

Date: May 1, 2026
From: Jon Klockziem, Director – Property Tax Division
Subject: Final 2026 Capitalization Rate Study

The Property Tax Division of the Minnesota Department of Revenue is responsible for estimating the market value of utility, pipeline, and railroad operating property, as of January 2 each year. We complete an annual Capitalization Rate Study and use the capitalization rates published in the study to help determine the unitary value of state assessed property.

We posted the 2026 Draft Capitalization Rate Study on March 11, 2026, and welcomed comments until March 31, 2026. We appreciate the thoughtful comments we received.

Who can I contact with questions?

If you have questions about this final study, contact the State Assessed Property Section at sa.property@state.mn.us.



Jon Klockziem, Director
Property Tax Division



2026 Capitalization Rate Study

Assessment Year 2026

Property Tax Division
Minnesota Department of Revenue
May 1, 2026

Table of Contents

| | |
|---|------------|
| Introduction | 1 |
| Updates and Looking Forward | 4 |
| Market News | 4 |
| Yield Capitalization Rate (Yield Rate) | 9 |
| Guideline Companies | 10 |
| Market Rate of Equity | 14 |
| Market Rate of Debt | 26 |
| Market Rate of Preferred Stock | 27 |
| Direct Capitalization Rate (Direct Rate) | 27 |
| Equity Component | 27 |
| Flotation Costs | 28 |
| Company-Specific Risk | 29 |
| Illiquidity | 29 |
| Growth | 29 |
| Short-Term Growth Rate | 30 |
| Long-Term Growth Rate | 31 |
| Inflation | 32 |
| Market to Book Ratios | 33 |
| Public Comments on Draft Study | 33 |
| Questions? | 46 |
| Appendix A – Electric | A-1 |
| Appendix B – Gas Distribution | B-1 |
| Appendix C – Gas Transmission Pipeline | C-1 |
| Appendix D – Fluid Transportation Pipeline | D-1 |
| Appendix E – Railroad | E-1 |
| Appendix F – Ex Ante Equity Risk Premium | F-1 |
| Appendix G – Guideline Company Selection | G-1 |

Introduction

The Minnesota Department of Revenue determines the estimated market value¹ for utility, pipeline, and railroad operating property as of January 2 each year². The department determines the unit value of the entire system³ to estimate the market value of these properties.

For each market segment, this study derives:

- A yield capitalization rate (yield rate)
- A direct capitalization rate (direct rate)
- A short-term growth rate
- A long-term growth rate
- An implied inflation rate

The market segments are:

- Electric
- Gas distribution
- Gas transmission pipeline
- Fluid transportation pipeline
- Railroad

The department's Property Tax Division determines the unit value of these systems, in part, with the income capitalization approach to valuation. This approach measures the present value of the anticipated future benefits of property ownership. There are two methods of income capitalization: direct and yield capitalization.⁴

- **Direct capitalization** converts an estimate of a single year's net operating income expectancy into an indication of value for the subject property using the direct rate. This conversion is based on the market-observed relationship between an income level and market value.
- **Yield capitalization** calculates the net present value of the anticipated future income by discounting cash flows using the yield rate.

Under the income capitalization approach, yield capitalization models use yield rates and direct capitalization models use direct rates.

¹ Minnesota Statutes, section 272.03, subdivision 8 defines market value as, "the usual selling price at the place where the property to which the term is applied shall be at the time of assessment; being the price which could be obtained at a private sale or auction sale, if it is determined by the assessor that the price from the auction sale represents an arm's-length transaction. The price obtained at a forced sale shall not be considered."

² Value changes over time, the market value the department estimates is as of January 2, a single point in time.

³ Minnesota Rules, Chapter 8100.0100, subpart 16 defines unit value as, "the value of the entire system of a utility company taken as a whole without regard to the value of its component parts." Minnesota Rules, Chapter 8106.0100, subpart 20 defines unit value as, "the value of the system of a railroad company taken as a whole without any regard to the value of its component parts."

⁴ Appraisal Institute (2013). The Appraisal of Real Estate, 14th Edition, Page 46

Both the yield and direct rates are calculated using the band of investment method. This method considers equity and debt financing and is a combination of the weighted rates for each, as shown in this table:

| | Capital Structure | × | Market Rate | = | Weighted Rate |
|----------------------|-------------------|---|-------------|---|---------------|
| Debt | 50% | × | 6% | = | 3% |
| Equity | 50% | × | 10% | = | 5% |
| Combined Rate | | | | = | 8% |

We estimate the market cost of capital for each market segment, under Minnesota Rules 8100 and 8106.

Summary of Rates Derived from this Study

| Market Segments | Yield Rate | Direct Rate | Short-Term Growth Rate ⁵ | Long-Term Real Growth Rate ⁶ | Long-Term Implied Inflation Rate ⁷ |
|-------------------------------|------------|-------------|-------------------------------------|---|---|
| Electric | 7.91% | 5.62% | 6.88% | 1.80% | 2.00% |
| Gas Distribution | 7.81% | 5.59% | 7.20% | 1.80% | 2.00% |
| Gas Transmission Pipeline | 8.63% | 5.04% | 8.00% | 1.80% | 2.00% |
| Fluid Transportation Pipeline | 8.54% | 7.43% | 8.23% | 1.80% | 2.00% |
| Railroad | 9.27% | 5.32% | 7.90% | 1.80% | 2.00% |

Updates

We posted the Draft 2026 Capitalization Rates study [on our website](#) on March 11, 2026. We accepted comments through March 31, 2026, and made these updates after the initial draft:

1. One comment indicated that Revenue selected the incorrect implied equity risk premium from Dr. Damodaran’s website stating, “It appears the Department inadvertently chose the 10-year Treasury rate of 4.18% but intended to use the ERP rate for 1-Jan-26.”

⁵ See the short-term growth rate section in this narrative.

⁶ This is the estimated long-term real growth rate of the United States Economy, explained in further detail in the Growth section of this narrative.

⁷ See the Inflation Section in this narrative.

Response

Revenue used the ERP in column R, “Implied Premium (FCFE with sustainable Payout)” in Dr. Damodaran’s [Implied ERP \(annual\) from 1960 to Current spreadsheet](#).⁸ In previous studies the department used the ERP in column P, “Implied ERP (FCFE)”. The Implied ERP FCFE is 4.23% and the Implied Premium (FCFE with sustainable Payout) is 4.18%.

The Implied ERP (FCFE) assumes the cash payout is unchanged over time, allowing dividends plus buybacks to grow at the same rate as earnings). The Implied Premium (FCFE with sustainable payout), allows the cash payout ratio to change over time to a sustainable growth rate, computed using the expected growth rate after year 5 and the return on equity of the S&P 500 companies: Sustainable Payout ratio = $1 - \text{expected Growth Rate in Perpetuity} / \text{Return on Equity}$.

The department has heard from stakeholders in the past that we must consider the payout ratio in its models.

As we were not clear on which implied ERP it used, we will revert back to the Implied ERP FCFE as used in the 2025 assessment year study.

We will consider using the Implied Premium (FCFE with sustainable payout) in future studies.

2. One comment noted that the department did not update the Value of Preferred Equity in the Capital Structure calculation for the Gas Transmission Pipeline Market Segment.

Response

We updated the Value of Preferred Equity from Canadian dollars to US dollars in the final study. The resulting capital structure did not change.

3. One comment suggested increasing the cost of debt in the railroad market segment from 5.68% to 5.90%.

Response

Three guideline companies are rated A2-A3 (5.68%) and two guideline companies are rated Baa1 (5.88%). The department selected the mode and median of 5.68% in the draft study. We adjusted the cost of debt from 5.68% to 5.78%, an average of the two rates. This increased the yield rate from 9.24% to 9.26%.

⁸ Damodaran, A. (n.d.). [Implied ERP \(annual\) from 1960 to Current](https://pages.stern.nyu.edu/~adamodar/). Retrieved January 22, 2026 from <https://pages.stern.nyu.edu/~adamodar/>

Looking Forward

Single-Stage Dividend Growth Models (DGM)

We removed the single-stage dividend growth models (earnings and dividend growth) from our cost of equity analysis. It's been several years since we've relied on them, because we strongly disagree with the underlying assumption. The single-stage DGM assumes unrealistic long-term growth. In these single-stage models, short-term growth is used to determine an estimated cost of equity. Short-term growth rates are generally not sustainable in the long term. See further comments on the DGM models in the Market Rate of Equity section of this Study.

Historical Equity Risk Premium Calculations

The department would like to hear more from stakeholders on their opinions of calculating historical equity risk premiums using total returns on bonds compared to income returns on bonds.

Cost of Debt

In prior studies, stakeholders expressed support for the department's use of Mergent Bond Yield Averages to estimate the cost of debt. Some recommend considering alternative sources, including S&P data or Fitch data. The department would like to hear from more stakeholders regarding the differences among these data sets and preferences for their use.

Market News

Electric Market Segment

As provided by Value Line Investment Survey, "Since our last review in early September, Electric Utility (Central) stocks under *Value* Line coverage have risen roughly 3% on average, about matching the advance in the S&P 500 over the same period."

"Utilities have generally kept pace with the broader market averages in recent months, supported by a steadier fundamental backdrop. New demand catalysts remain a key theme across the region. Large data center developments, new industrial expansions, and constructive regulatory settlements are expected to lift load growth through the latter half of the decade. These drivers, combined with stable dividends and ongoing rate base growth, continue to make the group a stable anchor in diversified portfolios."⁹

On June 5, 2025, American Electric Power Company (AEP), KKR and PSP Investments completed the transaction announced in January 2025 for KKR and PSP Investments to jointly invest \$2.82 billion for a

⁹ Hodgsikson, Zachary J (2025). Electric Utility (Central) Industry. Value Line Investment Survey.

19.9% equity interest in AEP's Ohio and Indiana Michigan transmission companies. The 19.9% minority equity interest represents approximately 5% of AEP's total transmission rate base.¹⁰

Black Hills Corporation and NorthWestern Energy Group Inc. approved a definitive agreement to combine in an all-stock, tax-free merger with a pro forma market capitalization of approximately \$7.8 billion and a combined enterprise value of \$15.4 billion, based on each company's closing price as of August 18, 2025. This will create a regional, regulated electric and natural gas utility company that will serve 2.1 million (700,000 electric and 1.4 million gas) customers across eight contiguous mid-west and western states. The transaction is expected to close within 12 months of the date of the agreement, August 18, 2025, subject to each company's shareholders, and regulatory approvals.¹¹

On October 21, 2025, CenterPoint Energy Inc. announced the sale of its Ohio natural gas Local Distribution Company (LDC) business, Vectren Energy Delivery of Ohio to national Fuel Gas. The assets include approximately 5,900 miles of transmission and distribution pipelines. The sales price of \$2.62 billion represents an approximately 1.9 x multiple of the 2024 Ohio LDC rate base. The transaction is expected to close in the fourth quarter of 2026.¹²

On April 1, 2025, CenterPoint Energy Inc. completed the sale of its natural gas distribution utilities in Louisiana and Mississippi to Bernhard Capital Partners. The assets include approximately 12,000 miles of main pipeline in Louisiana and Mississippi serving approximately 380,000 metered customers.¹³

Gas Distribution Market Segment

As provided by Value Line Investment Survey, "A number of stocks in Value Line's Natural Gas Utility Industry have exhibited price strength since our last review in August. We think this reflects improved earnings results and better performing financial markets. But 3- to 5-year capital gains potential for most of these equities is not alluring. Still, the main attraction is their reliable, healthy doses of dividend income."¹⁴

Black Hills Corporation and NorthWestern Energy Group Inc. approved a definitive agreement to combine in an all-stock, tax-free merger with a pro forma market capitalization of approximately \$7.8 billion and a combined enterprise value of \$15.4 billion, based on each company's closing price as of August 18, 2025. This will create a regional, regulated electric and natural gas utility company that will serve 2.1 million (700,000 electric and 1.4 million gas) customers across eight contiguous mid-west and

¹⁰ <https://www.prnewswire.com/news-releases/aep-closes-on-transmission-investment-strategic-partnership-with-kr-and-psp-investments-302474559.html> accessed 02/04/2026

¹¹ <https://ir.blackhillscorp.com/news-releases/news-release-details/black-hills-corp-and-northwestern-energy-combine-all-stock>, accessed 02/04/2026

¹² <https://investors.centerpointenergy.com/news-releases/news-release-details/centerpoint-energy-announces-sale-its-ohio-natural-gas-business>, accessed 02/04/2026

¹³ <https://investors.centerpointenergy.com/news-releases/news-release-details/centerpoint-energy-completes-sale-its-louisiana-and-mississippi>, accessed 02/04/2026

¹⁴ Harris, Frederick, III (2025). Natural Gas Utility. Value Line Investment Survey.

western states. The transaction is expected to close within 12 months of the date of the agreement, August 18, 2025, subject to each company's shareholders, and regulatory approvals.¹⁵

On October 21, 2025, CenterPoint Energy Inc. announced the sale of its Ohio natural gas Local Distribution Company (LDC) business, Vectren Energy Delivery of Ohio to national Fuel Gas. The assets include approximately 5,900 miles of transmission and distribution pipelines. The sales price of \$2.62 billion represents an approximately 1.9 x multiple of the 2024 Ohio LDC rate base. The transaction is expected to close in the fourth quarter of 2026.¹⁶

On April 1, 2025, CenterPoint Energy Inc. completed the sale of its natural gas distribution utilities in Louisiana and Mississippi to Bernhard Capital Partners. The assets include approximately 12,000 miles of main pipeline in Louisiana and Mississippi serving approximately 380,000 metered customers.¹⁷

On June 3, 2025, SiEnergy Operating LLC, a wholly owned subsidiary of Northwest Natural Holding Company, completed the acquisition of Hughes Gas Resources from EPCOR USA Inc. for \$60 million.¹⁸

On July 29, 2025, Spire Inc. announced it entered into an agreement with Piedmont Natural Gas, a wholly owned subsidiary of Duke Energy, to acquire its Tennessee local distribution company that serves more than 200,000 customers in the Nashville area. Spire is acquiring the business for a total consideration of \$2.48 billion on a cash-free, debt-free basis, representing a purchase price multiple of 1.5x estimated rate base in 2026.¹⁹

Gas Transmission Pipeline Market Segment

As provided by Value Line Investment Survey, "The Oil/Gas Distribution Industry is ranked near the bottom of the pack for Timeliness in The Value Line Investment Survey. Third-quarter 2025 results were positive, as many companies benefited from higher throughput, but oil and natural gas prices were lower than the year-earlier period. This was generally a mixed bag for top lines, but many companies have benefited from recent purchases and acquisitions, alongside capital projects. Inflationary pressures have continued to ease, and interest rates have declined further as the Federal Reserve has cut rates. Rising labor costs and other expenses have muddied the waters a bit, causing varying effects on the bottom lines at many companies in the space.

"Stocks in the Oil/Gas Distribution Industry have been volatile but have generally trended upwards alongside the broader market, limiting long-term appreciation potential, in many cases. Still, for long-

¹⁵ <https://ir.blackhillscorp.com/news-releases/news-release-details/black-hills-corp-and-northwestern-energy-combine-all-stock>, accessed 02/04/2026

¹⁶ <https://investors.centerpointenergy.com/news-releases/news-release-details/centerpoint-energy-announces-sale-its-ohio-natural-gas-business>, accessed 02/04/2026

¹⁷ <https://investors.centerpointenergy.com/news-releases/news-release-details/centerpoint-energy-completes-sale-its-louisiana-and-mississippi>, accessed 02/04/2026

¹⁸ <https://www.businesswire.com/news/home/20250603972017/en/NW-Natural-Holdings-Closes-Acquisition-of-Texas-Natural-Gas-Utility> accessed 02/04/2026

¹⁹ <https://www.prnewswire.com/news-releases/spire-to-acquire-tennessee-piedmont-natural-gas-business-from-duke-energy-302515375.html> accessed 02/04/2026

term investors, the industry often has dividend yields that far exceed the Value Line average, and the expectation of continued dividend growth in the coming quarters makes it an appealing option.”²⁰

On February 18, 2025, Kinder Morgan Inc. announced that its subsidiary, Hiland Partners Holdings LLC, closed on its previously announced \$640 million acquisition of a natural gas gathering and processing system in North Dakota from Outrigger Energy II LLC. The acquisition includes a 270 million cubic feet per day (MMcf/d) processing facility and a 104-mile, large-diameter, high-pressure rich gas gathering header pipeline with 350 MMcf/d of capacity connecting supplies from the Willison Basin area to high-demand markets. The gathering and processing system is backed by long-term contracts with commitments from major customers in the basin.²¹

On January 31, 2025, ONEOK Inc. (ONEOK) announced that it has completed its acquisition of EnLink Midstream LLC (EnLink).²² Under the agreement, ONEOK will acquire all of the outstanding publicly held common units of EnLink for \$4.3 billion in ONEOK common stock. Each common unit of EnLink that ONEOK does not already own will be converted into 0.1412 shares of ONEOK common stock. The exchange ratio was derived by dividing \$15.75 per unit, equal to EnLink's market close price on Nov. 22, 2024, by ONEOK's 10-day volume-weighted average price (VWAP). In the aggregate, ONEOK will issue approximately 37.0 million shares in connection with the proposed transaction, representing approximately 6.0% of the total ONEOK shares outstanding upon consummation of the transaction.²³

Fluid Transportation Pipeline Market Segment

As provided by Value Line Investment Survey, “Energy prices have remained under pressure for most of 2025. This hasn’t been a positive for most entities in the midstream industry. Third-quarter results were heavily influenced by what shale play a firm was involved in and which segment of the energy business was the primary focus. Consolidation ought to continue in the near term in this Industry. Some of the midstream firms followed here are partially owned by larger energy corporations. The big attraction of this group of stocks is that they pay large dividends. This sector has been out of favor on Wall Street this year, which has resulted in the returns from these equities lagging the performance of the broader market. The total returns would be even worse if not for current income offsetting some of the loss of principal. The Pipeline MLP Industry is not for everyone. Despite proclamations that each company is protected by binding contracts for a minimum volume of business, the energy sector remains very cyclical. Moreover, the majority of equities followed below are MLPs. Income from these securities are often taxed at a higher rate than ordinary dividends.”²⁴

One August 22, 2025, Enterprise Products Partners LP completed the acquisition of natural gas gathering affiliate of Occidental in a debt-free transaction for \$850 million in cash considerations. The acquired assets include certain natural gas gathering systems in the Midland Basin, as well as

²⁰ Seibert, John, III. (2025). Oil/Gas Distribution Industry. Value Line Investment Survey.

²¹ <https://ir.kindermorgan.com/news/news-details/2025/Kinder-Morgan-Closes-on-640-Million-Acquisition-of-a-Natural-Gas-Gathering-and-Processing-System-From-Outrigger-Energy-II/default.aspx>, accessed 2/11/2026

²² <https://ir.oneok.com/news-and-events/press-releases/2025/01-31-2025-140247526>, accessed 02/04/2026

²³ <https://ir.oneok.com/news-and-events/press-releases/2024/11-25-2024-020325625>, accessed 2/11/2026

²⁴ Flood, James A. (202). Pipeline MLPs. Value Line Investment Survey.

approximately 200 miles of natural gas gathering pipelines that support Occidental’s production activities in the Midland Basin. With access to more than 1,000 drillable locations, these systems will immediately expand Enterprise’s Natural gas gathering footprint in the Midland basin and provide long-term development visibility.²⁵

On September 2, 2025, MPLX LP completed the \$2.375 billion acquisition of Northwind Delaware Holdings LLC, which provides sour gas gathering, treating, and processing services in Lea County, New Mexico, enhancing its Permian natural gas and NGL value chains. The acquisition is expected to be immediately accretive and to distributable cash flow, and inclusive of estimated incremental capital of \$500 million, representing a 7x multiple on forecast 2027 EBITDA and an estimated mid-teen unlevered return.²⁶

On October 31, 2025, Plains All American Pipeline LP (Plains) completed the acquisition of a 55% equity interest in EPIC Crude Holdings LP, the entity that owns and operates the EPIC Crude Oil Pipeline from the subsidiaries of Diamondback Energy Inc. and Kinetick Holdings Inc. Effective November 1, 2025, Plains completed the acquisition of the remaining 45% operated equity interest in EPIC from a portfolio company of Ares Private Equity funds for a purchase price of approximately \$1.33 billion, inclusive of approximately \$500 million of debt. Additionally, Plains has agreed to a potential earnout payment of up to \$157 million tied to certain expansions of the pipeline system by 2028.²⁷

Railroad Market Segment

As provided by Value Line Investment Survey, “Railroad Industry volume has slowed from earlier in the year, but continues to grow modestly. A major merger will soon start to be reviewed by the government. However, opposition is heating up, and the approval process is likely to be lengthy. Railcar makers are in the midst of a cyclical downturn, but leasing activity is helping them endure the decline. Shipments Have Slowed, but Are Rising.”²⁸

On July 29, 2025, Union Pacific Corporation and Norfolk Southern Corporation announced an agreement for merger where Union Pacific would acquire Norfolk Southern in a stock and cash transaction, representing a 25% premium to Norfolk Souther’s trading weighted average price.²⁹ Union Pacific shareholders approved the merger on November 15, 2025.³⁰ The railroads filed an application with the Surface Transportation Board requesting approval of the merger on December 19, 2025.³¹ On

²⁵ <https://ir.enterpriseproducts.com/news-releases/news-release-details/enterprise-completes-acquisition-occidentals-natural-gas>, accessed 02/05/2026

²⁶ <https://ir.mplx.com/CorporateProfile/press-releases/news-release/2025/MPLX-LP-Closes-Northwind-Midstream-Acquisition/default.aspx>, accessed 02/05/2026

²⁷ <https://ir.plains.com/news-releases/news-release-details/plains-all-american-reports-third-quarter-2025-results-and>, accessed 02/05/2025

²⁸ Benway, Stuart J. (2025). Railroad Industry. Value Line Investment Survey.

