained unpaid for

24, 2007, 8:21 a.m.: 20070509-IR-170070147RFA; filed Dec 15, 2008, 11:46 a.m.: 20090114-IR-170080315FRA; readopted filed Aug 2, 2013, 2:16 p.m.: 20130828-IR-170130227RFA; readopted filed Apr 11, 2019, 9:04 a.m.: 20190508-IR-170190136RFA)

170 IAC 5-1-13 Bills

Authority: IC 8-1-1-3; IC 8-1-2-4
Affected: IC 8-1-2-38; IC 8-1-2-42; IC 8-1-2-87

Sec. 13. Bills for Gas Service. (A) Bills rendered periodically to customers for gas service shall show at least the following information:

(1) The dates and meter readings of the meter at the beginning and end of the period for which the bill is rendered and the billing date, and
(2) The number and kind of units of service supplied,
(3) The billing rate code,
(4) The previous balance, if any,
(5) The amount of the bill,
(6) The sum of the amount of the bill and the late payment charge,
(7) The date on which the bill becomes delinquent and on which the late payment charge will be added to the bill,
(8) If the bill is estimated, a clear and conspicuous coding or other indication identifying the bill as an estimated bill must be shown,
(9) Printed statements and/or actual figures on either side of the bill shall inform the customer of the seventeen (17) day non-penalty period,
(10) An explanation, which can be readily understood, of all codes and/or symbols shall be shown on the bill.

(B) Delinquencies. (1) A utility service bill which has remained unpaid for a period of more than seventeen (17) days following the mailing of the bill shall be a delinquent bill.

(2) A utility service bill shall be rendered as a net bill. If the net bill is not paid within seventeen (17) days after the bill is mailed, it shall become a delinquent bill and a late payment charge may be added in the amount of ten (10) percent of the first three (3) dollars and three (3) percent of the excess of three (3) dollars.

(C) Estimated Bills. (1) A gas public utility may estimate the bill of any customer only for good cause. Good cause includes, but is not limited to: requests of customer; inclement weather; labor or union disputes; inaccessibility of a customer's meter, if the utility has made a reasonable attempt to read it; and other circumstances beyond the control of the utility, its agents, and employees.

(D) Alternative Billing Method and Dates ("Budget Plan").

(1) Each utility shall have and shall advise each applicant and customer of a policy and practice which allows applicant or customer to contract for a plan whereby the company averages the estimated bill over an extended period and balances the account at the end of that period.

(Indiana Utility Regulatory Commission; No. 34613: Standards of Service For Gas Public Utilities Rule 13; filed Oct 14, 1976, 10:20 am: Rules and Regs. 1977, p. 399; readopted filed Jul 11, 2001, 4:30 p.m.: 24 IR 4233; readopted filed Apr 24, 2007, 8:21 a.m.: 20070509-IR-170070147RFA; readopted filed Aug 2, 2013, 2:16 p.m.: 20130828-IR-170130227RFA; readopted filed Apr 11, 2019, 9:04 a.m.: 20190508-IR-170190136RFA)

170 IAC 5-1-14 Billing adjustments

Authority: IC 8-1-1-3; IC 8-1-2-4
Affected: IC 8-1-2

Sec. 14. (a) If any service meter is found to have a percentage of error greater than that allowed under section 6(a) of this rule, the following provisions for the adjustment of bills shall be observed:

(1) When a meter is found to be fast, in excess of two percent (2%) when tested at check and open rates (positive average error), the utility shall refund the customer's account with the amount of any charges in excess of either of the following:
 (A) An average bill for the units of gas incorrectly metered.
 (B) Separate bills individually adjusted for the percent of error for a period equal to one-half (1/2) of the time elapsed since the previous test, or one (1) year, whichever period is shorter.

AFFIRMATION

I affirm, under the penalties for perjury, that the foregoing representations are true.

Leja D. Courter

Leja D. Courter
Chief Technical Advisor
Indiana Office of Utility Consumer Counselor
Cause No. 45621
Northern Indiana Public Service Company LLC

1/20/2022
Date

CERTIFICATE OF SERVICE

This is to certify that a copy of the foregoing ***OUCC'S TESTIMONY OF LEJA D. COURTER*** has been served upon the following counsel of record in the captioned proceeding by electronic service on January 20, 2022.

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