²⁹ <https://www.up.com/press-releases/growth/norfolk-southern-transcontinental-nr-250729>

³⁰ <https://www.up.com/press-releases/financial/shareholders-approve-ns-merger-251114>

³¹ <https://www.up.com/press-releases/growth/stb-merger-application-enhances-competition-251219>

January 16, 2026, the Surface Transportation Board found the application as incomplete and provided the applicants may submit a revised application under the same docket (Docket No. 36873).³²

Yield Capitalization Rate (Yield Rate)

The yield capitalization model is based on the premise that the value of a property is equal to the present value of all anticipated future benefits.³³ Yield capitalization calculates the present value of the anticipated future income by discounting cash flows using the yield rate (Y_0).

The present value of future benefits as of the assessment date is what the current owner would give up by selling the property and what the new owner would receive by purchasing the property.

The discounted cash flows model is the most sophisticated form of yield capitalization. We use it when explicit forecasts of anticipated net cash flows (NCF)³⁴ are available and when the rate of change in the cash flows is not constant.

Key – Variables in Equations

| | |
|------------------------|--|
| Y_0 | Yield Rate for Current Assessment Period |
| NCF | Net Cash Flows |
| NCF₁ | Net Cash Flows for Next Period |
| n | nth Period |
| g | Expected long-term growth rate in net cash flows |
| NOI | Net Operating Income |

$$\text{Value} = \text{NCF}_1 / (1+Y_0)^1 + \text{NCF}_2 / (1+Y_0)^2 + \text{NCF}_3 / (1+Y_0)^3 + \dots + \text{NCF}_n / (1+Y_0)^n$$

Because explicit forecasts of anticipated cash flows are generally not made into perpetuity, after the period of explicit forecasts, the assumption is made that the growth rate in anticipated cash flows will be stable. The next step, reversion, applies a long-term growth rate to the cash flows in perpetuity, after the period of explicitly forecasted cash flows.

This formula shows three periods of explicit forecasts of anticipated cash flows followed by the reversion.

$$\text{Value} = \text{NCF}_1 / (1+Y_0)^1 + \text{NCF}_2 / (1+Y_0)^2 + \text{NCF}_3 / (1+Y_0)^3 + ((\text{NCF}_3 * (1+g) / (Y_0-g)) / (1+Y_0)^3)$$

We use **stable growth yield capitalization** when explicit forecasts of anticipated net cash flows are not available or when the anticipated growth in net cash flows is stable. This model is a simplified, but mathematically identical, model to the discounted cash flows model when the anticipated growth rate (g) is constant.

$$\text{Value} = \text{NCF}_1 / (Y_0 - g)^1$$

³² Surface Transportation Board Decision (1/16/2026), Docket No. 36873. Decision ID 52819.

³³ Western States Association of Tax Administrators, (2009). Appraisal Handbook – Unit Valuation of Centrally Assessed Properties, Page III-13

³⁴ Net cash flows equal net operating income plus non-cash expenses minus capital expenditures minus change in working capital.

The **zero percent stable growth yield capitalization model** assumes that the constant growth rate is 0%. This means that the income will remain the same over time.

$$\text{Value} = \text{NCF}_1 / (Y_0 - 0\%)^1$$

If the net cash flows will be equal to the net operating income (NOI)³⁵, meaning depreciation will be equal to capital expenditures; the formula can be simplified to:

$$\text{Value} = \text{NOI}_1 / (Y_0 - 0\%)^1$$

This model assumes 0% growth into perpetuity.

In our yield model, we use Net Operating Earnings (NOI) or Net Railway Operating Income (NROI) as the measure of income. This assumes that free cash flow available to both debt and equity holders is equivalent to NOI or NROI, based on the premise that depreciation offsets capital expenditures and the company maintains zero percent growth rate in perpetuity.

Guideline Companies

The department selects guideline companies by reviewing the Standard Industrial Classification Code and market segments listed by Value Line Investment Survey. We use the Value Line survey because it is a well-respected, widely used publication.

Value Line classifies companies into more than 90 unique industries and groupings based on their operations, products, customers, and competitors. Value Line constantly evaluates every company tracked in the survey to make sure they are in the proper sector.³⁶

We reviewed companies in the following Value Line industries as possible guideline companies in our market segments:

| Value Line’s Industry | Department’s Market Segment |
|--|-------------------------------|
| Electric Utility (Central, East, and West) | Electric |
| Natural Gas Utility | Gas Distribution |
| Oil/Gas Distribution | Gas Transmission Pipeline |
| Pipeline MLPs | Fluid Transportation Pipeline |
| Railroad | Railroad |

³⁵ Net operating income is an after-tax accounting income before any deductions for interest or dividends.

³⁶ Severo Nieves, (March 2016). Value Line Institutional Services, Institutional Sales & Marketing, Analyst, email.

We reviewed possible guideline companies to compare their market segments to the companies doing business in Minnesota. We generally exclude companies that underwent a merger or acquisition in the previous calendar year and companies that have announced an upcoming merger or acquisition during the current year, unless we determine that those companies are still reflective of the subject companies.

Guideline Company Updates

We updated the list of guideline companies for this study each year, depending on mergers and acquisitions, market activities, and other factors. We summarized this year's changes below. For details on the companies reviewed for each segment, see Guideline Company Selection (page G-1).

Electric Market Segment

We did not include Black Hills Corporation and NorthWestern Energy Group as guideline companies in the 2026 Study due to the pending merger between the two companies.³⁷ The merger is an all-stock merger.

KKR and PSP Investments jointly invested \$2.82 billion for a 19.9% equity interest in American Electric Power (AEP)'s Ohio and Indiana Michigan transmission companies. The 19.9% minority equity interest represents approximately 5% of AEP's total transmission rate base.³⁸ We decided this transaction was not large enough to preclude them from being a guideline company for the 2026 Study. The investment represented a 19.9% minority equity interest.

CenterPoint Energy Inc. completed the sale of its Louisiana and Mississippi natural gas distribution businesses to Bernhard Capital for \$1.2 billion^{39,40} and also announced the sale of its Ohio natural gas business distribution sector to National Fuel Gas Company for \$2.62 billion.⁴¹ We decided these transactions were not large enough to preclude them from being a guideline company for the 2026 Study. The sale to Bernhard Capital represents less than 5% of CenterPoint's market capitalization and the sale to National Fuel Gas Company represents approximately 10% of CenterPoint's market capitalization.

³⁷ <https://ir.blackhillscorp.com/news-releases/news-release-details/black-hills-corp-and-northwestern-energy-combine-all-stock>, accessed 02/04/2026

³⁸ <https://www.prnewswire.com/news-releases/aep-closes-on-transmission-investment-strategic-partnership-with-kr-and-psp-investments-302474559.html>, accessed 02/04/2026

³⁹ <https://investors.centerpointenergy.com/news-releases/news-release-details/centerpoint-energy-completes-sale-its-louisiana-and-mississippi>, accessed 02/04/2026

⁴⁰ <https://investors.centerpointenergy.com/news-releases/news-release-details/centerpoint-energy-announces-sale-its-louisiana-and-mississippi>, accessed 2/17/2026

⁴¹ <https://investors.centerpointenergy.com/news-releases/news-release-details/centerpoint-energy-announces-sale-its-ohio-natural-gas-business>, accessed 02/04/2026

Gas Distribution Market Segment

We did not include Black Hills Corporation and NorthWestern Energy Group as guideline companies in the 2026 Study due to the pending merger between the two companies.⁴² The merger is an all-stock merger.

CenterPoint Energy Inc. completed the sale of its Louisiana and Mississippi natural gas distribution businesses to Bernhard Capital for \$1.2 billion^{43,44} and also announced the sale of its Ohio natural gas business distribution sector to National Fuel Gas Company for \$2.62 billion.⁴⁵ We decided these transactions were not large enough to preclude them from being a guideline company for the 2026 Study. The sale to Bernhard Capital represents less than 5% of CenterPoint's market capitalization and the sale to National Fuel Gas Company represents approximately 10% of CenterPoint's market capitalization.

Northwest Natural Holding Co. completed the acquisition of Hughes Gas Resources from EPCOR USA Inc. during 2025 for \$60 million.⁴⁶ We decided this transaction was not large enough to preclude them from being a guideline company for the 2026 Study. This represents approximately 3% of Northwest Natural Holding Co.'s market capitalization.

We did not include Spire Inc. as a guideline company for the 2026 Study due to the agreement to acquire Tennessee Piedmont Natural Gas from Duke Energy for total consideration of \$2.48 billion.⁴⁷ The consideration is almost 50% of Spire Inc.'s market capitalization.

Gas Transmission Pipeline Market Segment

No changes in guideline company selection from the 2025 Study.

Kinder Morgan Inc. acquired a natural gas gathering and processing system in North Dakota for \$640 million.⁴⁸ We decided this transaction was not large enough to preclude them from being a guideline company for the 2026 Study. The purchase price is approximately 1% of Kinder Morgan Inc.'s market capitalization.

⁴² <https://ir.blackhillscorp.com/news-releases/news-release-details/black-hills-corp-and-northwestern-energy-combine-all-stock>, accessed 02/04/2026

⁴³ <https://investors.centerpointenergy.com/news-releases/news-release-details/centerpoint-energy-completes-sale-its-louisiana-and-mississippi>, accessed 02/04/2026

⁴⁴ <https://investors.centerpointenergy.com/news-releases/news-release-details/centerpoint-energy-announces-sale-its-louisiana-and-mississippi>, accessed 2/17/2026

⁴⁵ <https://investors.centerpointenergy.com/news-releases/news-release-details/centerpoint-energy-announces-sale-its-ohio-natural-gas-business>, accessed 02/04/2026

⁴⁶ <https://www.businesswire.com/news/home/20250603972017/en/NW-Natural-Holdings-Closes-Acquisition-of-Texas-Natural-Gas-Utility>, accessed 02/04/2026

⁴⁷ <https://www.prnewswire.com/news-releases/spire-to-acquire-tennessee-piedmont-natural-gas-business-from-duke-energy-302515375.html>, accessed 02/04/2026

⁴⁸ <https://ir.kindermorgan.com/news/news-details/2025/Kinder-Morgan-Closes-on-640-Million-Acquisition-of-a-Natural-Gas-Gathering-and-Processing-System-From-Outrigger-Energy-II/default.aspx>, accessed 2/11/2026

ONEOK Inc.'s acquisition of EnLink Midstream LLC was completed on January 30, 2025 for \$4.3 billion in ONEOK common stock.^{49,50} We decided this transaction was not large enough to preclude them from being a guideline company for the 2026 Study. The acquisition reflects approximately 7% of ONOK Inc.'s market capitalization.

Fluid Transportation Pipeline Market Segment

No changes in guideline company selection from the 2025 Study.

Enterprise Products Partners LP completed the acquisition of Occidental's natural gas gathering affiliate in the Permian Basin in August 2025 in a debt-free transaction for \$580 million in cash consideration.⁵¹ We decided this transaction was not large enough to preclude them from being a guideline company for the 2026 Study. The transaction represents less than 1% of Enterprise Products Partners LP's total market capitalization.

MPLX LP finalized the \$2.375 billion acquisition of Northwind Delaware Holdings LLC during 2025, expanding their services in the natural gas liquids value chains.⁵² We decided this transaction was not large enough to preclude them from being a guideline company for the 2026 Study. The acquisition cost represents approximately 5% of MPLX LP's market capitalization.

Plains All American Pipeline LP completed the acquisition of 100% equity interest of EPIC in 2025 for approximately \$2.9 billion over two transactions^{53,54}. This acquisition represents less than 25% of total market capitalization. We decided this transaction was not large enough to preclude them from being a guideline company for the 2026 Study.

Railroad Market Segment

No changes in guideline company selection from the 2025 Study.

On July 29, 2025, Union Pacific Corporation and Norfolk Southern Corporation announced an agreement for merger where Union Pacific would acquire Norfolk Southern in a stock and cash transaction, representing a 25% premium to Norfolk Souther's trading weighted average price.⁵⁵ Union Pacific shareholders approved the merger on November 15, 2025.⁵⁶ The railroads filed an application with the Surface Transportation Board requesting approval of the merger on December 19, 2025.⁵⁷ On

⁴⁹ <https://ir.oneok.com/news-and-events/press-releases/2025/01-31-2025-140247526>, accessed 02/04/2026

⁵⁰ <https://ir.oneok.com/news-and-events/press-releases/2024/11-25-2024-020325625>, accessed 2/17/2026

⁵¹ <https://ir.enterpriseproducts.com/news-releases/news-release-details/enterprise-completes-acquisition-occidentals-natural-gas>, accessed 02/05/2026

⁵² <https://ir.mplx.com/CorporateProfile/press-releases/news-release/2025/MPLX-LP-Closes-Northwind-Midstream-Acquisition/default.aspx>, accessed 02/05/2026

⁵³ <https://ir.plains.com/news-releases/news-release-details/plains-all-american-reports-third-quarter-2025-results-and>, accessed, 02/05/2025

⁵⁴ <https://ir.plains.com/news-releases/news-release-details/plains-acquire-55-interest-epic-crude-holdings-lp>, accessed 2/17/2026

⁵⁵ <https://www.up.com/press-releases/growth/norfolk-southern-transcontinental-nr-250729>

⁵⁶ <https://www.up.com/press-releases/financial/shareholders-approve-ns-merger-251114>

⁵⁷ <https://www.up.com/press-releases/growth/stb-merger-application-enhances-competition-251219>

January 16, 2026, the Surface Transportation Board found the application as incomplete and provided the applicants may submit a revised application under the same docket (Docket No. 36873).⁵⁸

We included both Union Pacific Corporation and Norfolk Southern Corporation as guideline companies, determining the pending merger⁵⁹ did not result in a significant change in financials as of the assessment date.

Market Rate of Equity

We used the capital asset pricing model (CAPM) and dividend growth model (DGM) to determine the market rate of equity for each market segment.

We selected the market rate of equity for each market segment after considering six different CAPMs, six different empirical capital asset pricing models (ECAPMs), and two different DGMs. The models allowed us to establish a range of acceptability.

In the past, regulated companies have asked us to consider the allowed return on equity set by regulators. While regulators establish a maximum allowed rate of return for a specific company, we estimate the cost of equity for each market segment.

Capital Asset Pricing Model (CAPM)

The CAPM is based on the theory that all investors will independently optimize their portfolios. The expected return on an asset is related to its risk. We used this model to determine the market rate of equity. For the risk-free rate in the CAPM, we use the U.S. Treasury 20-year coupon bond yield. We also use a market-specific beta calculated with data from the Value Line Investment Survey.

A recent study by Décaire and Graham (2024) found that 96.8% of analysts rely on the capital asset pricing model to estimate the cost of equity.⁶⁰

The CAPM is based on the following assumptions, according to Shannon Pratt and Roger Grabowski⁶¹:

1. Investors are risk averse.
2. Rational investors seek to hold efficient portfolios (portfolios that are fully diversified).
3. All investors have identical investment time horizons (expected holding periods).
4. All investors have identical expectations about such variables as expected rates of return and how discount rates are generated.
5. There are no transaction costs.
6. There are no investment-related taxes, but there may be corporate income taxes.
7. The rate received from lending money is the same as the cost of borrowing money.

⁵⁸ Surface Transportation Board Decision (1/16/2026), Docket No. 36873. Decision ID 52819.

⁵⁹ <https://www.up.com/press-releases/growth/norfolk-southern-transcontinental-nr-250729>

⁶⁰ Décaire, Paul and Graham, John, (2024). *Valuation Fundamentals*, Hong Kong University Business School., page 4.

⁶¹ Pratt, Shannon and Grabowski, Roger, (2014). *Cost of Capital Applications and Examples*, 5th Ed., Page 199

8. The market has perfect divisibility and liquidity (investors can readily buy or sell any desired fractional interest).

Risk-Free Rate

The risk-free rate reflects the actual market conditions as of the January 2, 2026, property assessment date. We used a risk-free rate of 4.81% for this study.⁶² This rate includes inflation expectations.^{63, 64}

Beta

The beta⁶⁵ selected for each market segment indicates the segment’s systematic risk relative to the market. The betas for each guideline company come from the Value Line Investment Survey. Value Line derives its beta coefficient from regression analysis of the weekly percentage changes in the price of stock and weekly percentage changes in the New York Stock Exchange Composite Index over a period of five years. Value Line adjusts betas to account for their long-term tendency to converge toward one.⁶⁶ The adjusted betas are based on the theory that, over time, there is a tendency on the part of betas of all companies to move toward one. Firms that survive in the market tend to increase in size over time, become more diversified and have more assets in place, producing cash flows. All these factors push betas toward one.⁶⁷

We used the Hamada formula to analyze the effects of un-levering and re-levering guideline companies’ betas for the selected capital structure for each market segment, with one exception.⁶⁸ First, we unlevered the beta for each guideline company using the company-specific components:

$$\text{Unlevered beta} = \text{Levered beta} / [1 + (1 - \text{Tax Rate}) \times (\text{Debt} / \text{Equity})].$$

Next, we re-levered the beta for each guideline company using the average tax rate and the selected capital structure for the market segment:

$$\text{Re-levered beta} = \text{Unlevered Beta} \times [1 + (1 - \text{Tax Rate}) \times (\text{Debt} / \text{Equity})].⁶⁹$$

⁶² The daily observations rate for 20-year U.S. Treasury coupon bonds was 4.81% as of January 2, 2026.

⁶³ Preparing for AICPA’s Valuation Principles Examination Review (2016). Page 4-6.

⁶⁴ Pratt, Shannon and Grabowski, Roger, (2010). *Cost of Capital Applications and Examples*, 4th Ed., Pages 96-97

⁶⁵ “Beta is the measure of sensitivity of a stock’s return to the return on the market portfolio.” (p. 340) Brealey, Myers, & Marcus (2009) *Fundamentals of Corporate Finance* 6th ed. McGraw-Hill/Irwan, New York, New York. ISBN 978-0-07-338230.

⁶⁶ Value Line. (2012). Using Beta. Retrieved January 27, 2021 from https://www.valueline.com/Tools/Educational_Articles/Stocks/Using_Beta.aspx#.YBG5ZDSSmUk

⁶⁷ Damodaran, A. (n.d.). Estimating Risk Parameters. Retrieved January 27, 2021 from <http://people.stern.nyu.edu/adamodar/pdfiles/papers/beta.pdf>

⁶⁸ Guideline companies in the Fluid Transportation Pipeline market segment are limited partnerships and the income tax liability is “passed-through” to the shareholders. Therefore, the Hamada formula, which includes a component for income taxes is not applicable.

⁶⁹ Pratt, Shannon and Grabowski, Roger, (2010). *Cost of Capital Applications and Examples*, 4th Ed., Pages 188-189

See each market segment’s Beta Analysis page in the appendices for more information on how we arrived at the indicated beta.

The average and median beta for each market segment decreased from the previous year. Some decreases were significant. saw a relatively significant decrease in their beta. This led to the overall electric market segment beta decrease in our analysis.

Electric

| Company | 2026 | 2025 |
|----------------------------------|-------------|-------------|
| Alliant Energy Corp. | 0.80 | 0.90 |
| Ameren Corp. | 0.80 | 0.90 |
| American Electric Power Co. Inc. | 0.70 | 0.85 |
| Black Hills Corp. | N/A | 1.05 |
| CenterPoint Energy Inc. | 0.80 | 1.15 |
| CMS Energy Corp. | 0.70 | 0.85 |
| DTE Energy Company | 0.80 | 1.00 |
| Eergy Inc. | 0.75 | 0.95 |
| MGE Energy Inc. | 0.80 | 0.85 |
| Northwestern Corp. | N/A | 1.00 |
| OGE Energy Corp. | 0.85 | 1.05 |
| Otter Tail Corp. | 0.90 | 0.95 |
| WEC Energy Group | 0.65 | 0.85 |
| Xcel Energy Inc. | 0.70 | 0.85 |
| Average | 0.77 | 0.94 |
| Median | 0.80 | 0.93 |

Gas Distribution

| Company | 2026 | 2025 |
|---------------------------------|------|------|
| Atmos Energy Corp. | 0.75 | 0.90 |
| Black Hills Corp. | N/A | 1.05 |
| CenterPoint Energy Inc. | 0.80 | 1.15 |
| Chesapeake Utilities | 0.70 | 0.85 |
| CMS Energy Corp. | 0.70 | 0.85 |
| MGE Energy Inc. | 0.80 | 0.85 |
| New Jersey Resources Corp. | 0.75 | 1.00 |
| NiSource Inc. | 0.85 | 0.95 |
| Northwest Natural | 0.75 | 0.85 |
| ONE Gas Inc. | 0.75 | 0.85 |
| Southwest Gas Holdings Inc. | 0.75 | 0.95 |
| Spire Inc. / Laclede Group Inc. | N/A | 0.90 |
| WEC Energy Group | 0.65 | 0.85 |

| | | |
|----------------|-------------|-------------|
| Average | 0.75 | 0.92 |
| Median | 0.75 | 0.90 |

Gas Transmission Pipeline

| Company | 2026 | 2025 |
|-------------------------|-------------|-------------|
| DT Midstream Inc. | 0.95 | 0.95 |
| Enbridge Inc. | 0.70 | 0.85 |
| Kinder Morgan Inc. | 1.00 | 1.15 |
| ONEOK Inc. | 1.30 | 1.50 |
| Pembina Pipeline Corp. | 0.80 | 1.05 |
| TC Energy Corp. | 0.90 | 1.05 |
| Williams Companies Inc. | 0.95 | 1.10 |
| Average | 0.94 | 1.09 |
| Median | 0.95 | 1.05 |

Fluid Transportation Pipeline

| Company | 2026 | 2025 |
|---------------------------------|-------------|-------------|
| Energy Transfer LP | 1.10 | 1.10 |
| Enterprise Products Partners LP | 0.90 | 1.00 |
| MPLX LP | 0.90 | 0.95 |
| Plains All American Pipeline LP | 1.15 | 1.40 |
| Average | 1.01 | 1.11 |
| Median | 1.00 | 1.05 |

Railroad

| Company | 2026 | 2025 |
|-----------------------------------|-------------|-------------|
| Canadian National Railway | 0.95 | 0.90 |
| Canadian Pacific Kansas City Ltd. | 0.95 | 0.95 |
| CSX Corp. | 1.00 | 1.00 |
| Norfolk Southern Corp. | 1.00 | 1.05 |
| Union Pacific Corp. | 0.95 | 1.00 |
| Average | 0.97 | 0.98 |
| Median | 0.95 | 1.00 |

Equity Risk Premium

The equity risk premium, as defined by Pratt and Grabowski, is the extra return over the expected yield on risk-free securities that investors expect to receive from an investment in a diversified portfolio of

common stocks.⁷⁰ Bradford Cornell has a similar definition for the equity risk premium, noting it is the difference between the return on common stock and the return on government securities.⁷¹ The equity risk premium should reflect what investors think the risk premium will be going forward. Despite extensive research on the equity premiums, economists' estimate of its value differ widely.⁷²

As provided by Damodaran, "Broadly speaking, there are two ways of estimating equity risk premiums, with the first being a historical premium estimated by looking at the difference between past returns on stocks and the risk-free investment and the second being a forward-looking estimate, where you back out from stock prices what investors are building in as an expected return on stocks in the future."⁷³

The equity risk premium is notoriously difficult to estimate as it changes over time and historical estimates mix apples and oranges because different time periods have different equity risk premiums. One way to combat this is to use short historical time periods to estimate the equity risk premium to limit the impact of the changes. Unfortunately, estimates of the equity risk premiums using estimation periods even as long as a decade do not result in meaningful statistical conclusions. A better approach is to estimate the implied equity risk premium.⁷⁴

If you assume the market, in aggregate, is correct, you should use the implied equity risk premium. For these reasons, we placed more weight than in previous years on Damodaran's implied equity risk premium used in the capital asset pricing models for each market segment in the 2026 Study.

As provided by Damodaran, "The problem with any historical premium approach, even with substantial modifications, is that it is backward looking. Given that our objective is to estimate an updated, forward-looking premium, it seems foolhardy to put your faith in mean reversion and past data"⁷⁵ Damodaran also states, "The advantage of the implied premium approach is that it is market-driven and current and does not require any historical data".⁷⁶

Damodaran commented on the use of a historical risk premium versus an implied risk premium early in 2018:

⁷⁰ Pratt, Shannon and Grabowski, Roger, (2010). *Cost of Capital Applications and Examples*, 4th Ed., Pages 115-116

⁷¹ Cornell, Bradford, (1999). *The Equity Risk Premium*, Page 18

⁷² Tetlock, P. C. (April 2023). The Implied Equity Risk Premium. Columbia School of Business, 1.

⁷³ Damodaran, Aswath, Dr. (April 2016). *The Cost of Capital: The Swiss Army Knife of Finance*, Page 11. Retrieved from <http://people.stern.nyu.edu/adamodar/pdfiles/papers/costofcapital.pdf>

⁷⁴ Cornell, B., Cornell, S., & Cornell, A. (2024, May). Structural Change and Valuation: Implications for Future Stock Returns. Retrieved from Cornell Capital Group: <https://www.cornell-capital.com/wp-content/uploads/2024/05/Structural-Change-and-Valuation.pdf>

⁷⁵ Damodaran, A. (March, 2025). Equity Risk Premiums (ERP): Determinants, Estimation, and Implications - The 2025 Edition, page 90. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5168609

⁷⁶ Damodaran, A. (March, 2025). Equity Risk Premiums (ERP): Determinants, Estimation, and Implications - The 2025 Edition, page 119. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5168609

While it is tempting to continue to dissect last year's numbers, it is healthier to turn our attention to the future. It is why I have increasingly moved away from using historical risk premiums, like the 4.77% premium that I computed by looking at the 1928-2017 return table, and towards implied equity risk premiums, where I back out what investors are demanding as a premium for investing in stocks by looking at how much they pay for stocks and what they expect to generate as cash flows. (Think of it as an IRR for stocks, analogous to the yield to maturity on a bond). At the start of 2018, putting this approach into play, I estimated an equity risk premium of 5.08% for the S&P 500.⁷⁷

Damodaran has again commented regarding the use of the implied risk premium over the historical risk premium stating that:

The argument for using implied risk premiums is not that they are precise, but that they come with far less estimation error than historical risk premiums.⁷⁸

As provided by Pratt and Grabowski, "There is no one universally accepted method for estimate the ERP [equity risk premium]. A wide variety of premiums are used in practice and recommended by academics and financial advisors."⁷⁹

Using a forward-looking equity risk premium fits with the forward-looking nature of the capital asset pricing model. In addition, forward-looking equity risk premia more stable with lower standard deviations than ex post market risk premia.⁸⁰

We reviewed a few different calculations of the equity risk premium:

Three-Stage Ex Ante (2.98%)

This is a forward-looking CAPM model that uses a three-stage dividend growth model of the S&P 500 to estimate the equity risk premium.⁸¹ According to Ibbotson, "One of the advantages of a three-stage discounted cash flow model is that it fits with the life cycle theories in regard to company growth."⁸² In the three-stage model:

1. The first stage uses the short-term growth estimate of the S&P 500
2. The second stage applies a linear decline in the growth rate until reaching the long-term expected growth rate of the U.S. economy

⁷⁷ Damodaran, A. January 2018 Data Update 2: The Buoyancy of US Equities. January 9, 2018.

<https://aswathdamodaran.blogspot.com/2018/01/january-2017-data-update-2-buoyancy-of.html>

⁷⁸ Damodaran, A. (March, 2025) *Equity Risk Premiums (ERP): Determinants, Estimation, and Implications - The 2025 Edition*, Page 104. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5168609

⁷⁹ Pratt, Shannon and Grabowski, Roger, (2010). *Cost of Capital Applications and Examples*, 4th Ed., Page 113

⁸⁰ Nicado-Cuyugan, J., & Phipps, R., (n.d.). *Forward-Looking Market Risk Premiums (1992-2020) and Macroeconomic Factors: Inflation, real GDP, stock market volatility and term spread*. Public Utilities Fortnightly. Accessed 4/9/2025 from <https://www.fortnightly.com/white-papers/capm-market-risk-premium-forward-looking>.

⁸¹ See Appendix F for this calculation.

⁸² Ibbotson, *S&P 500 valuation yearbook*, page 51

3. The third stage uses the long-term expected growth rate of the U.S. economy

We received suggestions for completing a single-stage ex ante calculation. Applying the short-term growth rate (17.37%)⁸³ to a single-stage model would imply that the S&P 500 will continue to grow at 17.37% in perpetuity. A single-stage ex ante calculation should not use a short-term growth rate, rather a long-term, sustainable growth rate. Financial theory suggests that the sustainable growth rate used in a single-stage model cannot exceed the long-term growth rate of the economy as a whole. Therefore, we do not complete a single-stage ex ante calculation.

Damodaran (4.23%)

This is an implied equity risk premium as calculated by Damodaran, Professor of Finance at the Stern School of Business at New York University.⁸⁴ Damodaran calculates a forward-looking equity risk premium by using expected cash flows in the future, and what investors are paying for those cash flows today, making them forward looking.⁸⁵ The implied equity risk premium adjusts to market data and assumes the market is correct in the aggregate.

The CFO Survey (5.61%)

This survey is issued by Duke University's Fuqua School of Business and the Federal Reserve Banks of Richmond and Atlanta. It was fielded from November 11 to December 1, 2025. The annual survey polls CFOs of both public and private companies around the globe. According to the survey results indicate that respondents of the survey expect that the average annual S&P 500 return will be 9.9% over the next ten years.⁸⁶ This is paired with the annual yield on 10-year Treasury Bonds of 4.29%.⁸⁷ Graham & Harvey also published a paper regarding The CFO Survey. They state, "The hurdle rates⁸⁸ are significantly higher than the cost of capital implied by the market risk premium estimates." "Given capital constraints, firms often impose a higher hurdle rate on their investment. For example, to allocate capital to an investment that promises a projected return exactly at a firm's WACC [weighted average cost of capital] is equivalent to accepting a zero net present value project."⁸⁹

Fernandez, Garcia, and Acin (5.5%)

This is a forward-looking equity risk premium based on surveys of finance and economics professors, analysts and managers of companies and their opinion of the required market risk

⁸³ S&P 500 Earnings and Estimate Report dated 1/16/2026, <https://www.spglobal.com/spdji/en/indices/equity/sp-500/#overview>

⁸⁴ Damodaran, Aswath (2026). Implied Equity Risk Premium on January 5, 2026. Retrieved on January 22, 2026 from <http://pages.stern.nyu.edu/~adamodar/>

⁸⁵ Damodaran, Aswath (2025). Equity Risk Premiums (ERP): Determinants, Estimation, and Implications - The 2025 Edition Updated: March 5, 2025, Page 104. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4751941

⁸⁶ The CFO Survey (2026). Retrieved January 22, 2026 from https://www.richmondfed.org/research/national_economy/cfo_survey

⁸⁷ The annual yield for 10-year U.S. Treasury coupon bonds was 4.29% for 2025.

⁸⁸ Companies use hurdle rates to evaluate and make decisions about investments or projects to undertake.

⁸⁹ Graham, J. R., and Harvey, C. R. (28 March 2018). *The Equity Risk Premium in 2018*. SSRN Electronic Journal. doi:10.2139/ssrn.3155709

premium in different countries, performed annually. The equity risk premium of 5.5% is paired with an average risk free rate of 4.1% for a total required return of 9.6%.⁹⁰

Business Valuation Resources, Historical, Arithmetic Mean (6.78%)

Business Valuation Resources provides a historical equity risk premium calculated using an arithmetic mean of the S&P 500 average annual less the 20-year Treasury bond average annual return for the period of 1928 to present. Sourced from the Center for Research in Security Prices.⁹¹

Business Valuation Resources, Historical, Geometric Mean (5.54%)

Business Valuation Resources provides a historical equity risk premium calculated using a geometric mean of the S&P 500 average annual less the 20-year Treasury bond average annual return for the period of 1928 to present. Sourced from the Center for Research in Security Prices.⁹²

Geometric Versus Arithmetic Averages

The arithmetic rate of return is a simple average of annual returns. The geometric rate of return considers cash flows generated during the security's holding period to be reinvested at the security's required rate of return. In general, the lower the returns, the greater is the disparity between the two averages.⁹³ As provided by Damodaran, "the geometric mean is more appropriate if you are using the Treasury bond rate as your risk-free rate, have a long time horizon and want to estimate the expected return over that long time horizon."⁹⁴ A study by Jacquier, Kane, and Marcus analyzed the arithmetic and geometric returns and found that, "unbiased estimates of future portfolio value require that the current value be compounded forward at a weighted average of the arithmetic and geometric rates." They continue, "As the horizon approaches the length of the estimate period, the weight on the geometric average approaches 1. For even longer horizons, both the geometric and arithmetic average forecasts will be upwardly biased."⁹⁵

⁹⁰ Fernandez, P., Garcia T., and Acín, J. F. (May 2025). *Survey: Market Risk Premium and Risk-Free Rate Used for 54 Countries in 2025*: SSRN Electronic Journal. <https://ssrn.com/abstract=5260463>

⁹¹ Business Valuation Resources. (2026). *Cost of Capital Platform*. Historical Equity Risk Premium (20-Year T-Bond) – for Period 1928-2025), Arithmetic Average. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>

⁹² Business Valuation Resources. (2026). *Cost of Capital Platform*. Historical Equity Risk Premium (20-Year T-Bond) – for Period 1928-2025), Geometric Average. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>

⁹³ Hirt, G., Block, S., & Basu, S. (2006). *Investment Planning for Financial Professionals*. McGraw-Hill, New York, New York. ISBN 0-07-132721-5

⁹⁴ Damodaran, A. Discussion Issues and Derivations. Retrieved January 27, 2021 from http://people.stern.nyu.edu/adamodar/New_Home_Page/AppldCF/derivn/ch4deriv.html

⁹⁵ Jacquier, E., Kane, A., & Marcus, A. (2003). Geometric or Arithmetic Mean: A Reconsideration. *Financial Analysts Journal*, 59(6), 46–53. Retrieved January 27, 2021 from <https://doi.org/10.2469/faj.v59.n6.2574>

This formula calculates the market rate of equity using the capital asset pricing model (CAPM).

$$\text{Market Rate of Equity for Market Segment} = (RP_e \times \beta) + R_f$$

| Key – Variables in Equations | |
|------------------------------|---------------------|
| RP_e | Equity risk premium |
| R_f | Risk-free rate |
| β | Beta |

Empirical Capital Asset Pricing Model

The empirical capital asset pricing model (ECAPM) is a modification of the CAPM. The ECAPM applies 25% weight to the equity risk premium component and 75% weight to the beta times the equity risk premium component. This reduces the sensitivity of the cost of equity estimate to changes in the beta coefficient.

According to Steven Kihm, Andrew Satchwell, and Peter Cappers, the model “mutes the sensitivity of the cost of equity estimate to changes in the beta coefficient, consistent with the adjustment suggested by the empirical research.”⁹⁶

This formula calculates the market rate of equity using the ECAPM.

$$\text{Market Rate of Equity for Market Segment} = (RP_e \times \beta \times 75\%) + (RP_e \times 25\%) + R_f$$

We completed ECAPM models for each market segment, using the equity risk premiums described in the Capital Asset Pricing Model section.

Dividend Growth Model (DGM)

The DGM is based on the theory that the prices paid for a share of stock reflect the investors’ discounted present value of future expected earnings.⁹⁷ The DGM is also called the Discounted Cash Flows (DCF) model or Gordon growth model.

Theoretically, the growth estimate in the DGM is the estimated growth in dividends, which are cash flows to equity shareholders after reinvestment. Dividend growth estimates may track earnings growth estimates. However, companies may change dividend payment policies drastically, resulting in large differences between earnings growth estimates and dividend growth estimates.

A consensus based on substantial academic literature indicates analysts’ expectations of earnings take account of all the information provided by more formulaic forecasting rules and incorporate other information as well. “Based on these findings, the most common solution is to assume that the dividend payout rate remains effectively constant and to use analyst forecasts of earnings growth as a proxy for the growth rate of dividends.”⁹⁸

⁹⁶ Kihm, Steven; Satchwell, Andrew; and Cappers, Peter. *The Financial Impacts of Declining Investment Opportunities on Electric Utility Shareholders*, Electricity Markets & Policy Group, Technical Brief, Page 20

⁹⁷ Western States Association of Tax Administrators (2009). *Appraisal Handbook – Unit Valuation of Centrally Assessed Properties*, Page III-20

⁹⁸ Cornell, Bradford, (1999). *The Equity Risk Premium*, Page 105

Another issue that leads us to question the usefulness and reliability of the dividend growth rate in this model is the trend for U.S. companies to include stock buybacks in their dividend payment policies. We discuss this in detail in the Stock Buybacks section. The formula uses dividend yield (DY), which is next year’s expected dividends per share divided by the current market price per share of stock, plus an estimate of growth. We reviewed both dividend and earnings growth models.

| Key – Variables in Equations | |
|------------------------------|-----------------|
| DY | Dividend Yield |
| DG | Dividend Growth |
| EG | Earnings Growth |

Dividend Growth (DG), analysts’ estimates of dividend growth is used in the model:

$$\text{Market Rate of Equity for Market Segment} = \text{DY} + \text{DG}$$

Earnings Growth (EG), analysts’ estimates of earnings growth is used in the model:

$$\text{Market Rate of Equity for Market Segment} = \text{DY} + \text{EG}$$

Another formulaic expression of the dividend growth model is:

$$K_E = D_1 / P_0 + G_1$$

In this expression, we estimate the cost of equity by taking the dividend yield (expected dividends in the next period divided by the recent stock price) plus expected growth. This model is the same model as the simplified discounted cash flows income model that we referred to as the stable growth yield capitalization, mentioned previously. The stable growth yield capitalization formula is:

$$\text{Value} = \text{NCF}_1 / (Y_0 - g)$$

Instead of solving for value as the stable growth yield capitalization model does, the DGM solves for cost of equity.

| Key – Variables in Equations | |
|------------------------------|--|
| K_E | Cost of Equity |
| D₁ | Expected Dividends |
| P₀ | Recent Stock Price |
| G₁ | Projected 5-year Growth Rate |
| Y₀ | Yield Rate for Current Assessment Period |
| g | Stable Growth |
| NCF₁ | Net Cash Flows for Next Period |

Value Line Investment Survey provides analysts’ estimates of change in earnings and dividends from 2022-2024 to 2028-2030. However, these growth estimates are short-term and would be applied to a perpetuity model.

The growth rate used in this single-stage DGM is a short-term growth rate, which is typically much higher than the growth rate of the U.S. economy. It is not possible for a company to grow at a growth rate higher than the U.S. economy in the long-term. Pratt and Grabowski state, “Long-term growth rates exceeding the real growth in GDP (Gross Domestic Product) plus inflation are generally not sustainable.”⁹⁹

⁹⁹ Pratt, Shannon and Grabowski, Roger, (2010). *Cost of Capital Applications and Examples*, 4th Ed., Page 681

In an article published by Cornell and Gerger, “Long-term growth rates play a central role in all discounted cash flow models. This is true whether the goal is to estimate the value of a company or to estimate the cost of equity. It is well recognized as a matter of mathematics, although not always incorporated in practice, that the long-term expected growth cannot exceed the growth rate of the aggregate economy. What is less widely appreciated is that as an empirical matter the long-term growth rates for existing companies, that is companies that are being appraised or whose cost of equity is being estimated, are almost certain to be less than the growth rate of the aggregate economy.”

Cornell and Gerger’s article goes on to say, “The bottom line is that when employing a DCF model to value a company, or when using the dividend growth model to estimate the cost of equity capital, the growth rate of the economy should be thought of as a ceiling, not a floor on long-term growth in earnings and dividends. In the long run, existing companies fade, and new enterprises account for much of the growth in aggregate earnings and profits. Therefore, although the short- or medium-term expected growth rates for an existing company may be relatively high, in very few instances is it reasonable to assume that the long-run growth rate for an existing company will match the long-run growth rate of GDP.”¹⁰⁰

As a result of the mismatched assumptions for growth, we no longer complete a single-stage dividend growth model. We, instead, develop two-stage and three-stage dividend growth models.

Two-Stage Dividend Growth Model

We completed a two-stage dividend growth model (two-stage DGM) to account for the short-term growth estimates available. Unlike the model discussed in the previous section, the two-stage DGM assumes that growth is not constant. This allows us to use analysts’ short-term growth estimates, a transition period where the short-term growth estimates adjust to the long-term, sustainable growth estimate, and then a period of long-term sustainable growth.

David Parcell (2010) provides the following multi-stage DGM formula in *The Cost of Capital – A Practitioner’s Guide*, published by the Society of Utility and Regulatory Financial Analysts:

$$K_E = (DY \times (1 + 0.5(G))) + 0.67(G_1) + 0.33(g)$$

See each market segment’s Two-Stage Dividend Growth Model page in the appendices for more information on how we derived the indicated rate.

| Key – Variables in Equations | |
|------------------------------|---------------------------------|
| K_E | Cost of Equity |
| DY | Dividend Yield |
| G₁ | Projected 5-year Growth Rate |
| G | Average of G ₁ and g |
| g | Stable Growth |

¹⁰⁰ Cornell, Bradford; Gerger, Richard, (2022). Long-term Growth Rates in Discounted Cash Flow Models. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4047338

Three-Stage Dividend Growth Model

We completed a three-stage dividend growth model (three-stage DGM) to account for the short-term growth estimates available. This model uses the analysts' short-term growth estimates for a period of five years, a period of 10 years where the short-term growth reverts to the long-term sustainable growth, and a period of 100 years, where the dividends are grown at the long-term sustainable growth rate of the U.S. economy. We use the internal rate of return function utilizing the calculated, expected dividends and the current price of the stock.

As provided by Dr. Damodaran, "In the long term, the real riskless rate will converge on the real growth rate of the economy and the nominal riskless rate will approach the nominal growth rate of the economy.... A simple rule of thumb on the stable growth rate is that it should not exceed the riskless rate used in the valuation".¹⁰¹

The final stage of a company life cycle is the relative decline stage. If a company does not move into a relative decline stage, then their constant growth rate must not be greater than the growth rate of the overall economy. Assuming a growth rate equal to the growth rate of the overall economy is conservative.

This model is similar to the three-stage dividend growth model we use to calculate the ex-ante equity risk premium used in the capital asset pricing models.

The market segment appendices include a detailed calculation of the three-stage dividend growth model for each guideline company.

Stock Buybacks

A company's net income represents income that the company can reinvest or distribute to its owners.¹⁰² Dividends are often considered the primary approach for publicly traded firms to return cash or assets to their shareholders. However, companies can also return cash to their stockholders through stock buybacks – buying back outstanding stock in the firm and reduce the number of shares outstanding.¹⁰³

Because a company cannot act as its own shareholder, it absorbs repurchased shares, reducing the number of outstanding shares on the market. This increases the relative ownership stake of each investor because there are fewer shares, or claims, on the company earnings.

For the 12-month September 2025 period, buybacks for the S&P 500 surpassed \$1 trillion for the second time, the first time was for the 12-months ending June 2022 with \$1.005 trillion. S&P 500 Q3 were \$249.0 billion, as the expenditure increased 9.9% from Q3 2024. Q4 2025 expenditures are

¹⁰¹ Damodaran, A. Chapter 2, Intrinsic Valuation, Page 32, Retrieved from <http://people.stern.nyu.edu/adamodar/pdfiles/DSV2/Ch2.pdf>

¹⁰² Keown, Arthur; Martin, John; and Petty, J., (2014). *Foundations of Finance: The Logic and Practice of Financial Management*, 8th Ed., Page 53

¹⁰³ Damodaran, Aswath, Dr. (2015). *Applied Corporate Finance*, 4th Ed., Page 439

expected to post similar growth to the Q3 2025 period.¹⁰⁴ According to S&P Global, the stock buybacks for the S&P 500 in 2024 were \$942.5 billion, up from \$795.2 billion in 2023.¹⁰⁵ According to Goldman Sachs strategists, stock buybacks in 2022 were at \$950 billion and decreased to \$815 billion in 2023. Stock buybacks remain a prevalent strategy among companies to return cash to its shareholders.

Given the trend of U.S. companies to include stock buybacks in their dividend payment policies, we prefer the use of an earnings-growth DGM in part due to stock buyback policies.

Build-Up Model

The build-up model¹⁰⁶ is another model used to estimate the market rate of equity. Some view this as a version of the CAPM without specifically incorporating systematic risk.¹⁰⁷ The CAPM assumes that the risk premium portion of a security's expected return is a function of that security's systematic risk.¹⁰⁸

An investor can diversify their portfolio to remove unsystematic risk (market segment-specific risk). Systematic risk (market risk) is the risk related to an investment return that cannot be eliminated through diversification.¹⁰⁹

In the build-up model, the market rate of equity for the market segment equals the risk-free rate plus the equity risk premium plus the risk specific to the market segment for unsystematic risk.

$$\text{Market rate of equity for Market Segment} = R_f + RP_e + RP_u$$

When the inputs are not available for the CAPM, one can use the Build-Up Model. We were able to complete the CAPM for each market segment and did not need to resort to using the Build-Up Model.

Market Rate of Debt

The department used the Corporate Bond Yield Averages for Public Utility Bonds from Mergent Bond Record to estimate the market rate of debt for each company used as a guideline company for the Electric, and Gas Distribution market segments. We used the Corporate Bond Yield Averages for Industrial Bonds from Mergent Bond Record to estimate the market rate of debt for each company used as a guideline company for the Gas Transmission Pipeline, Fluid Transportation Pipeline, and Railroad market segments.

¹⁰⁴ S&P Dow Jones Indices. (2025). December 18, 2025, Press Release. Retrieved 2/12/2025 from <https://www.spglobal.com/spdji/en/documents/index-news-and-announcements/20251218-sp-500-buyback-q3-2025.pdf>

¹⁰⁵ S&P Global (2025). "S&P 500 Q4 Buybacks Increase 7.4% and 2024 Expenditures Sets New Record...". <https://press.spglobal.com/2025-03-19-S-P-500-Q4-2024-Buybacks-Increase-7-4-and-2024-Expenditure-Sets-New-Record-by-Increasing-18-5-Earnings-Per-Share-Increases-from-Buybacks-Divide-for-the-Quarter,-as-Q1-2025s-Impact-is-Expected-to-Increase#:~:text=Key%20Highlights%3A,June%202022%20with%20%241.005%20trillion.>

¹⁰⁶ Some have referred to this model as a Risk Premium Model.

¹⁰⁷ Pratt, Shannon and Grabowski, Roger, *Cost of Capital Applications and Examples*, 4th Ed., Page 102 (2010)

¹⁰⁸ Ibid, p. 105

¹⁰⁹ Keown, Arthur; Martin, John; and Petty, J., *Foundations of Finance: The Logic and Practice of Financial Management*, 8th Ed., (2014). Page 195

See each market segment’s Indicated Rate of Debt page for more information on how the department arrived at the indicated rate of debt.

Market Rate of Preferred Stock

Preferred stock makes up a minimal percentage of the capital structure for all market segments. The amount of capital structure attributable to preferred stock was not materially significant and was not included in indicated capital structure for each market segment.

Direct Capitalization Rate (Direct Rate)

Appraisers use direct capitalization to convert an estimate of a single year’s net operating income expectancy into an indication of value in one direct step.¹¹⁰

The direct rate (D_0) is an expression of the market observed relationship between price and income.

The direct capitalization rate is often best developed by extracting it from sales of comparable properties by dividing one year’s income for the sale by its sale price.¹¹¹

To indicate the market value (value), apply the market observed direct rate to the net operating income (NOI) of the property.

$$\text{Value} = \text{NOI}_1 / D_0$$

We used the same guideline companies in the yield rate and the direct rate. See the Guideline Companies section for more information.

We used the same method for the debt component in the direct rate as in the Market Rate of Debt section, used for the yield rate. See the Market Rate of Debt section for more information.

We used an inverse of the Price to Earnings Ratio (P/E Ratio) to estimate the equity component of the direct rate. For this estimate, we used the P/E Ratio as calculated by Value Line Investment Survey; if the P/E Ratio was not calculated, we used the Trailing P/E Ratio as calculated by Value Line. We selected the P/E ratio most indicative of the market segment data. The inverse of the selected ratio is the equity component of the direct rate.

| Key – Variables in Equations | |
|----------------------------------|--|
| D_0 | Direct Rate |
| NOI_1 | Net Operating Income for the next year |
| Value | Market Value |

¹¹⁰ Western States Association of Tax Administrators (2009). Appraisal Handbook – Unit Valuation of Centrally Assessed Properties, Page III-8

¹¹¹ Lennhoff, D. (2011), Direct Capitalization: It Might be Simple But It Isn’t That Easy. *The Appraisal Journal* (Winter 2011), pages 66-73 accessed 2/12/2026 from <https://www.thefreelibrary.com/Direct+capitalization%3A+it+might+be+simple+but+it+isn%27t+that+easy.-a0252739812>.

We use guideline company's stock price as the indication of value as the indication of equity value and earnings as the indication for the income level for equity to derive the direct relationship between value and price.

We then blend this equity rate with the cost of debt to get an overall direct capitalization rate that we use to convert to the subject company's single year's income expectancy into a value indication.

See each market segment's Direct Equity Component page in the appendices for more information on how we arrived at the indicated equity component.

Flotation Costs

Flotation costs are costs incurred when a company issues a new security, including fees to an investment banker, legal fees, accounting, and other out of pocket expenses. The market-determined opportunity cost of capital is not affected by the flotation costs of a particular firm.¹¹² The correct procedure for the economic analysis of flotation costs does not alter the weighted average cost of capital.¹¹³

The yield rates and direct rates in this study are market derived, using market data. Unlike determining allowable rates of return in rate cases, the recovery of previously incurred costs is not added to the yield rates or direct rates used for estimating market value. The yield rate and direct rate are not recovery mechanisms for the costs of doing business.

Dr. Richard Simonds stated in his paper published in the Journal of Property Tax Assessment & Administration, "When capitalizing net operating income in the income approach, a flotation-cost adjustment cannot be applied to the cost of capital. Advocates of an adjustment may be confusing the concept of the allowed rate of return on invested capital in a rate-regulated environment with the concept of the market-determined opportunity cost of capital."¹¹⁴

Thomas Copeland and Fred Weston find that adjusting for flotation costs in the rate of return is incorrect because it implicitly adjusts the opportunity cost of funds supplied to the firm. The true market-determined opportunity cost is unaffected by the flotation costs of a particular firm.¹¹⁵ We do not make flotation cost adjustments to the yield rate or direct rate in this study.

¹¹² Western States Association of Tax Administrators, (2009). Appraisal Handbook – Unit Valuation of Centrally Assessed Properties, Page III-31

¹¹³ Copeland, Thomas E., and Weston, Fred J. (1988). Financial Theory and Corporate Policy (3rd Ed.). Addison-Wesley Publishing Company.

¹¹⁴ Simonds, R. (2006). "Income Capitalization, Flotation Costs, and the Cost of Capital." Journal of Property Tax Assessment & Administration, Volume 3, Issue 4.

¹¹⁵ Copeland and Weston. *Financial Theory and Corporate Policy* (3rd Ed.). Page 534

Company-Specific Risk

The department does not include adjustment for company-specific risks, such as a size premium adjustment for a specific company.

We do not include size premium adjustments based on the guideline companies' average market capitalization size; we do not find this to be generally accepted practice. Damodaran points out several reasons why a size adjustment to the CAPM is not appropriate, concluding that the empirical evidence is not as conclusive as it was initially thought to be.¹¹⁶ He also finds that forward-looking risk premiums are yielding no premiums for small cap (market capitalization) stocks and much of the additional risk is either diversifiable or double counted.¹¹⁷

Eugene Fama and Kenneth French analyzed size premiums of companies that move to different market capitalizations and found, "the size premium is almost entirely a result of the extreme positive returns of small-cap (market capitalization) stocks that move to a big-cap (market capitalization) portfolio from one year to the next."¹¹⁸

Similarly, the equity risk premium surveys by Graham and Harvey find no evidence that the weighted average cost of capital is larger for smaller firms.¹¹⁹

Illiquidity

We do not adjust capitalization rates for illiquidity. As the Appraisal Institute explains:

A discount rate reflects the relationship between income and the value that a market will attribute to that income. The financial and economic concepts implicitly in a discount rate are complex and have been the subject of significant analysis for more than a century. Although four key components can be identified within a discount rate – the safe rate plus considerations of illiquidity, management, and various risks – a discount rate that is constructed by adding allowances for these components can be misleading and inaccurate.¹²⁰

Growth

The growth rate is important because it affects the yield model, explained in the Yield Capitalization Rate section. Minnesota Rules 8100 and 8106 imply a zero percent growth yield model. If the

¹¹⁶ Damodaran, A. (March, 2025). Equity Risk Premiums (ERP): Determinants, Estimation, and Implications - The 2025 Edition, page 57. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5168609

¹¹⁷ Damodaran, A. (11 April 2015). "The small cap premium: Where is the beef?" Retrieved from: <http://aswathdamodaran.blogspot.com/2015/04/the-small-cap-premium-fact-fiction-and.html>.

¹¹⁸ Fama, Eugene F. and French, Kenneth R. (2007). "Migration." *Financial Analysts Journal*, Volume 63, Number 3. CFA Institute.

¹¹⁹ Graham, J. R., and Harvey, C. R. (28 March 2018). The Equity Risk Premium in 2018. SSRN Electronic Journal. doi:10.2139/ssrn.3155709

¹²⁰ Appraisal Institute (2013). *The Appraisal of Real Estate*, 14th Edition, Page 458

assumption that income streams remain equal over time is incorrect, this model may not accurately reflect the market value of the company.

For a company with a changing income stream, a discounted cash flows model or stable growth yield model may be better at estimating the value for the company under review. The discounted cash flows model uses explicit forecasts of anticipated net cash flows for each period. We can estimate these inputs if the company does not provide them.

The direct rate is the relationship between an estimate of a single year’s net operating income and the value of the property, while the yield rate converts income from future periods into present value. Western States Association of Tax Administrators Appraisal Handbook states, “direct capitalization is not affected by the appraiser’s view of the future income.”¹²¹

Short-Term Growth Rate

We reviewed short-term growth rates from a few sources to derive an estimate of a short-term growth rate for each market segment.

Zacks Investment Research provides industry growth estimates for the next five years, by industry. We downloaded this data on January 5, 2026.

| Electric | Gas Distribution | Gas Transmission Pipeline | Fluid Transportation Pipeline | Railroad |
|----------|------------------|---------------------------|-------------------------------|----------|
| 9.1% | 8.9% | 10.9% | 10.7% | 8.4% |

We compared the median short-term growth rates for each market segment from CFRA (from S&P NetAdvantage), Value Line Investment Survey, and Zacks Investment Research.

In previous years’ cap rate studies, we have used Yahoo Finance estimates of short-term growth rates for the companies included in our study. We did not use Yahoo Finance growth rates for the 2026 study because the rates are no longer publicly available on their website.

¹²¹ Ibid., Page III-9

| Source | CFRA ¹²² | Value Line Earnings ¹²³ | Value Line Dividends ¹²⁴ | Zacks ¹²⁵ |
|-------------------------------|---------------------|------------------------------------|-------------------------------------|----------------------|
| Electric | 8.00% | 6.50% | 6.50% | 7.25% |
| Gas Distribution | 8.00% | 6.50% | 6.50% | 7.90% |
| Gas Transmission Pipeline | 7.50% | 8.50% | 3.50% | 13.30% |
| Fluid Transportation Pipeline | 3.50% | 7.75% | 9.50% | 8.70% |
| Railroad | 5.00% | 8.50% | 9.00% | 7.30% |

The median short-term growth rate for each market segment from the above sources is:

| Electric | Gas Distribution | Gas Transmission Pipeline | Fluid Transportation Pipeline | Railroad |
|----------|------------------|---------------------------|-------------------------------|----------|
| 6.88% | 7.20% | 8.00% | 8.23% | 7.90% |

This evidence indicates that there is significant short-term growth in each market segment, though the amount of short-term growth can vary widely between different analyst’s forecasts.

Long-Term Growth Rate

We reviewed long-term growth rates from several sources to derive an estimate of long-term growth for the economy. “Since no firm can grow forever at a rate higher than the growth rate of the economy in which it operates, the constant growth rate cannot be greater than the overall growth rate of the economy.”¹²⁶ These sources indicate varying rates of growth in the U.S. economy over the long-term:

- The Federal Reserve Bank projects their “longer run” estimate of change in U.S. real Gross Domestic Product (GDP) at 1.8%.¹²⁷
- The World Bank forecasts U.S. GDP will grow 2.2% in 2026, and 2.9% in 2027.¹²⁸

¹²² CFRA (as downloaded from S&P NetAdvantage) three-year projected earnings per share compound annual growth rate. CFRA stock reports dated January 3, 2026.

¹²³ Value Line Investment Survey provides estimated growth rates for dividends and earnings 2022-2024 to 2028-2030. Value Line tear sheets are dated October 17, 2025 to December 5, 2025.

¹²⁴ Value Line Investment Survey provides estimated growth rates for dividends and earnings 2022-2024 to 2028-2030. Value Line tear sheets are dated October 17, 2025 to December 5, 2025.

¹²⁵ Zacks Investment Research provides expected earnings per share growth (3-5 years). Data downloaded January 5, 2026.

¹²⁶ Damodaran, Aswath, Dr. (n.d.) The Stable Growth Rate, http://pages.stern.nyu.edu/~adamodar/New_Home_Page/valquestions/stablegrowthrate.htm

¹²⁷ Board of Governors of the Federal Reserve System, Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents under their individual assumptions of projected appropriate monetary policy. December 2025. Retrieved February 4, 2026 from <https://www.federalreserve.gov/monetarypolicy/files/fomcprojt20251210.pdf>

¹²⁸ World Bank Group Flagship Report, Global Economic Prospects. January 2026. Page 4. Retrieved January 23, 2026 from <http://www.worldbank.org/en/publication/global-economic-prospects>

- Trading Economics projects the U.S. GDP annual growth rate to trend around 2.0% in 2027 and 1.9% in 2028.¹²⁹
- The Congressional Budget Office projects that real GDP will grow by 2.2% in 2026, 1.8% in 2027 and 1.8% in 2028. The CBO projects that real GDP will grow at an annual average of 1.8% from 2029 to 2030, and 1.8% from 2031 to 2036.¹³⁰

After considering the above sources, we find the indicated long-term real growth rate of the U.S. economy to be 1.8%.

Inflation

Inflation makes future income less valuable than today's income. Inflation is the increase in the prices of goods and services over time. It effectively measures the change in the prices of a basket of goods and services in a year. The Federal Open Market Committee uses the personal consumption expenditures price index as one inflation measure.¹³¹

According to Arthur Keown, John Martin, and J. William Petty, "investors require nominal (or quoted) rate of interest that exceeds the inflation rate or else their realized real return will be negative."¹³² According to Damodaran, "An inflation-indexed Treasury security does not offer a guaranteed nominal return to buyers, but instead provides a guaranteed real return."¹³³

According to Cornell, "inflation is not considered explicitly when using the equity risk premium to forecast long-run future stock returns because it is already included in the interest rates that go into the calculation."¹³⁴ Cornell continues, "When investors invest, their goal is to increase future consumption. Consequently, the success of an investment is measured not in nominal dollars but real dollars... investors are concerned with real returns, defined as the percent increase in purchasing power, not nominal returns."¹³⁵

The U.S. Treasury issues inflation-indexed securities. Comparing the inflation-indexed securities to the non-inflation indexed securities, we can calculate the inflation rate. Using the 10-year, 20-year, and 30-year securities, we calculated the inflation rates as of January 2, 2026.¹³⁶

¹²⁹ Trading Economics, United States Full Year GDP Growth Rate Forecast. Retrieved January 23, 2026 from <https://tradingeconomics.com/united-states/full-year-gdp-growth>

¹³⁰ Congressional Budget Office. (January 2026). The Budget and Economic Outlook: 2026 to 2036. Retrieved February 11, 2026 from <https://www.cbo.gov/system/files/2026-02/61882-Outlook-2026.pdf>

¹³¹ Board of Governors of the Federal Reserve System (2026). What is inflation, and how does the Federal Reserve evaluate changes in the rate of inflation? Retrieved February 17, 2026 from https://www.federalreserve.gov/faqs/economy_14419.htm

¹³² Keown, Arthur; Martin, John; and Petty, J. William, (2014). *Foundations of Finance: The Logic and Practice of Financial Management*, 8th Ed., Page 35

¹³³ Damodaran, Aswath, Dr. (2015). *Applied Corporate Finance*, 4th Ed., Page 90

¹³⁴ Cornell, Bradford, (1999). *The Equity Risk Premium*, Page 29

¹³⁵ Ibid. Page 31

¹³⁶ Difference between inflation-indexed and non-inflation indexed securities for 10-year, 20-year, and 30-year daily rates as of January 2, 2026. Retrieved January 22, 2026 from www.federalreserve.gov

| | 10-Year | 20-Year | 30-Year |
|----------------------|---------|---------|---------|
| Calculated Inflation | 2.25% | 2.42% | 2.23% |

The Budget and Economic Outlook: 2026 to 2036, published by the Congressional Budget Office (CBO), estimates that inflation for personal consumption expenditures will change from 4th quarter to 4th quarter by 2.7% in 2026, 2.3% in 2027, 2.1% in 2028, 2.0% from 2029 to 2030, and 2.0% from 2031 to 2036.¹³⁷

The Federal Reserve Board members and the Federal Reserve Bank presidents estimated the longer-run personal consumption expenditures inflation rate at 2%.¹³⁸

We used the expected, longer-run personal consumption expenditures inflation rate of 2% as the estimate of inflation for this study.

Given the indicated long-term real growth rate of 1.8% and the expected inflation rate of 2%, we estimated the long-term growth rate at 3.8%.¹³⁹

Market to Book Ratios

We analyzed market-to-book ratios of publicly traded stock and debt securities by market segment as data is available. This analysis indicates how the market perceives the value of these assets relative to the book value. A market-to-book ratio below one indicates that there may be obsolescence affecting that market segment; a ratio over one would indicate that there is no obsolescence. The analysis for each market segment indicated no obsolescence.

See each market segment’s Calculation of Market to Book Ratios page for more information.

Public Comments on Draft Study

The Minnesota Department of Revenue posted the Draft Capitalization Rate Study [on our website](#) on March 11, 2026, and accepted comments through March 31, 2026. We appreciate the thoughtful responses and additional studies we received. Your opinions and feedback are important, and we carefully considered every comment.

¹³⁷ Congressional Budget Office. (January 2026). The Budget and Economic Outlook: 2026 to 2036. Retrieved February 11, 2026 from <https://www.cbo.gov/system/files/2026-02/61882-Outlook-2026.pdf>

¹³⁸ Board of Governors of the Federal Reserve System, Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents under their individual assumptions of projected appropriate monetary policy. December 2025. Retrieved February 4, 2026 from <https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20251210.pdf>

¹³⁹ As provided by Pratt & Grabowski, “Long-term growth rates exceeding the real growth in GDP plus inflation are generally not sustainable” (p. 1195). Pratt, Shannon and Grabowski, Roger, (2014). *Cost of Capital Applications and Examples*, 5th Ed.

This section summarizes the comments we received on the Draft Study and our response. For a list of the updates in this Final Study compared to the Draft Study, please see the Updates Section on page three of this narrative.

1. One comment stated that the department’s cost of equity is flawed because investors will not require significantly lower rates of return in the future.

Response

The department is not assuming investors will require lower rates of return in the future, we are estimating the return investors require today, reflecting current market conditions, not an assumption that investor return expectations will decline.

Our multi-stage dividend growth models apply one required return to all future periods. The present value is lower at longer horizons because the same discount rate is compounded, not because a lower rate is used in later years.

2. One comment discussed concerns around Plains All American Pipeline LP as a guideline company, especially in the capital structure analysis due to a recent acquisition.

Response

The department considered the acquisition as part of the 2025 Draft Study. The only fluid transportation guideline company without a recent acquisition, Energy Transfer LP, experienced a greater shift in its capital structure toward common equity than any of the other guidelines. If we removed Plains All American Pipeline LP from the study, the beta would decrease, the three-stage DGM would decrease, the two-stage DGM would decrease, and the average indicated rate of debt would decrease. We did not remove Plains All American Pipeline LP as a guideline company.

Table 1: Equity Percentages, Year over Year Change

| Company | 2025 Equity Percentage | 2026 Draft Equity Percentage | % Change, Year over Year |
|---------------------------------|------------------------|------------------------------|--------------------------|
| Energy Transfer LP | 50.0% | 45.43% | -9.16% |
| Enterprise Products Partners LP | 70.04% | 68.35% | -2.41% |
| MPLX LP | 69.94% | 67.91% | -2.91% |

| Company | 2025 Equity Percentage | 2026 Draft Equity Percentage | % Change, Year over Year |
|------------------------|------------------------|------------------------------|--------------------------|
| Plains All American LP | 56.15% | 53.80% | -4.19% |

- Several comments compared last year’s data points to this year’s data points as reasoning for the selected rates to seem out of line.

Response

Movement in one direction on an average of models does not indicate an exact movement in a data point or selected rate. We consider the reliability and applicability of the models individually when selecting data points and rates. The selected data points and rates appropriately reflect our opinion of the most dependable indicators, not a mechanical year-over-year change.

- One comment stated that several of the department’s cost of equity models are designed to manipulate the cost of equity lower by putting unrealistic growth rates into the out years without making any adjustments to future dividend payout ratios.

Response

The department analyzed an adjusted three-stage dividend growth model considering stock buybacks and payout ratios. The cost of equity was lower with those adjustments. We will consider adding payout ratios to its calculations or as an additional model going forward.

- Earnings per share can grow faster than the economy indefinitely.

Response

The department disagrees that a company’s earnings per share can grow faster than the economy indefinitely. This principle is universally accepted:

- “If a company grew faster than the economy forever, it would eventually overtake the entire world economy.”¹⁴⁰
- “[In stable growth], the growth rate cannot exceed the growth rate of the economy.”¹⁴¹

¹⁴⁰ Koeller, Goedhart, & Wessels. (2020). Valuation: Measuring and Managing the Value of Companies, 7th Edition, Page 21.

¹⁴¹ Damodaran. (2012). Investment Valuation, 3rd Edition, Page 320.

- “As a firm grows, it becomes more difficult for it to maintain high growth and it eventually will grow at a rate less than or equal to the growth rate of the economy in which it operates.”¹⁴²
- “The simple constant-growth DCF formula is an extremely useful rule of thumb, but no more than that. Naïve trust in the formula has led many financial analysts to silly conclusions....Also, resist the temptation to apply the formula to firms having high current rates of growth. Such growth can rarely be sustained indefinitely, but the constant-growth formula assumes it can. This erroneous assumption leads to an overestimate of r .”¹⁴³
- “The long-term growth rate is based on security analysts’ forecasts. In the multistage DCF model, growth after five years is assumed to adjust gradually to the estimated long-term growth rate of gross domestic product (GDP).”¹⁴⁴
- “In fact, dividends cannot grow as fast as the economy on a sustainable long-term basis.”¹⁴⁵
- “Most long-run forecasts of earnings or dividend growth ignore the simple fact that aggregate earnings and dividends in the economy cannot sustainable grow faster than the economy itself.”¹⁴⁶
- “Many analysts argue that the terminal growth rate should never be higher than the expected long-term nominal growth rate of the general economy, which includes both inflation and real growth. If the company is in an industry subject to vigorous competition, with little prospect for real growth without large capital expenditures, then perpetual growth at the rate of expected long-term inflation may be reasonable.”¹⁴⁷
- “A long-term growth rate in excess of a projected inflation rate should be viewed with caution and adequately supported and explained in the valuation analysis.”¹⁴⁸
- “A company cannot possibly growth at an 11 percent rate into perpetuity or it will eventually exceed the gross domestic product of the world. Long term sustainable growth cannot exceed the rate of inflation and population growth. Even if short term growth is high, the present value of this growth into perpetuity cannot be that high.”¹⁴⁹

¹⁴² Damodaran. (2012). Investment Valuation, 3rd Edition, Page 304.

¹⁴³ Brealey, Myers, & Allen. (2019). Principles of Corporate Finance, 13th Edition, Pages 89-90.

¹⁴⁴ Brealey, Myers, & Allen. (2019). Principles of Corporate Finance, 13th Edition, Pages 89.

¹⁴⁵ Arnott & Bernstein. (2002). What Risk Premium is ‘Normal’? Page 71. Financial Analysts Journal.

¹⁴⁶ Arnott & Bernstein. (2002). What Risk Premium is ‘Normal’? Page 72. Financial Analysts Journal.

¹⁴⁷ Pratt & Niculita. (2008). Valuing a Business. Page 248.

¹⁴⁸ PwC. (2018). Fair Value Measurements. Global Edition. Page 7-16.

¹⁴⁹ Trugman (2008). Understanding Business Valuation. American Institute of Certified Public Accountants Historical Collection. Page 381.

6. Value Line adjusts betas to account for their long-term tendency to converge towards one. The adjustments in the Empirical CAPM would be duplicative of the beta adjustments.

Response

Value Line uses a standard calculation to adjust betas. The department recognizes that the Empirical CAPM reduces the sensitivity of the cost of equity estimate to changes in the beta coefficient and that Value Lines adjusts its beta. However, we completed the Empirical CAPM model to assist in establishing a range of reasonableness and did not rely on this model specifically when selecting the cost of equity.

7. One comment stated that a shift in capital structure toward debt, combined with higher interest rates, requires a larger proportion of earnings to be allocated to debt service. The increased risk to equity holders should correspond with higher costs of equity, rather than lower costs of equity.

Response

Higher debt in the capital structure does not mechanically imply a higher required return on equity. The impact depends on how the additional debt affects the overall risk of the guideline companies and market segment. If higher debt is accompanied by stable cash flows, investment-grade credit quality, and strong interest-coverage ratios, then the increase in equity risk is limited and the observed market cost of equity could decrease. The department's estimated cost of equity is a market-implied estimate using market data.

8. One comment stated that beta does not capture total risk of income producing physical properties like fluid transportation pipelines due to the presence of nonsystematic risk factors such as illiquidity, contract risk, regulatory risk, etc. Additional tax compliance burdens for master limited partnerships result in shares that are more thinly traded than stock shares of publicly traded corporations and are, therefore, a poor match with the CAPM assumptions.

Response

The department notes that the CAPM does not claim that the beta captures **all** risks, only that investors are compensated for systematic risks that cannot be diversified away. The risks affect firm-specific cash flows but do not warrant an additional return premium beyond what

investors can eliminate through portfolio diversification.¹⁵⁰ Many publicly traded master limited partnerships in the fluid pipeline market segment have substantial market capitalization, continuous trading activity, and observable prices.

9. One comment stated that master limited partnerships pay a majority of their net income as cash dividends. Thus, traded equity units are inherently income-oriented securities. Investors purchase master limited partnership units for stable cash distributions and price the value of the traded units based on the present value of expected future cash distribution payments, closely aligning with the income approach used for property tax valuation. The dividend growth model reflects market pricing behavior.

Response

Although master limited partnerships (MLP) distribute a high share of their cash flow, the pricing of MLP units does not mirror the income-approach framework used to value regulated pipeline operating property. Publicly traded equity, MLP units included, reflects total return expectations, which incorporate distribution yield and market-driven factors such as investor risk preferences, liquidity conditions, tax structures, capital-market volatility, and expectations for unit price appreciation. These equity-market dynamics can cause MLP unit values to deviate substantially from the underlying economic returns of the physical pipeline assets, making MLP distribution yields an unreliable proxy for the discount rate applicable to regulated utility property.

10. One comment stated that the department's concerns about applying a single-stage dividend growth model to a zero percent stable growth model are misplaced. The total investor-required rates of return, derived from ownership units, is used as a proxy for the total return requirement of a potential purchaser of the physical fluid pipeline transportation assets. Another commenter stated that the single-stage DGM is most applicable DGM for regulated utilities.

Response

The use of a dividend growth model to derive a cost of equity for a zero-growth income model is fundamentally inconsistent. Because the DGM implies price appreciation driven by perpetual growth, it's inconsistent with the zero-growth assumptions in the income models used in the

¹⁵⁰ Unit Valuation Standards (2018). National Conference of Unit Valuation States. Retrieved from: <https://www.ncuvs.org/unit-valuation-standards>

valuations. A single-stage dividend growth model, by definition, derives investor return requirements inclusive of embedded growth expectations. This is a mismatch. This results in an overstated discount rate relative to the zero-growth income used in Minnesota Rules 8100 and 8106. Investor-required rates of return are already fully captured through the CAPM, which does not presume or rely on growth expectations.

11. The natural gas pipeline industry's long-term demand outlook has improved in recent years, but opportunity alone does not equate to realizable returns. Pipeline development bears significant execution risk and is capital intensive.

Response

The presence of broader industry opportunity has little effect on the return requirements applicable to the existing pipeline assets being valued. Execution risk and capital intensity are relevant to new projects, but do not translate to higher returns on in-place assets.

12. One commenter stated that the department's selected equity risk premiums are not appropriate:

- a. The three-stage ex ante ERP calculation assumes liquidity, diversification, and flexible pricing of returns, conditions that do not apply to the market segment.
- b. Dr. Damodaran's implied ERP methodology fails to capture market-segment-specific risks. Applying an implied ERP designed for diversified equity market results in a systematic understatement of the market segment's equity returns.
- c. The CFO Survey ERP reflects subjective expectations of corporate executives regarding broad equity market returns over the next ten years related to diversified corporate investment rather than regulated infrastructure.
- d. Fernandez, Banuls & Acin Survey ERP is useful for academic benchmarking but lacks asset specificity and does not isolate the incremental regulatory, environmental, and political risk borne by U.S. Gas Transmission pipelines.
- e. BVR Historical ERPs (Arithmetic and Geometric) offer a longer-term perspective but is significantly diluted in the ECAPM.

The commenter continued that the Kroll ERP is more appropriate because it is grounded in long-term historical capital market evidence and is the prevailing standard in professional appraisal practice for regulated utilities, reflecting investor returns across economic cycles, regulatory environments and capital market disruptions. Another commenter stated the department has offered no explanation in the variance between Kroll and BVR other than the difference in time periods.

Response

Many of the commenters' concerns stem from the belief that certain ERP sources are not applicable to a specific industry. However, under the Capital Asset Pricing Model (CAPM), investors are assumed to hold diversified portfolios. As a result, the cost of equity should reflect only economy-wide or industry-wide risks that cannot be diversified away. Industry-specific or company-specific risks are not added to the equity risk premium. CAPM captures those through beta. Adding industry-specific risks to the ERP would therefore double count the same risk.

The department also notes that the commenters' concerns regarding Business Valuation Resources (BVR) relate specifically to its use within the ECAPM framework, not to BVR itself. The commenter, in fact, supports both Kroll ERPs, stating it is the prevailing standard in professional appraisal practice for regulated utilities. We disagree. There is no single prevailing ERP standard in professional appraisal practice, and BVR remains a respected, widely used source for published historical ERPs. One methodological advantage of BVR is that it compares **total returns** for both stocks and bonds, rather than comparing total-return stocks to **income return bonds**. This difference in how bond returns are measured, along with differences in the underlying time periods, can explain much of the variance between the ERP estimates cited by the commenter.

In addition, implied ERPs represent market-wide expectations for systematic risk, which is the risk CAPM is designed to measure. Asset -specific risks such as regulatory lag, permitting pressures, or political uncertainties are already reflected in the market prices and observed returns of comparable regulated utilities, which is where beta, and therefore relative risk, is estimated. Adjustments to the cost of equity for non-diversification are not appropriate.¹⁵¹

13. Several comments suggest the department consider authorized returns on equity by regulatory agencies or use models applied by regulatory agencies in determining authorized returns on equity.

One commenter notes that regulators for some market segments utilize a two-stage DGM [DCF] approach. The two-stage model utilizes a 2/3 weighting on the first stage using earnings growth and a 1/3 weighting on the second stage using inflation and GDP growth. The commenter also notes that the regulator relies on the CAPM in addition to the two-stage DGM.

Response

While regulators such as the Federal Energy Regulatory Commission (FERC) establish an

¹⁵¹ National Conference of Unit Valuation States (2018). Unit Valuation Standards. <https://www.ncuvs.org/unit-valuation-standards>

authorized rate of return for a specific utility, the department's role is different. We estimate the market cost of equity for an entire market segment for valuation purposes. These are not equivalent concepts.

Regulatory agencies set allowed returns to balance two goals: ensuring utilities earn a fair return and protecting customers from natural monopoly power. These include policy goals. In contrast, the department evaluates market evidence of investor-required returns for a market segment (reflecting investor pricing), not company-specific authorized returns set in a ratemaking proceeding. For this reason, authorized rates of return are not interchangeable with market-derived costs of equity.

Although FERC relies on a two-stage DCF model for setting allowed returns, that framework is designed for regulatory ratemaking and reflects policy objectives unique to FERC's jurisdiction. It does not represent the market segment's cost of equity for valuation purposes. We therefore determine cost of equity using market evidence appropriate for valuation, rather than adopting a regulatory construct designed for setting utility rates.

14. Some comments noted that Dr. Damodaran's implied equity risk premium estimates have been below actual returns and therefore, the department should utilize historical ERPs instead. Another commenter disagreed with Dr. Damodaran's implied ERP stating he has not demonstrated that his implied premium is more accurate than historically derived estimates. Another commenter stated that the implied ERP has shortcomings that need to be considered, including volatility year-to-year and reflecting extremes in market optimism or pessimism.

Response

Dr. Damodaran's implied ERP is not a forecast of realized returns; it's a forward-looking, market-implied expectation at a point in time, considering prices and expected cash flows from dividends, buybacks, and earnings growth. Realized returns can, and often do, differ materially from expectations. The fact that realized returns have exceeded Damodaran's implied ERPs does not indicate any deficiency in the implied ERP methodology. It simply reflects that expectations and outcomes differ, especially in periods of strong market performance. Damodaran's implied ERP remains the more appropriate measure for CAPM because it captures **today's market pricing of risk**, aligns with the theoretical foundation of a forward-looking cost of equity, and avoids distortions inherent in long-term historical averages.

Historical ERPs average returns over long periods, during which economic structure, interest rate environments, and market composition were significantly different than today. In contrast, the implied ERP is derived from today's asset prices and growth expectations, ensuring the estimate captures the risk investors demand today.

The CAPM is inherently forward-looking. The cost of equity is meant to represent the return investors currently require for bearing systematic risk. Implied ERPs align with this framework, whereas historical ERPs assume that long-run average returns reflect current expectations, an assumption not supported by modern market dynamics.

Dr. Damodaran’s annual ERP paper provides that, “historical premiums are noisy because they are based upon annual returns on stocks, which are highly volatile on a year-to-year basis. It is true that implied equity risk premiums are noisy too, with the noise coming from errors in forecasts earnings growth and cash flows, but that error is small, relative to that in historical equity risk premiums.”¹⁵² Implied ERPs are less statistically volatile and less error-prone than historical risk premiums.

15. Several comments requested the department consider multiple sources for the cost of debt including Bloomberg or S&P Capital IQ. One comment stated, “The S&P Capital IQ platform publishes debt ratings and yields specific to the utilities industry slightly higher than Mergent.” One comment noted that a single source, even when reasonable, can understate the financing cost when not compared against other primary services.

Response

As we mentioned in last year’s “Looking Forward” section of the study, we want to hear from stakeholders on the difference between these data sets and which stakeholders prefer. Comments provided do not indicate the pros and cons of the sources or why we should rely on other sources, other than generic statements. While some comments indicate we should rely on other sources, some comments also indicate we should continue to utilize Mergent Bond record.

16. One commenter states that the department does not explain its position (or provide any convincing explanation) for only relying on two cost of equity models for at least the past three years. The real concern of why there is such reliance on those two models only is unaddressed.

Response

The department’s current and previous studies provide pages of explanation detailing the weaknesses of single-stage DGM, limitations of two-stage and three-stage DGM, issues with survey-based models, issues with historical ERPs, and why forward-looking implied ERP aligns with CAPM theory. We respectfully disagree with the assertion that it does not explain its decision.

¹⁵² Damodaran, A. (March 2026). Equity Risk Premiums (ERP): Determinants, Estimation, and Implications - The 2026 Edition, pages 95-96. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=6361419

We complete several models to estimate the cost of equity. The strengths and weaknesses of each model are discussed throughout this narrative. Each model helps establish a range of reasonableness for the cost of equity even if some models are relied more heavily on than others.

To summarize:

1. Capital Asset Pricing Model

- a. The CAPM is based on the theory that all investors will independently optimize their portfolios. The expected return on an asset is related to its risk. There are several assumptions inherent in the CAPM. It is difficult to measure precisely the inputs in the model.¹⁵³
- b. The department gathered (and calculated in one instance) two historical equity risk premiums, two forward looking, and two from surveys.
 - i. Historical equity risk premiums have been found to be less accurate than forward-looking equity risk premiums.
 - ii. Forward-looking equity risk premiums follows the forward-looking premise of the model. Forward-looking equity risk premia are more stable with lower standard deviations than ex post market risk premia regardless of time horizon.¹⁵⁴
 - iii. Surveys collect expected returns in the market from various financial experts, CFOs, analysts, professors, and managers. Surveys have been shown to focus on short-term and can be dependent on what questions are asked. There can also be a high variance between answers.¹⁵⁵

2. Empirical Capital Asset Pricing Model

- a. The empirical capital asset pricing model (ECAPM) is a modification of the CAPM. The ECAPM applies 25% weight to the equity risk premium component and 75% weight to the beta times the equity risk premium component. This reduces the sensitivity of the cost of equity estimate to changes in the beta coefficient. This

¹⁵³ Brigham, E. & Ehrhardt, M., (2017). *Financial Management: Theory and Practice*, 15th Ed., Page 1006.

¹⁵⁴ Nicado-Cuyugan, J., & Phipps, R., (n.d.). *Forward-Looking Market Risk Premiums (1992-2020) and Macroeconomic Factors: Inflation, real GDP, stock market volatility and term spread*. Public Utilities Fortnightly. Accessed 4/9/2025 from <https://www.fortnightly.com/white-papers/capm-market-risk-premium-forward-looking>.

¹⁵⁵ Modugno, V. (2012). "Estimating Equity Risk Premiums". Sponsored by Society of Actuaries' Pension Section Research Committee. <https://www.soa.org/49386e/globalassets/assets/files/research/projects/research-est-equity-risk-premiums-report.pdf>

model is based on the theory that the CAPM can overstate the actual sensitivity of the cost of capital to beta. In other words, low (high) beta stocks can have a higher (lower) risk premium than the CAPM reflects. Some argue that low beta stocks having a higher risk premium than indicated by the CAPM disagrees with efficient market theory.

3. Dividend Growth Model

- a. The dividend growth model is based on the theory that the prices paid for a share of stock reflect the investors' discounted present value of future expected earnings and is widely used.
- b. The department calculated four dividend growth models.
 - i. **Single stage model** uses estimated **growth in dividends**. The single stage model assumes the growth rate will continue into perpetuity. Few companies are expected to grow in such regular ways.¹⁵⁶ The growth estimates available to us are short-term growth rates, often 3- to 5-year estimates. A growth rate above the long-term sustainable growth rate of the overall economy is not sustainable.
 - ii. **Single stage model** uses estimated **growth in earnings**. We prefer the use of earnings growth estimates over dividend growth estimates in the dividend growth models. This is primarily due to companies' stock buyback policies (as mentioned by the company) and changes in dividend payouts during the life cycle of a company.
 - iii. **Two stage model** uses estimated **growth in earnings**. A weighted average of the short-term growth rate and the long-term, sustainable growth estimate.
 - iv. **Three-stage model** uses estimated **growth in earnings**. The short-term growth rate in the first stage, the long-term sustainable growth estimate in the last stage, and the middle stage converges the short-term growth to the long-term growth.

17. One commenter states that the department does not provide the assumed risk-free rate in the CFO survey or Fernando survey.

Response

On page 19 of the draft study, the department notes the assumed risk-free rate in the CFO Survey is 4.29%. The ERP we used is the difference between the expected average annual

¹⁵⁶ Brealey, Myers, & Marcus (2009) *Fundamentals of Corporate Finance* 6th ed. McGraw-Hill/Irwan, New York, New York. ISBN 978-0-07-338230.

return and the 10-year Treasury yield. The Fernando study states that the market risk premium above the risk-free rate is 5.5%, which was paired with an average risk-free rate of 4.1%. Therefore, the average required return on the market (the risk-free rate and the market risk premium) was 9.6%.

The department maintains that its inputs in the CAPM and ECAPM are consistent. The risk-free rate in our models is the 20-year treasury yield, aligning with the longer economic life and risk horizon of the assets being valued.

Once the ERP is estimated relative to any bond maturity, it can be paired with a different maturity risk free rate as long as the analyst maintains internal consistency within the CAPM. Because the ERPs in the studies incorporate the respondent's own risk-free assumption, their estimated premium is standalone. This practice is widely accepted in valuation, regulatory finance, and academic treatments of the CAPM. In these survey-based ERPs, the risk-free rate is already embedded in the respondent's premium estimate. Therefore, the ERP can be applied with the Department's selected risk-free rate without violating CAPM consistency.

18. One commenter stated that the department should adjust the CAPM for size risk.

Response

We do not include an additional premium for size. See the Company-Specific Risk section for a detailed discussion.

19. Some commenters stated the department's study should measure investor expectations, which would require an adjustment for flotation costs.

Response

We do not include an adjustment for flotation costs. See the Flotation Costs section for a detailed discussion.

20. One commenter stated that because the department's models do not provide for illiquidity, the conclusions would be conservative and underestimate the overall cost of capital, and the remedy is to include an adjustment for illiquidity. Other comments also stated we should include in adjustment of illiquidity.

Response

We do not adjust capitalization rates for illiquidity. See the Illiquidity section for a detailed discussion.

21. Other comments stated the department's rates are too low and should have remained relatively flat given the year-over-year change in inputs.

Response

The Department's methodology intentionally relies on current, observable market inputs to ensure that each year's capitalization rates reflect the most recent market evidence. We place reliance on models we find are applicable given the availability and reliability of the inputs and underlying methodology of the models.

22. One commenter suggested the department use an average of the 12-month bond yield averages as opposed to the December bond yield average.

Response

We use the December bond yield average as this reflects the bond market nearest to the assessment date.

23. Several commenters pointed to a drop in beta year-over-year related to a growing high concentration of the technology companies in the S&P 500, the technology companies carry high levels of risk and volatility, making other companies seem less risky in comparison.

Response

Betas are estimated against a broad market index to measure systematic risk relative to that market. If index composition changes and utilities' covariance with the market declines, CAPM will appropriately reflect lower systematic risk for utilities. This does not understate required returns; it measures the covariance investors face at the assessment date.

Questions?

If you have questions about this Study, contact us at sa.property@state.mn.us.

Appendix A - Electric

Yield Rate

| | Capital Structure | Rate | Composite |
|----------------|-------------------|-------|--------------|
| Long-Term Debt | 39.00% | 5.88% | 2.29% |
| Common Equity | 61.00% | 9.21% | 5.62% |
| Yield Rate | | | 7.91% |

| |
|----------------------------------|
| Electric Yield Rate 7.91% |
|----------------------------------|

Capital Structure

| Company | Market Value of Long-Term Debt ¹ | Value of Preferred Equity ² | Market Value of Common Equity ³ | Total Market Value | % Long-Term Debt | % Preferred Equity | % Common Equity |
|---------------------------------|---|--|--|--------------------|------------------|--------------------|-----------------|
| Alliant Energy Corp. | 11,748,000,000 | - | 16,865,632,949 | 28,613,632,949 | 41.06% | 0.00% | 58.94% |
| Ameren Corp. | 17,992,000,000 | 129,000,000 | 27,880,176,583 | 46,001,176,583 | 39.11% | 0.28% | 60.61% |
| American Electric Power Co Inc. | 44,930,000,000 | - | 62,774,612,233 | 107,704,612,233 | 41.72% | 0.00% | 58.28% |
| CenterPoint Energy Inc. | 22,377,000,000 | - | 25,241,397,399 | 47,618,397,399 | 46.99% | 0.00% | 53.01% |
| CMS Energy Corp. | 17,645,000,000 | 224,000,000 | 21,578,159,848 | 39,447,159,848 | 44.73% | 0.57% | 54.70% |
| DTE Energy Co. | 23,840,000,000 | - | 27,081,658,275 | 50,921,658,275 | 46.82% | 0.00% | 53.18% |
| Eergy Inc. | 13,018,900,000 | - | 16,827,596,216 | 29,846,496,216 | 43.62% | 0.00% | 56.38% |
| MGE Energy Inc. | 768,889,000 | - | 2,868,072,238 | 3,636,961,238 | 21.14% | 0.00% | 78.86% |
| OGE Energy Corp. | 5,179,300,000 | - | 8,837,568,000 | 14,016,868,000 | 36.95% | 0.00% | 63.05% |
| Otter Tail Corp. | 923,639,000 | - | 3,413,204,604 | 4,336,843,604 | 21.30% | 0.00% | 78.70% |
| WEC Energy Group Inc. | 19,609,100,000 | 30,400,000 | 34,651,887,928 | 54,291,387,928 | 36.12% | 0.06% | 63.83% |
| Xcel Energy Inc. | 29,943,000,000 | - | 46,570,501,396 | 76,513,501,396 | 39.13% | 0.00% | 60.87% |

| | | | |
|---------------|--------|-------|--------|
| Mean | 38.22% | 0.08% | 61.70% |
| Median | 40.10% | 0.00% | 59.78% |

| | | | |
|---|---------------|--------------|---------------|
| Indicated Industry Capital Structure | 39.00% | 0.00% | 61.00% |
|---|---------------|--------------|---------------|

Notes:

1. Source: 10-K or Annual Report
2. Source: Value Line
3. Source: Share price as of January 2, 2026 multiplied by common shares outstanding from companies' 2025 10-K

Indexed Rate of Debt

| Company | Debt Rating | Long-Term Debt Rate |
|---------------------------------|-------------|---------------------|
| Alliant Energy Corp. | Baa2 | 5.88% |
| Ameren Corp. | Baa1 | 5.88% |
| American Electric Power Co Inc. | Baa2 | 5.88% |
| CenterPoint Energy Inc. | Baa2 | 5.88% |
| CMS Energy Corp. | Baa2 | 5.88% |
| DTE Energy Co. | Baa2 | 5.88% |
| Eergy Inc. | Baa2 | 5.88% |
| MGE Energy Inc. | A1* | 5.68% |
| OGE Energy Corp. | Baa1 | 5.88% |
| Otter Tail Corp. | Baa2 | 5.88% |
| WEC Energy Group Inc. | Baa1 | 5.88% |
| Xcel Energy Inc. | Baa1 | 5.88% |

Mean 5.86%
Median 5.88%
Mode 5.88%

| | |
|-------------------------------|--------------|
| Indicated Rate of Debt | 5.88% |
|-------------------------------|--------------|

Public Utility Bond Yield Averages from Mergent Bond Record, January 2026 Edition
Public Utility Bond Averages, December 2025 (page 122)

| Mergent | S&P | Dec. Yield Avg. |
|-------------------|-------------------|-----------------|
| Aaa, Aa1, Aa2 Aa3 | AAA, AA+, AA, AA- | 5.57% |
| A1, A2, A3 | A+, A, A- | 5.68% |
| Baa1, Baa2, Baa3 | BBB+, BBB, BBB- | 5.88% |

*MGE Energy, Inc. is not rated by Moody's, however, its wholly-owned subsidiary, Madison Gas & Electric Company is rated as A1.

Indicated Rate of Equity

| Model | Rate |
|---|--------------|
| CAPM - Ex Ante, Three Stage | 7.19% |
| CAPM - Damodaran | 8.19% |
| CAPM - The CFO Survey | 9.30% |
| CAPM - Fernandez, Banuls, and Acin | 9.21% |
| CAPM - Ex Post (BVR Historical, Arithmetic) | 10.23% |
| CAPM - Ex Post (BVR Historical, Geometric) | 9.24% |
| Empirical CAPM - Ex Ante, Three Stage | 7.34% |
| Empirical CAPM - Damodaran | 8.41% |
| Empirical CAPM - The CFO Survey | 9.58% |
| Empirical CAPM - Fernandez, Banuls, and Acin | 9.49% |
| Empirical CAPM - Ex Post (BVR Historical, Arithmetic) | 10.57% |
| Empirical CAPM - Ex Post (BVR Historical, Geometric) | 9.52% |
| DGM - Two-Stage | 8.67% |
| DGM - Three-Stage | 7.75% |
| Indicated Rate of Equity | 9.21% |

We established a range of acceptability for the cost of equity with all available models. We considered all of the data and placed equal reliance on the CAPM using the Business Valuation Resources Historical (arithmetic) equity risk premium, and the Damodaran CAPM.

Direct Rate

| | Capital Structure | Rate | Composite |
|-------------------------|-------------------|-------|--------------|
| Debt Component | 39.00% | 5.88% | 2.29% |
| Equity Component | 61.00% | 5.46% | 3.33% |
| Direct Rate | | | 5.62% |

| | |
|--------------------|--------------|
| Direct Rate | 5.62% |
|--------------------|--------------|

Capital Asset Pricing Model (CAPM)

$(ERP \times \beta) + RFR = \text{Indicated Equity Rate}$

| | Equity Risk Premium (ERP) | x Industry Beta (β) | = Industry Risk Premium | + Risk-Free Rate ¹ (RFR) | Indicated Equity Rate |
|--|---------------------------|-----------------------------|-------------------------|-------------------------------------|-----------------------|
| Three Stage Ex Ante ² | 2.98% | 0.80 | 2.38% | 4.81% | 7.19% |
| Dr. Damodaran ERP ³ | 4.23% | 0.80 | 3.38% | 4.81% | 8.19% |
| The CFO Survey ⁴ | 5.61% | 0.80 | 4.49% | 4.81% | 9.30% |
| Fernandez, Banuls and Acin ⁵ | 5.50% | 0.80 | 4.40% | 4.81% | 9.21% |
| BVR - Historical, Arithmetic Mean ⁶ | 6.78% | 0.80 | 5.42% | 4.81% | 10.23% |
| BVR - Historical, Geometric Mean ⁷ | 5.54% | 0.80 | 4.43% | 4.81% | 9.24% |

Notes:

- 1 U.S. Treasury on January 2, 2026 - 20-year Coupon Bond Yield, Daily Observations, Retrieved January 22, 2026 from www.federalreserve.gov
- 2 Three Stage Dividend Growth Model, S&P 500. See Appendix F, Three Stage Ex Ante Calculation
- 3 Implied Equity Risk Premium on January 2, 2026 as determined by Dr. Aswath Damodaran; Retrieved January 22, 2026 from <http://pages.stern.nyu.edu/~adamodar/>
- 4 The CFO Survey (2025). Data & Results December 17, 2025. Mean average annual S&P return over next ten years (9.9%) less annual yield on 10-year Treasury Bonds (4.29%). Retrieved January 22, 2026 from https://www.richmondfed.org/research/national_economy/cfo_survey
- 5 Fernandez, P., Garcia D., & Acin, J. F. (2025). Survey: Market Risk Premium and Risk-Free Rate used for 54 countries in 2025. SSRN Electronic Journal. Retrieved January 22, 2026 from <https://ssrn.com/abstract=5260463>
- 6 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using arithmetic mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>
- 7 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using geometric mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>

Empirical Capital Asset Pricing Model (ECAPM)

$$(ERP \times \beta \times .75) + (ERP \times .25) + RFR = \text{Indicated Equity Rate}$$

| Model | Equity Risk Premium (ERP) | Industry Beta (β) | Weighted Industry Risk Premium (weighted at 75%) | Weighted Equity Risk Premium (weighted at 25%) | Risk-Free Rate (RFR) ¹ | Indicated Equity Rate |
|--|---------------------------|---------------------------|--|--|-----------------------------------|-----------------------|
| Three Stage Ex Ante ² | 2.98% | 0.80 | 1.79% | 0.75% | 4.81% | 7.34% |
| Dr. Damodaran ERP ³ | 4.23% | 0.80 | 2.54% | 1.06% | 4.81% | 8.41% |
| The CFO Survey ⁴ | 5.61% | 0.80 | 3.37% | 1.40% | 4.81% | 9.58% |
| Fernandez, Banuls and Acin ⁵ | 5.50% | 0.80 | 3.30% | 1.38% | 4.81% | 9.49% |
| BVR - Historical, Arithmetic Mean ⁶ | 6.78% | 0.80 | 4.07% | 1.70% | 4.81% | 10.57% |
| BVR - Historical, Geometric Mean ⁷ | 5.54% | 0.80 | 3.32% | 1.39% | 4.81% | 9.52% |

Notes:

- 1 U.S. Treasury on January 2, 2026 - 20-year Coupon Bond Yield, Daily Observations, Retrieved January 22, 2026 from www.federalreserve.gov
- 2 Three Stage Dividend Growth Model, S&P 500. See Appendix F, Three Stage Ex Ante Calculation
- 3 Implied Equity Risk Premium on January 2, 2026 as determined by Dr. Aswath Damodaran; Retrieved January 22, 2026 from <http://pages.stern.nyu.edu/~adamodar/>
- 4 The CFO Survey (2025). Data & Results December 17, 2025. Mean average annual S&P return over next ten years (9.9%) less annual yield on 10-year Treasury Bonds (4.29%). Retrieved January 22, 2026 from https://www.richmondfed.org/research/national_economy/cfo_survey
- 5 Fernandez, P., Garcia D., & Acin, J. F. (2025). Survey: Market Risk Premium and Risk-Free Rate used for 54 countries in 2025. SSRN Electronic Journal. Retrieved January 22, 2026 from <https://ssrn.com/abstract=5260463>
- 6 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using arithmetic mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>
- 7 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using geometric mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>

Two-Stage Dividend Growth Model

$$K_E = (DY \times (1 + 0.5(G))) + 0.67(G_1) + 0.33(g)$$

K_E Cost of Equity

G₁ Short-term Growth Estimate

DY Dividend Yield

g Stable Growth

G Average Growth Rate

| Company | DY Dividend Yield | G1 Short-term Growth Estimate | g Stable Growth | G Average Growth Rate | K _E Cost of Equity |
|---------------------------------|-------------------------|-------------------------------------|--------------------|-----------------------------|----------------------------------|
| Alliant Energy Corp. | 3.10% | 6.00% | 3.80% | 4.90% | 8.44% |
| Ameren Corp. | 2.82% | 6.50% | 3.80% | 5.15% | 8.50% |
| American Electric Power Co Inc. | 3.28% | 6.50% | 3.80% | 5.15% | 8.97% |
| CenterPoint Energy Inc. | 2.27% | 7.00% | 3.80% | 5.40% | 8.28% |
| CMS Energy Corp. | 3.08% | 8.50% | 3.80% | 6.15% | 10.13% |
| DTE Energy Co. | 3.58% | 4.50% | 3.80% | 4.15% | 7.92% |
| Eversource Inc. | 3.80% | 7.50% | 3.80% | 5.65% | 10.19% |
| MGE Energy Inc. | 2.42% | 6.50% | 3.80% | 5.15% | 8.09% |
| OGE Energy Corp. | 3.97% | 6.50% | 3.80% | 5.15% | 9.68% |
| Otter Tail Corp. | 2.55% | 4.50% | 3.80% | 4.15% | 6.87% |
| WEC Energy Group Inc. | 3.35% | 6.00% | 3.80% | 4.90% | 8.71% |
| Xcel Energy Inc. | 3.05% | 7.00% | 3.80% | 5.40% | 9.08% |

Mean 8.74%
Median 8.60%

| | |
|--------------------------------------|--------------|
| Two-Stage DGM, Indicated Rate | 8.67% |
|--------------------------------------|--------------|

We placed equal reliance on the mean and median when selecting the indicated rate.

Notes:

Dividend Yield provided by Value Line

Growth Estimates, Next 5 Years for Earnings provided Value Line

Stable growth rate is the nominal growth rate determined in the Capitalization Rate Study Narrative (indicated long-term growth rate of the U.S. economy of 1.8% plus the expected inflation rate of 2.0%).

Three-Stage Dividend Growth Model

Start Price - recent price from Value Line
Expected dividends - estimated dividends from Value Line
Stage one growth - projected earnings growth rate from Value Line
Stage two growth - reversion to long-term growth rate
Stage three growth - long-term growth rate developed in Study

| Company | Year | Alliant Energy Corp. | Ameren Corp. | American Electric Power Co Inc. | CenterPoint Energy Inc. | CMS Energy Corp. | DTE Energy Co. | Eergy Inc. | MGE Energy Inc. | OGE Energy Corp. | Otter Tail Corp. | WEC Energy Group Inc. | Xcel Energy Inc. | | | | | | | | | | | | |
|--------------------|------|----------------------|--------------|---------------------------------|-------------------------|------------------|----------------|------------|-----------------|------------------|------------------|-----------------------|------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|---------|-------|--------|
| Start Price | 2025 | | -65.59 | | -100.86 | | -115.81 | | -38.73 | | -70.42 | | -130.36 | | -73.08 | | -78.44 | | -42.88 | | -81.45 | | -106.47 | | -74.68 |
| Expected Dividends | 2026 | | 2.15 | | 3.03 | | 3.98 | | 0.95 | | 2.30 | | 4.71 | | 2.84 | | 1.95 | | 1.73 | | 2.18 | | 3.81 | | 2.42 |
| Stage One Growth | 2027 | 6.00% | 2.28 | 6.50% | 3.23 | 6.50% | 4.24 | 7.00% | 1.02 | 8.50% | 2.50 | 4.50% | 4.92 | 7.50% | 3.05 | 7.00% | 2.09 | 6.50% | 1.84 | 4.50% | 2.28 | 6.00% | 4.04 | 7.00% | 2.59 |
| Stage One Growth | 2028 | 6.00% | 2.42 | 6.50% | 3.44 | 6.50% | 4.51 | 7.00% | 1.09 | 8.50% | 2.71 | 4.50% | 5.14 | 7.50% | 3.28 | 7.00% | 2.23 | 6.50% | 1.96 | 4.50% | 2.38 | 6.00% | 4.28 | 7.00% | 2.77 |
| Stage One Growth | 2029 | 6.00% | 2.56 | 6.50% | 3.66 | 6.50% | 4.81 | 7.00% | 1.16 | 8.50% | 2.94 | 4.50% | 5.38 | 7.50% | 3.53 | 7.00% | 2.39 | 6.50% | 2.09 | 4.50% | 2.49 | 6.00% | 4.54 | 7.00% | 2.96 |
| Stage One Growth | 2030 | 6.00% | 2.71 | 6.50% | 3.90 | 6.50% | 5.12 | 7.00% | 1.25 | 8.50% | 3.19 | 4.50% | 5.62 | 7.50% | 3.79 | 7.00% | 2.56 | 6.50% | 2.23 | 4.50% | 2.60 | 6.00% | 4.81 | 7.00% | 3.17 |
| Stage One Growth | 2031 | 6.00% | 2.88 | 6.50% | 4.15 | 6.50% | 5.45 | 7.00% | 1.33 | 8.50% | 3.46 | 4.50% | 5.87 | 7.50% | 4.08 | 7.00% | 2.74 | 6.50% | 2.37 | 4.50% | 2.72 | 6.00% | 5.10 | 7.00% | 3.39 |
| Stage Two Growth | 2032 | 5.80% | 3.04 | 6.25% | 4.41 | 6.25% | 5.79 | 6.71% | 1.42 | 8.07% | 3.74 | 4.44% | 6.13 | 7.16% | 4.37 | 6.66% | 2.92 | 6.25% | 2.52 | 4.44% | 2.84 | 5.80% | 5.39 | 6.71% | 3.62 |
| Stage Two Growth | 2033 | 5.60% | 3.21 | 6.01% | 4.68 | 6.01% | 6.14 | 6.42% | 1.51 | 7.65% | 4.02 | 4.37% | 6.40 | 6.83% | 4.67 | 6.33% | 3.10 | 6.01% | 2.67 | 4.37% | 2.96 | 5.60% | 5.70 | 6.42% | 3.85 |
| Stage Two Growth | 2034 | 5.40% | 3.39 | 5.76% | 4.95 | 5.76% | 6.50 | 6.13% | 1.61 | 7.22% | 4.31 | 4.31% | 6.67 | 6.49% | 4.97 | 5.99% | 3.29 | 5.76% | 2.82 | 4.31% | 3.09 | 5.40% | 6.00 | 6.13% | 4.09 |
| Stage Two Growth | 2035 | 5.20% | 3.56 | 5.52% | 5.22 | 5.52% | 6.85 | 5.84% | 1.70 | 6.79% | 4.61 | 4.25% | 6.96 | 6.15% | 5.28 | 5.65% | 3.47 | 5.52% | 2.98 | 4.25% | 3.22 | 5.20% | 6.32 | 5.84% | 4.33 |
| Stage Two Growth | 2036 | 5.00% | 3.74 | 5.27% | 5.49 | 5.27% | 7.22 | 5.55% | 1.79 | 6.36% | 4.90 | 4.18% | 7.25 | 5.82% | 5.58 | 5.32% | 3.66 | 5.27% | 3.14 | 4.18% | 3.35 | 5.00% | 6.63 | 5.55% | 4.57 |
| Stage Two Growth | 2037 | 4.80% | 3.92 | 5.03% | 5.77 | 5.03% | 7.58 | 5.25% | 1.89 | 5.94% | 5.19 | 4.12% | 7.55 | 5.48% | 5.89 | 4.98% | 3.84 | 5.03% | 3.29 | 4.12% | 3.49 | 4.80% | 6.95 | 5.25% | 4.81 |
| Stage Two Growth | 2038 | 4.60% | 4.10 | 4.78% | 6.05 | 4.78% | 7.94 | 4.96% | 1.98 | 5.51% | 5.48 | 4.05% | 7.85 | 5.15% | 6.19 | 4.65% | 4.02 | 4.78% | 3.45 | 4.05% | 3.63 | 4.60% | 7.27 | 4.96% | 5.05 |
| Stage Two Growth | 2039 | 4.40% | 4.28 | 4.54% | 6.32 | 4.54% | 8.30 | 4.67% | 2.07 | 5.08% | 5.75 | 3.99% | 8.17 | 4.81% | 6.49 | 4.31% | 4.19 | 4.54% | 3.61 | 3.99% | 3.78 | 4.40% | 7.59 | 4.67% | 5.28 |
| Stage Two Growth | 2040 | 4.20% | 4.46 | 4.29% | 6.59 | 4.29% | 8.66 | 4.38% | 2.17 | 4.65% | 6.02 | 3.93% | 8.49 | 4.47% | 6.78 | 3.97% | 4.36 | 4.29% | 3.76 | 3.93% | 3.93 | 4.20% | 7.91 | 4.38% | 5.52 |
| Stage Two Growth | 2041 | 4.00% | 4.64 | 4.05% | 6.86 | 4.05% | 9.01 | 4.09% | 2.25 | 4.23% | 6.28 | 3.86% | 8.81 | 4.14% | 7.06 | 3.64% | 4.52 | 4.05% | 3.92 | 3.86% | 4.08 | 4.00% | 8.23 | 4.09% | 5.74 |
| Stage Three Growth | 2042 | 3.80% | 4.82 | 3.80% | 7.12 | 3.80% | 9.35 | 3.80% | 2.34 | 3.80% | 6.52 | 3.80% | 9.15 | 3.80% | 7.33 | 3.80% | 4.69 | 3.80% | 4.06 | 3.80% | 4.23 | 3.80% | 8.54 | 3.80% | 5.96 |
| Stage Three Growth | 2043 | 3.80% | 5.00 | 3.80% | 7.39 | 3.80% | 9.71 | 3.80% | 2.43 | 3.80% | 6.76 | 3.80% | 9.50 | 3.80% | 7.61 | 3.80% | 4.87 | 3.80% | 4.22 | 3.80% | 4.40 | 3.80% | 8.86 | 3.80% | 6.19 |
| Stage Three Growth | 2044 | 3.80% | 5.19 | 3.80% | 7.67 | 3.80% | 10.07 | 3.80% | 2.52 | 3.80% | 7.02 | 3.80% | 9.86 | 3.80% | 7.90 | 3.80% | 5.05 | 3.80% | 4.38 | 3.80% | 4.56 | 3.80% | 9.20 | 3.80% | 6.42 |
| Stage Three Growth | 2045 | 3.80% | 5.39 | 3.80% | 7.96 | 3.80% | 10.46 | 3.80% | 2.62 | 3.80% | 7.29 | 3.80% | 10.23 | 3.80% | 8.20 | 3.80% | 5.24 | 3.80% | 4.55 | 3.80% | 4.74 | 3.80% | 9.55 | 3.80% | 6.66 |
| Stage Three Growth | 2046 | 3.80% | 5.59 | 3.80% | 8.26 | 3.80% | 10.85 | 3.80% | 2.72 | 3.80% | 7.56 | 3.80% | 10.62 | 3.80% | 8.51 | 3.80% | 5.44 | 3.80% | 4.72 | 3.80% | 4.92 | 3.80% | 9.91 | 3.80% | 6.92 |
| Stage Three Growth | 2047 | 3.80% | 5.81 | 3.80% | 8.58 | 3.80% | 11.27 | 3.80% | 2.82 | 3.80% | 7.85 | 3.80% | 11.03 | 3.80% | 8.83 | 3.80% | 5.65 | 3.80% | 4.90 | 3.80% | 5.10 | 3.80% | 10.29 | 3.80% | 7.18 |
| Stage Three Growth | 2048 | 3.80% | 6.03 | 3.80% | 8.90 | 3.80% | 11.70 | 3.80% | 2.93 | 3.80% | 8.15 | 3.80% | 11.44 | 3.80% | 9.17 | 3.80% | 5.86 | 3.80% | 5.08 | 3.80% | 5.30 | 3.80% | 10.68 | 3.80% | 7.45 |
| Stage Three Growth | 2049 | 3.80% | 6.26 | 3.80% | 9.24 | 3.80% | 12.14 | 3.80% | 3.04 | 3.80% | 8.46 | 3.80% | 11.88 | 3.80% | 9.52 | 3.80% | 6.09 | 3.80% | 5.28 | 3.80% | 5.50 | 3.80% | 11.08 | 3.80% | 7.74 |
| Stage Three Growth | 2050 | 3.80% | 6.49 | 3.80% | 9.59 | 3.80% | 12.60 | 3.80% | 3.15 | 3.80% | 8.78 | 3.80% | 12.33 | 3.80% | 9.88 | 3.80% | 6.32 | 3.80% | 5.48 | 3.80% | 5.71 | 3.80% | 11.51 | 3.80% | 8.03 |
| Stage Three Growth | 2051 | 3.80% | 6.74 | 3.80% | 9.96 | 3.80% | 13.08 | 3.80% | 3.27 | 3.80% | 9.11 | 3.80% | 12.80 | 3.80% | 10.25 | 3.80% | 6.56 | 3.80% | 5.69 | 3.80% | 5.92 | 3.80% | 11.94 | 3.80% | 8.34 |
| Stage Three Growth | 2052 | 3.80% | 7.00 | 3.80% | 10.34 | 3.80% | 13.58 | 3.80% | 3.40 | 3.80% | 9.46 | 3.80% | 13.29 | 3.80% | 10.64 | 3.80% | 6.81 | 3.80% | 5.90 | 3.80% | 6.15 | 3.80% | 12.40 | 3.80% | 8.65 |
| Stage Three Growth | 2053 | 3.80% | 7.26 | 3.80% | 10.73 | 3.80% | 14.09 | 3.80% | 3.53 | 3.80% | 9.82 | 3.80% | 13.79 | 3.80% | 11.05 | 3.80% | 7.07 | 3.80% | 6.13 | 3.80% | 6.38 | 3.80% | 12.87 | 3.80% | 8.98 |
| Stage Three Growth | 2054 | 3.80% | 7.54 | 3.80% | 11.14 | 3.80% | 14.63 | 3.80% | 3.66 | 3.80% | 10.19 | 3.80% | 14.31 | 3.80% | 11.47 | 3.80% | 7.34 | 3.80% | 6.36 | 3.80% | 6.62 | 3.80% | 13.36 | 3.80% | 9.32 |
| Stage Three Growth | 2055 | 3.80% | 7.82 | 3.80% | 11.56 | 3.80% | 15.18 | 3.80% | 3.80 | 3.80% | 10.58 | 3.80% | 14.86 | 3.80% | 11.90 | 3.80% | 7.61 | 3.80% | 6.60 | 3.80% | 6.88 | 3.80% | 13.86 | 3.80% | 9.68 |
| Stage Three Growth | 2056 | 3.80% | 8.12 | 3.80% | 12.00 | 3.80% | 15.76 | 3.80% | 3.94 | 3.80% | 10.98 | 3.80% | 15.42 | 3.80% | 12.36 | 3.80% | 7.90 | 3.80% | 6.85 | 3.80% | 7.14 | 3.80% | 14.39 | 3.80% | 10.05 |
| Stage Three Growth | 2057 | 3.80% | 8.43 | 3.80% | 12.46 | 3.80% | 16.36 | 3.80% | 4.09 | 3.80% | 11.40 | 3.80% | 16.01 | 3.80% | 12.82 | 3.80% | 8.20 | 3.80% | 7.11 | 3.80% | 7.41 | 3.80% | 14.94 | 3.80% | 10.43 |
| Stage Three Growth | 2058 | 3.80% | 8.75 | 3.80% | 12.93 | 3.80% | 16.98 | 3.80% | 4.25 | 3.80% | 11.83 | 3.80% | 16.62 | 3.80% | 13.31 | 3.80% | 8.52 | 3.80% | 7.38 | 3.80% | 7.69 | 3.80% | 15.51 | 3.80% | 10.82 |
| Stage Three Growth | 2059 | 3.80% | 9.08 | 3.80% | 13.42 | 3.80% | 17.63 | 3.80% | 4.41 | 3.80% | 12.28 | 3.80% | 17.25 | 3.80% | 13.82 | 3.80% | 8.84 | 3.80% | 7.66 | 3.80% | 7.98 | 3.80% | 16.10 | 3.80% | 11.23 |
| Stage Three Growth | 2060 | 3.80% | 9.43 | 3.80% | 13.93 | 3.80% | 18.30 | 3.80% | 4.58 | 3.80% | 12.75 | 3.80% | 17.90 | 3.80% | 14.34 | 3.80% | 9.17 | 3.80% | 7.95 | 3.80% | 8.29 | 3.80% | 16.71 | 3.80% | 11.66 |
| Stage Three Growth | 2061 | 3.80% | 9.79 | 3.80% | 14.46 | 3.80% | 18.99 | 3.80% | 4.75 | 3.80% | 13.23 | 3.80% | 18.58 | 3.80% | 14.89 | 3.80% | 9.52 | 3.80% | 8.26 | 3.80% | 8.60 | 3.80% | 17.34 | 3.80% | 12.10 |
| Stage Three Growth | 2062 | 3.80% | 10.16 | 3.80% | 15.01 | 3.80% | 19.71 | 3.80% | 4.93 | 3.80% | 13.74 | 3.80% | 19.29 | 3.80% | 15.45 | 3.80% | 9.89 | 3.80% | 8.57 | 3.80% | 8.93 | 3.80% | 18.00 | 3.80% | 12.56 |
| Stage Three Growth | 2063 | 3.80% | 10.54 | 3.80% | 15.58 | 3.80% | 20.46 | 3.80% | 5.12 | 3.80% | 14.26 | 3.80% | 20.02 | 3.80% | 16.04 | 3.80% | 10.26 | 3.80% | 8.89 | 3.80% | 9.27 | 3.80% | 18.68 | 3.80% | 13.04 |
| Stage Three Growth | 2064 | 3.80% | 10.94 | 3.80% | 16.17 | 3.80% | 21.24 | 3.80% | 5.32 | 3.80% | 14.80 | 3.80% | 20.78 | 3.80% | 16.65 | 3.80% | 10.65 | 3.80% | 9.23 | 3.80% | 9.62 | 3.80% | 19.39 | 3.80% | 13.54 |
| Stage Three Growth | 2065 | 3.80% | 11.36 | 3.80% | 16.79 | 3.80% | 22.05 | 3.80% | 5.52 | 3.80% | 15.36 | 3.80% | 21.57 | 3.80% | 17.28 | 3.80% | 11.06 | 3.80% | 9.58 | 3.80% | 9.98 | 3.80% | 20.13 | 3.80% | 14.05 |
| Stage Three Growth | 2066 | 3.80% | 11.79 | 3.80% | 17.42 | 3.80% | 22.89 | 3.80% | 5.73 | 3.80% | 15.95 | 3.80% | 22.39 | 3.80% | 17.94 | 3.80% | 11.48 | 3.80% | 9.95 | 3.80% | 10.36 | 3.80% | 20.90 | 3.80% | 14.59 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|------|-------|-------|-------|--------|-------|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|
| Stage Three Growth | 2067 | 3.80% | 12.24 | 3.80% | 18.09 | 3.80% | 23.75 | 3.80% | 5.94 | 3.80% | 16.55 | 3.80% | 23.25 | 3.80% | 18.62 | 3.80% | 11.91 | 3.80% | 10.33 | 3.80% | 10.76 | 3.80% | 21.69 | 3.80% | 15.14 |
| Stage Three Growth | 2068 | 3.80% | 12.71 | 3.80% | 18.77 | 3.80% | 24.66 | 3.80% | 6.17 | 3.80% | 17.18 | 3.80% | 24.13 | 3.80% | 19.33 | 3.80% | 12.36 | 3.80% | 10.72 | 3.80% | 11.17 | 3.80% | 22.52 | 3.80% | 15.72 |
| Stage Three Growth | 2069 | 3.80% | 13.19 | 3.80% | 19.49 | 3.80% | 25.59 | 3.80% | 6.40 | 3.80% | 17.84 | 3.80% | 25.05 | 3.80% | 20.06 | 3.80% | 12.83 | 3.80% | 11.13 | 3.80% | 11.59 | 3.80% | 23.37 | 3.80% | 16.31 |
| Stage Three Growth | 2070 | 3.80% | 13.69 | 3.80% | 20.23 | 3.80% | 26.57 | 3.80% | 6.65 | 3.80% | 18.51 | 3.80% | 26.00 | 3.80% | 20.83 | 3.80% | 13.32 | 3.80% | 11.55 | 3.80% | 12.03 | 3.80% | 24.26 | 3.80% | 16.93 |
| Stage Three Growth | 2071 | 3.80% | 14.21 | 3.80% | 21.00 | 3.80% | 27.58 | 3.80% | 6.90 | 3.80% | 19.22 | 3.80% | 26.99 | 3.80% | 21.62 | 3.80% | 13.83 | 3.80% | 11.99 | 3.80% | 12.49 | 3.80% | 25.18 | 3.80% | 17.58 |
| Stage Three Growth | 2072 | 3.80% | 14.75 | 3.80% | 21.79 | 3.80% | 28.62 | 3.80% | 7.16 | 3.80% | 19.95 | 3.80% | 28.01 | 3.80% | 22.44 | 3.80% | 14.35 | 3.80% | 12.44 | 3.80% | 12.96 | 3.80% | 26.14 | 3.80% | 18.24 |
| Stage Three Growth | 2073 | 3.80% | 15.31 | 3.80% | 22.62 | 3.80% | 29.71 | 3.80% | 7.44 | 3.80% | 20.71 | 3.80% | 29.08 | 3.80% | 23.29 | 3.80% | 14.90 | 3.80% | 12.91 | 3.80% | 13.46 | 3.80% | 27.13 | 3.80% | 18.94 |
| Stage Three Growth | 2074 | 3.80% | 15.89 | 3.80% | 23.48 | 3.80% | 30.84 | 3.80% | 7.72 | 3.80% | 21.49 | 3.80% | 30.18 | 3.80% | 24.18 | 3.80% | 15.47 | 3.80% | 13.41 | 3.80% | 13.97 | 3.80% | 28.16 | 3.80% | 19.66 |
| Stage Three Growth | 2075 | 3.80% | 16.50 | 3.80% | 24.37 | 3.80% | 32.01 | 3.80% | 8.01 | 3.80% | 22.31 | 3.80% | 31.33 | 3.80% | 25.10 | 3.80% | 16.05 | 3.80% | 13.92 | 3.80% | 14.50 | 3.80% | 29.23 | 3.80% | 20.40 |
| Stage Three Growth | 2076 | 3.80% | 17.12 | 3.80% | 25.30 | 3.80% | 33.23 | 3.80% | 8.32 | 3.80% | 23.16 | 3.80% | 32.52 | 3.80% | 26.05 | 3.80% | 16.66 | 3.80% | 14.44 | 3.80% | 15.05 | 3.80% | 30.34 | 3.80% | 21.18 |
| Stage Three Growth | 2077 | 3.80% | 17.77 | 3.80% | 26.26 | 3.80% | 34.49 | 3.80% | 8.63 | 3.80% | 24.04 | 3.80% | 33.75 | 3.80% | 27.04 | 3.80% | 17.30 | 3.80% | 14.99 | 3.80% | 15.62 | 3.80% | 31.50 | 3.80% | 21.98 |
| Stage Three Growth | 2078 | 3.80% | 18.45 | 3.80% | 27.26 | 3.80% | 35.80 | 3.80% | 8.96 | 3.80% | 24.95 | 3.80% | 35.04 | 3.80% | 28.07 | 3.80% | 17.95 | 3.80% | 15.56 | 3.80% | 16.21 | 3.80% | 32.69 | 3.80% | 22.82 |
| Stage Three Growth | 2079 | 3.80% | 19.15 | 3.80% | 28.30 | 3.80% | 37.16 | 3.80% | 9.30 | 3.80% | 25.90 | 3.80% | 36.37 | 3.80% | 29.13 | 3.80% | 18.64 | 3.80% | 16.15 | 3.80% | 16.83 | 3.80% | 33.93 | 3.80% | 23.69 |
| Stage Three Growth | 2080 | 3.80% | 19.88 | 3.80% | 29.37 | 3.80% | 38.58 | 3.80% | 9.65 | 3.80% | 26.88 | 3.80% | 37.75 | 3.80% | 30.24 | 3.80% | 19.34 | 3.80% | 16.77 | 3.80% | 17.47 | 3.80% | 35.22 | 3.80% | 24.59 |
| Stage Three Growth | 2081 | 3.80% | 20.63 | 3.80% | 30.49 | 3.80% | 40.04 | 3.80% | 10.02 | 3.80% | 27.90 | 3.80% | 39.18 | 3.80% | 31.39 | 3.80% | 20.08 | 3.80% | 17.40 | 3.80% | 18.13 | 3.80% | 36.56 | 3.80% | 25.52 |
| Stage Three Growth | 2082 | 3.80% | 21.42 | 3.80% | 31.64 | 3.80% | 41.56 | 3.80% | 10.40 | 3.80% | 28.96 | 3.80% | 40.67 | 3.80% | 32.58 | 3.80% | 20.84 | 3.80% | 18.07 | 3.80% | 18.82 | 3.80% | 37.95 | 3.80% | 26.49 |
| Stage Three Growth | 2083 | 3.80% | 22.23 | 3.80% | 32.85 | 3.80% | 43.14 | 3.80% | 10.80 | 3.80% | 30.07 | 3.80% | 42.22 | 3.80% | 33.82 | 3.80% | 21.63 | 3.80% | 18.75 | 3.80% | 19.54 | 3.80% | 39.39 | 3.80% | 27.50 |
| Stage Three Growth | 2084 | 3.80% | 23.07 | 3.80% | 34.10 | 3.80% | 44.78 | 3.80% | 11.21 | 3.80% | 31.21 | 3.80% | 43.82 | 3.80% | 35.10 | 3.80% | 22.46 | 3.80% | 19.47 | 3.80% | 20.28 | 3.80% | 40.89 | 3.80% | 28.54 |
| Stage Three Growth | 2085 | 3.80% | 23.95 | 3.80% | 35.39 | 3.80% | 46.48 | 3.80% | 11.63 | 3.80% | 32.39 | 3.80% | 45.49 | 3.80% | 36.44 | 3.80% | 23.31 | 3.80% | 20.21 | 3.80% | 21.05 | 3.80% | 42.45 | 3.80% | 29.63 |
| Stage Three Growth | 2086 | 3.80% | 24.86 | 3.80% | 36.74 | 3.80% | 48.25 | 3.80% | 12.07 | 3.80% | 33.62 | 3.80% | 47.22 | 3.80% | 37.82 | 3.80% | 24.19 | 3.80% | 20.97 | 3.80% | 21.85 | 3.80% | 44.06 | 3.80% | 30.75 |
| Stage Three Growth | 2087 | 3.80% | 25.81 | 3.80% | 38.13 | 3.80% | 50.08 | 3.80% | 12.53 | 3.80% | 34.90 | 3.80% | 49.01 | 3.80% | 39.26 | 3.80% | 25.11 | 3.80% | 21.77 | 3.80% | 22.68 | 3.80% | 45.73 | 3.80% | 31.92 |
| Stage Three Growth | 2088 | 3.80% | 26.79 | 3.80% | 39.58 | 3.80% | 51.99 | 3.80% | 13.01 | 3.80% | 36.23 | 3.80% | 50.87 | 3.80% | 40.75 | 3.80% | 26.07 | 3.80% | 22.60 | 3.80% | 23.54 | 3.80% | 47.47 | 3.80% | 33.13 |
| Stage Three Growth | 2089 | 3.80% | 27.80 | 3.80% | 41.09 | 3.80% | 53.96 | 3.80% | 13.50 | 3.80% | 37.61 | 3.80% | 52.81 | 3.80% | 42.30 | 3.80% | 27.06 | 3.80% | 23.46 | 3.80% | 24.44 | 3.80% | 49.27 | 3.80% | 34.39 |
| Stage Three Growth | 2090 | 3.80% | 28.86 | 3.80% | 42.65 | 3.80% | 56.01 | 3.80% | 14.02 | 3.80% | 39.03 | 3.80% | 54.81 | 3.80% | 43.91 | 3.80% | 28.09 | 3.80% | 24.35 | 3.80% | 25.37 | 3.80% | 51.15 | 3.80% | 35.70 |
| Stage Three Growth | 2091 | 3.80% | 29.96 | 3.80% | 44.27 | 3.80% | 58.14 | 3.80% | 14.55 | 3.80% | 40.52 | 3.80% | 56.89 | 3.80% | 45.58 | 3.80% | 29.15 | 3.80% | 25.27 | 3.80% | 26.33 | 3.80% | 53.09 | 3.80% | 37.06 |
| Stage Three Growth | 2092 | 3.80% | 31.10 | 3.80% | 45.95 | 3.80% | 60.35 | 3.80% | 15.10 | 3.80% | 42.06 | 3.80% | 59.06 | 3.80% | 47.31 | 3.80% | 30.26 | 3.80% | 26.23 | 3.80% | 27.33 | 3.80% | 55.11 | 3.80% | 38.47 |
| Stage Three Growth | 2093 | 3.80% | 32.28 | 3.80% | 47.70 | 3.80% | 62.64 | 3.80% | 15.68 | 3.80% | 43.66 | 3.80% | 61.30 | 3.80% | 49.11 | 3.80% | 31.41 | 3.80% | 27.23 | 3.80% | 28.37 | 3.80% | 57.20 | 3.80% | 39.93 |
| Stage Three Growth | 2094 | 3.80% | 33.50 | 3.80% | 49.51 | 3.80% | 65.02 | 3.80% | 16.27 | 3.80% | 45.31 | 3.80% | 63.63 | 3.80% | 50.97 | 3.80% | 32.61 | 3.80% | 28.26 | 3.80% | 29.45 | 3.80% | 59.38 | 3.80% | 41.44 |
| Stage Three Growth | 2095 | 3.80% | 34.78 | 3.80% | 51.39 | 3.80% | 67.50 | 3.80% | 16.89 | 3.80% | 47.04 | 3.80% | 66.05 | 3.80% | 52.91 | 3.80% | 33.85 | 3.80% | 29.34 | 3.80% | 30.57 | 3.80% | 61.63 | 3.80% | 43.02 |
| Stage Three Growth | 2096 | 3.80% | 36.10 | 3.80% | 53.34 | 3.80% | 70.06 | 3.80% | 17.53 | 3.80% | 48.82 | 3.80% | 68.56 | 3.80% | 54.92 | 3.80% | 35.13 | 3.80% | 30.45 | 3.80% | 31.73 | 3.80% | 63.97 | 3.80% | 44.65 |
| Stage Three Growth | 2097 | 3.80% | 37.47 | 3.80% | 55.37 | 3.80% | 72.72 | 3.80% | 18.20 | 3.80% | 50.68 | 3.80% | 71.16 | 3.80% | 57.01 | 3.80% | 36.47 | 3.80% | 31.61 | 3.80% | 32.93 | 3.80% | 66.40 | 3.80% | 46.35 |
| Stage Three Growth | 2098 | 3.80% | 38.90 | 3.80% | 57.47 | 3.80% | 75.49 | 3.80% | 18.89 | 3.80% | 52.60 | 3.80% | 73.87 | 3.80% | 59.17 | 3.80% | 37.85 | 3.80% | 32.81 | 3.80% | 34.19 | 3.80% | 68.93 | 3.80% | 48.11 |
| Stage Three Growth | 2099 | 3.80% | 40.37 | 3.80% | 59.66 | 3.80% | 78.35 | 3.80% | 19.61 | 3.80% | 54.60 | 3.80% | 76.67 | 3.80% | 61.42 | 3.80% | 39.29 | 3.80% | 34.06 | 3.80% | 35.49 | 3.80% | 71.55 | 3.80% | 49.94 |
| Stage Three Growth | 2100 | 3.80% | 41.91 | 3.80% | 61.92 | 3.80% | 81.33 | 3.80% | 20.35 | 3.80% | 56.68 | 3.80% | 79.59 | 3.80% | 63.76 | 3.80% | 40.78 | 3.80% | 35.35 | 3.80% | 36.83 | 3.80% | 74.27 | 3.80% | 51.84 |
| Stage Three Growth | 2101 | 3.80% | 43.50 | 3.80% | 64.28 | 3.80% | 84.42 | 3.80% | 21.13 | 3.80% | 58.83 | 3.80% | 82.61 | 3.80% | 66.18 | 3.80% | 42.33 | 3.80% | 36.70 | 3.80% | 38.23 | 3.80% | 77.09 | 3.80% | 53.81 |
| Stage Three Growth | 2102 | 3.80% | 45.15 | 3.80% | 66.72 | 3.80% | 87.63 | 3.80% | 21.93 | 3.80% | 61.07 | 3.80% | 85.75 | 3.80% | 68.69 | 3.80% | 43.94 | 3.80% | 38.09 | 3.80% | 39.69 | 3.80% | 80.02 | 3.80% | 55.85 |
| Stage Three Growth | 2103 | 3.80% | 46.87 | 3.80% | 69.25 | 3.80% | 90.96 | 3.80% | 22.76 | 3.80% | 63.39 | 3.80% | 89.01 | 3.80% | 71.30 | 3.80% | 45.61 | 3.80% | 39.54 | 3.80% | 41.19 | 3.80% | 83.06 | 3.80% | 57.98 |
| Stage Three Growth | 2104 | 3.80% | 48.65 | 3.80% | 71.89 | 3.80% | 94.42 | 3.80% | 23.63 | 3.80% | 65.80 | 3.80% | 92.39 | 3.80% | 74.01 | 3.80% | 47.34 | 3.80% | 41.04 | 3.80% | 42.76 | 3.80% | 86.21 | 3.80% | 60.18 |
| Stage Three Growth | 2105 | 3.80% | 50.50 | 3.80% | 74.62 | 3.80% | 98.01 | 3.80% | 24.52 | 3.80% | 68.30 | 3.80% | 95.90 | 3.80% | 76.83 | 3.80% | 49.14 | 3.80% | 42.60 | 3.80% | 44.38 | 3.80% | 89.49 | 3.80% | 62.47 |
| Stage Three Growth | 2106 | 3.80% | 52.42 | 3.80% | 77.45 | 3.80% | 101.73 | 3.80% | 25.46 | 3.80% | 70.89 | 3.80% | 99.55 | 3.80% | 79.75 | 3.80% | 51.01 | 3.80% | 44.22 | 3.80% | 46.07 | 3.80% | 92.89 | 3.80% | 64.84 |
| Stage Three Growth | 2107 | 3.80% | 54.41 | 3.80% | 80.40 | 3.80% | 105.60 | 3.80% | 26.42 | 3.80% | 73.59 | 3.80% | 103.33 | 3.80% | 82.78 | 3.80% | 52.95 | 3.80% | 45.90 | 3.80% | 47.82 | 3.80% | 96.42 | 3.80% | 67.30 |
| Stage Three Growth | 2108 | 3.80% | 56.48 | 3.80% | 83.45 | 3.80% | 109.61 | 3.80% | 27.43 | 3.80% | 76.38 | 3.80% | 107.26 | 3.80% | 85.92 | 3.80% | 54.96 | 3.80% | 47.64 | 3.80% | 49.64 | 3.80% | 100.09 | 3.80% | 69.86 |
| Stage Three Growth | 2109 | 3.80% | 58.62 | 3.80% | 86.62 | 3.80% | 113.77 | 3.80% | 28.47 | 3.80% | 79.29 | 3.80% | 111.33 | 3.80% | 89.19 | 3.80% | 57.05 | 3.80% | 49.45 | 3.80% | 51.53 | 3.80% | 103.89 | 3.80% | 72.52 |
| Stage Three Growth | 2110 | 3.80% | 60.85 | 3.80% | 89.91 | 3.80% | 118.10 | 3.80% | 29.55 | 3.80% | 82.30 | 3.80% | 115.56 | 3.80% | 92.58 | 3.80% | 59.22 | 3.80% | 51.33 | 3.80% | 53.48 | 3.80% | 107.84 | 3.80% | 75.27 |
| Stage Three Growth | 2111 | 3.80% | 63.16 | 3.80% | 93.33 | 3.80% | 122.58 | 3.80% | 30.67 | 3.80% | 85.43 | 3.80% | 119.95 | 3.80% | 96.09 | 3.80% | 61.47 | 3.80% | 53.28 | 3.80% | 55.52 | 3.80% | 111.93 | 3.80% | 78.13 |
| Stage Three Growth | 2112 | 3.80% | 65.56 | 3.80% | 96.88 | 3.80% | 127.24 | 3.80% | 31.84 | 3.80% | 88.67 | 3.80% | 124.51 | 3.80% | 99.74 | 3.80% | 63.80 | 3.80% | 55.31 | 3.80% | 57.63 | 3.80% | 116.19 | 3.80% | 81.10 |
| Stage Three Growth | 2113 | 3.80% | 68.05 | 3.80% | 100.56 | 3.80% | 132.08 | 3.80% | 33.05 | 3.80% | 92.04 | 3.80% | 129.24 | 3.80% | 103.53 | 3.80% | 66.23 | 3.80% | 57.41 | 3.80% | 59.82 | 3.80% | 120.60 | 3.80% | 84.18 |
| Stage Three Growth | 2114 | 3.80% | 70.64 | 3.80% | 104.38 | 3.80% | 137.10 | 3.80% | 34.31 | 3.80% | 95.54 | 3.80% | 134.16 | 3.80% | 107.47 | 3.80% | 68.75 | 3.80% | 59.59 | 3.80% | 62.09 | 3.80% | 125.19 | 3.80% | 87.38 |
| Stage Three Growth | 2115 | 3.80% | 73.33 | 3.80% | 108.35 | 3.80% | 142.31 | 3.80% | 35.61 | 3.80% | 99.17 | 3.80% | 139.25 | 3.80% | 111.55 | 3.80% | 71.36 | 3.80% | 61.86 | 3. | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|
| Stage Three Growth | 2120 | 3.80% | 88.36 | 3.80% | 130.56 | 3.80% | 171.48 | 3.80% | 42.91 | 3.80% | 119.50 | 3.80% | 167.80 | 3.80% | 134.42 | 3.80% | 85.99 | 3.80% | 74.54 | 3.80% | 77.66 | 3.80% | 156.58 | 3.80% | 109.29 |
| Stage Three Growth | 2121 | 3.80% | 91.71 | 3.80% | 135.52 | 3.80% | 177.99 | 3.80% | 44.54 | 3.80% | 124.04 | 3.80% | 174.18 | 3.80% | 139.53 | 3.80% | 89.25 | 3.80% | 77.37 | 3.80% | 80.61 | 3.80% | 162.53 | 3.80% | 113.45 |
| Stage Three Growth | 2122 | 3.80% | 95.20 | 3.80% | 140.67 | 3.80% | 184.76 | 3.80% | 46.23 | 3.80% | 128.75 | 3.80% | 180.80 | 3.80% | 144.83 | 3.80% | 92.65 | 3.80% | 80.31 | 3.80% | 83.67 | 3.80% | 168.71 | 3.80% | 117.76 |
| Stage Three Growth | 2123 | 3.80% | 98.82 | 3.80% | 146.01 | 3.80% | 191.78 | 3.80% | 47.99 | 3.80% | 133.65 | 3.80% | 187.67 | 3.80% | 150.34 | 3.80% | 96.17 | 3.80% | 83.36 | 3.80% | 86.85 | 3.80% | 175.12 | 3.80% | 122.23 |
| Stage Three Growth | 2124 | 3.80% | 102.57 | 3.80% | 151.56 | 3.80% | 199.07 | 3.80% | 49.81 | 3.80% | 138.72 | 3.80% | 194.80 | 3.80% | 156.05 | 3.80% | 99.82 | 3.80% | 86.53 | 3.80% | 90.15 | 3.80% | 181.77 | 3.80% | 126.88 |
| Stage Three Growth | 2125 | 3.80% | 106.47 | 3.80% | 157.32 | 3.80% | 206.63 | 3.80% | 51.71 | 3.80% | 144.00 | 3.80% | 202.20 | 3.80% | 161.98 | 3.80% | 103.61 | 3.80% | 89.82 | 3.80% | 93.58 | 3.80% | 188.68 | 3.80% | 131.70 |
| Stage Three Growth | 2126 | 3.80% | 110.52 | 3.80% | 163.30 | 3.80% | 214.48 | 3.80% | 53.67 | 3.80% | 149.47 | 3.80% | 209.88 | 3.80% | 168.13 | 3.80% | 107.55 | 3.80% | 93.23 | 3.80% | 97.14 | 3.80% | 195.85 | 3.80% | 136.70 |
| Stage Three Growth | 2127 | 3.80% | 114.71 | 3.80% | 169.51 | 3.80% | 222.63 | 3.80% | 55.71 | 3.80% | 155.15 | 3.80% | 217.86 | 3.80% | 174.52 | 3.80% | 111.64 | 3.80% | 96.77 | 3.80% | 100.83 | 3.80% | 203.29 | 3.80% | 141.90 |
| Stage Three Growth | 2128 | 3.80% | 119.07 | 3.80% | 175.95 | 3.80% | 231.09 | 3.80% | 57.83 | 3.80% | 161.04 | 3.80% | 226.14 | 3.80% | 181.15 | 3.80% | 115.88 | 3.80% | 100.45 | 3.80% | 104.66 | 3.80% | 211.02 | 3.80% | 147.29 |
| Stage Three Growth | 2129 | 3.80% | 123.60 | 3.80% | 182.63 | 3.80% | 239.88 | 3.80% | 60.03 | 3.80% | 167.16 | 3.80% | 234.73 | 3.80% | 188.04 | 3.80% | 120.28 | 3.80% | 104.27 | 3.80% | 108.64 | 3.80% | 219.04 | 3.80% | 152.89 |
| Stage Three Growth | 2130 | 3.80% | 128.30 | 3.80% | 189.57 | 3.80% | 248.99 | 3.80% | 62.31 | 3.80% | 173.52 | 3.80% | 243.65 | 3.80% | 195.18 | 3.80% | 124.85 | 3.80% | 108.23 | 3.80% | 112.76 | 3.80% | 227.36 | 3.80% | 158.70 |
| Stage Three Growth | 2131 | 3.80% | 133.17 | 3.80% | 196.78 | 3.80% | 258.45 | 3.80% | 64.67 | 3.80% | 180.11 | 3.80% | 252.91 | 3.80% | 202.60 | 3.80% | 129.60 | 3.80% | 112.34 | 3.80% | 117.05 | 3.80% | 236.00 | 3.80% | 164.73 |
| Stage Three Growth | 2132 | 3.80% | 138.23 | 3.80% | 204.25 | 3.80% | 268.27 | 3.80% | 67.13 | 3.80% | 186.95 | 3.80% | 262.52 | 3.80% | 210.30 | 3.80% | 134.52 | 3.80% | 116.61 | 3.80% | 121.50 | 3.80% | 244.97 | 3.80% | 170.99 |
| Stage Three Growth | 2133 | 3.80% | 143.48 | 3.80% | 212.02 | 3.80% | 278.47 | 3.80% | 69.68 | 3.80% | 194.06 | 3.80% | 272.49 | 3.80% | 218.29 | 3.80% | 139.64 | 3.80% | 121.04 | 3.80% | 126.11 | 3.80% | 254.27 | 3.80% | 177.49 |
| Stage Three Growth | 2134 | 3.80% | 148.94 | 3.80% | 220.07 | 3.80% | 289.05 | 3.80% | 72.33 | 3.80% | 201.43 | 3.80% | 282.85 | 3.80% | 226.58 | 3.80% | 144.94 | 3.80% | 125.64 | 3.80% | 130.91 | 3.80% | 263.94 | 3.80% | 184.23 |
| Stage Three Growth | 2135 | 3.80% | 154.60 | 3.80% | 228.44 | 3.80% | 300.03 | 3.80% | 75.08 | 3.80% | 209.09 | 3.80% | 293.60 | 3.80% | 235.19 | 3.80% | 150.45 | 3.80% | 130.42 | 3.80% | 135.88 | 3.80% | 273.97 | 3.80% | 191.23 |
| Stage Three Growth | 2136 | 3.80% | 160.47 | 3.80% | 237.12 | 3.80% | 311.44 | 3.80% | 77.93 | 3.80% | 217.03 | 3.80% | 304.75 | 3.80% | 244.13 | 3.80% | 156.17 | 3.80% | 135.37 | 3.80% | 141.04 | 3.80% | 284.38 | 3.80% | 198.50 |
| Stage Three Growth | 2137 | 3.80% | 166.57 | 3.80% | 246.13 | 3.80% | 323.27 | 3.80% | 80.89 | 3.80% | 225.28 | 3.80% | 316.34 | 3.80% | 253.41 | 3.80% | 162.10 | 3.80% | 140.52 | 3.80% | 146.40 | 3.80% | 295.18 | 3.80% | 206.04 |
| Stage Three Growth | 2138 | 3.80% | 172.90 | 3.80% | 255.48 | 3.80% | 335.55 | 3.80% | 83.97 | 3.80% | 233.84 | 3.80% | 328.36 | 3.80% | 263.04 | 3.80% | 168.26 | 3.80% | 145.85 | 3.80% | 151.97 | 3.80% | 306.40 | 3.80% | 213.87 |
| Stage Three Growth | 2139 | 3.80% | 179.47 | 3.80% | 265.19 | 3.80% | 348.30 | 3.80% | 87.16 | 3.80% | 242.73 | 3.80% | 340.83 | 3.80% | 273.03 | 3.80% | 174.65 | 3.80% | 151.40 | 3.80% | 157.74 | 3.80% | 318.04 | 3.80% | 222.00 |
| Stage Three Growth | 2140 | 3.80% | 186.29 | 3.80% | 275.27 | 3.80% | 361.54 | 3.80% | 90.47 | 3.80% | 251.95 | 3.80% | 353.79 | 3.80% | 283.41 | 3.80% | 181.29 | 3.80% | 157.15 | 3.80% | 163.74 | 3.80% | 330.13 | 3.80% | 230.43 |
| Stage Three Growth | 2141 | 3.80% | 193.37 | 3.80% | 285.73 | 3.80% | 375.28 | 3.80% | 93.91 | 3.80% | 261.52 | 3.80% | 367.23 | 3.80% | 294.18 | 3.80% | 188.18 | 3.80% | 163.12 | 3.80% | 169.96 | 3.80% | 342.67 | 3.80% | 239.19 |
| Implied Cost of Equity | | | 7.63% | | 7.45% | | 7.99% | | 6.87% | | 8.43% | | 7.55% | | 8.89% | | 6.86% | | 8.71% | | 6.49% | | 7.99% | | 7.90% |

Mean 7.73%
Median 7.77%

| | |
|--|--------------|
| Selected Three-Stage DGM Cost of Equity | 7.75% |
|--|--------------|

Equity Component of the Direct Rate

| Company | Value Line P/E Ratio |
|--|----------------------|
| Alliant Energy Corp. | 19.2 |
| Ameren Corp. | 18.8 |
| American Electric Power Co Inc. | 18.3 |
| CenterPoint Energy Inc. | 20.3 |
| CMS Energy Corp. | 18.3 |
| DTE Energy Co. | 16.9 |
| Evergy Inc. | 17.1 |
| MGE Energy Inc. | 20.0 |
| OGE Energy Corp. | 17.7 |
| Otter Tail Corp. | 15.5 |
| WEC Energy Group Inc. | 19.0 |
| Xcel Energy Inc. | 18.1 |
| | |
| Mean | 18.3 |
| Median | 18.3 |
| Selected Price to Earnings (P/E) Ratio | 18.3 |
| | |
| Indicated Equity Component of the Direct Rate | 5.46% |

We placed the most reliance on the median price to earnings ratio.

Notes:

The Price/Earnings Ratio was downloaded from Value Line.

Beta Analysis

| Company | Beta |
|---------------------------------|-------------|
| Alliant Energy Corp. | 0.80 |
| Ameren Corp. | 0.80 |
| American Electric Power Co Inc. | 0.70 |
| CenterPoint Energy Inc. | 0.80 |
| CMS Energy Corp. | 0.70 |
| DTE Energy Co. | 0.80 |
| Evergy Inc. | 0.75 |
| MGE Energy Inc. | 0.80 |
| OGE Energy Corp. | 0.85 |
| Otter Tail Corp. | 0.90 |
| WEC Energy Group Inc. | 0.65 |
| Xcel Energy Inc. | 0.70 |
| Beta Mean | 0.77 |
| Beta Median | 0.80 |
| Unlevered and Relevered Mean* | 0.79 |
| Indicated Beta | 0.80 |

We considered the mean, median, and unlevered/relevered mean. We placed more reliance on the median when selecting the indicated beta.

Notes:

*See the Unlevering Relevering Beta page for the calculation

Unlevering/Relevering Betas

| Unlevering of Betas | | | | | |
|---------------------------------|---|--|---|---|---------------------------|
| Company | Value Line Actual Income Tax Rate | From Capital Structure Page Actual Debt in Capital Structure | Structure Page Actual Equity in Capital Structure | Value Line Levered Beta (Published) | Formula Unlevered Beta |
| Alliant Energy Corp. | 2.00% | 41.06% | 58.94% | 0.80 | 0.48 |
| Ameren Corp. | 12.00% | 39.11% | 60.61% | 0.80 | 0.51 |
| American Electric Power Co Inc. | 21.00% | 41.72% | 58.28% | 0.70 | 0.45 |
| CenterPoint Energy Inc. | 16.00% | 46.99% | 53.01% | 0.80 | 0.46 |
| CMS Energy Corp. | 15.50% | 44.73% | 54.70% | 0.70 | 0.41 |
| DTE Energy Co. | 5.00% | 46.82% | 53.18% | 0.80 | 0.44 |
| Eergy Inc. | 6.50% | 43.62% | 56.38% | 0.75 | 0.44 |
| MGE Energy Inc. | 19.00% | 21.14% | 78.86% | 0.80 | 0.66 |
| OGE Energy Corp. | 12.00% | 36.95% | 63.05% | 0.85 | 0.56 |
| Otter Tail Corp. | 20.00% | 21.30% | 78.70% | 0.90 | 0.74 |
| WEC Energy Group Inc. | 19.00% | 36.12% | 63.83% | 0.65 | 0.45 |
| Xcel Energy Inc. | NMF | 39.13% | 60.87% | 0.70 | N/A |
| | | | | Average | 0.77 |

| Relevering of Betas | | | | | |
|---------------------------------|--|--|---|-------------------------|-------------|
| Company | Formula Composite Income Tax Rate | From Capital Structure Page Industry Debt in Capital Structure | From Capital Structure Industry Equity in Capital | Formula Levered Beta | |
| Alliant Energy Corp. | 13.45% | 39.00% | 61.00% | 0.75 | |
| Ameren Corp. | 13.45% | 39.00% | 61.00% | 0.79 | |
| American Electric Power Co Inc. | 13.45% | 39.00% | 61.00% | 0.70 | |
| CenterPoint Energy Inc. | 13.45% | 39.00% | 61.00% | 0.71 | |
| CMS Energy Corp. | 13.45% | 39.00% | 61.00% | 0.64 | |
| DTE Energy Co. | 13.45% | 39.00% | 61.00% | 0.68 | |
| Eergy Inc. | 13.45% | 39.00% | 61.00% | 0.68 | |
| MGE Energy Inc. | 13.45% | 39.00% | 61.00% | 1.03 | |
| OGE Energy Corp. | 13.45% | 39.00% | 61.00% | 0.87 | |
| Otter Tail Corp. | 13.45% | 39.00% | 61.00% | 1.15 | |
| WEC Energy Group Inc. | 13.45% | 39.00% | 61.00% | 0.70 | |
| Xcel Energy Inc. | 13.45% | 39.00% | 61.00% | N/A | |
| | | | | Average | 0.79 |

Notes:

Uses the Hamada Formula

Unlevered Beta = Levered Beta / [1 + (1 - Tax Rate) x (Debt/Equity)], using company-specific components

Relevered Beta = Unlevered Beta [1 + (1 - Tax Rate) x (Debt/Equity)], Using industry components for Tax Rate, Debt, and Equity

Calculation of Market to Book Ratios for the Electric Market Segment

- December 31, 2025 calendar year information for the January 2, 2026 Assessment
- A market to book ratio over one would be an indication of no obsolescence.
- Market value of common equity equals share price as of January 2, 2026 multiplied by common shares outstanding from companies' 2025 10-K

Market to Book Ratio for Equity

| Company | Market Value of Common Equity | Book Value of Common Equity from 10-K | Market to Book Ratio | Source |
|---------------------------------|-------------------------------|---------------------------------------|----------------------|--|
| Alliant Energy Corp. | 16,865,632,949 | 7,334,000,000 | 2.30 | Alliant Energy Corp. 2025 10-K, p. 52 |
| Ameren Corp. | 27,880,176,583 | 13,530,000,000 | 2.06 | Ameren Corp. 2025 10-K, p. 87 |
| American Electric Power Co Inc. | 62,774,612,233 | 31,138,000,000 | 2.02 | American Electric Power Co. 2025 10-K, p. 75 |
| CenterPoint Energy Inc. | 25,241,397,399 | 11,153,000,000 | 2.26 | CenterPoint Energy Inc. 2025 10-K, p. 97 |
| CMS Energy Corp. | 21,578,159,848 | 9,711,000,000 | 2.22 | CMS Energy Corp. 2025 10-K, p. 99 |
| DTE Energy Co. | 27,081,658,275 | 12,308,000,000 | 2.20 | DTE Energy Co. 2025 10-K, p. 61 |
| Evergy Inc. | 16,827,596,216 | 10,267,800,000 | 1.64 | Evergy Inc. 2025 10-K, p. 75 |
| MGE Energy Inc. | 2,868,072,238 | 1,303,936,000 | 2.20 | MGE Energy Inc. 2025 10-K, p. 60 |
| OGE Energy Corp. | 8,837,568,000 | 4,977,300,000 | 1.78 | OGE Energy Corp. 2025 10-K, p. 51 |
| Otter Tail Corp. | 3,413,204,604 | 1,861,760,000 | 1.83 | Otter Tail Corp. 2025 10-K, p. 51 |
| WEC Energy Group Inc. | 34,651,887,928 | 13,613,600,000 | 2.55 | WEC Energy Group. 2025 10-K, p. 89 |
| Xcel Energy Inc. | 46,570,501,396 | 23,609,000,000 | 1.97 | Xcel Energy Inc. 2025 10-K, p. 50 |
| Average | | | 2.09 | |

Market to Book Ratio for Debt

| Company | Market Value of Long-Term Debt from 10-K | Book Value of Long-Term Debt from 10-K | Market to Book Ratio | Source |
|---------------------------------|--|--|----------------------|---|
| Alliant Energy Corp. | 11,748,000,000 | 12,028,000,000 | 0.98 | Alliant Energy Corp. 2025 10-K, p. 100 |
| Ameren Corp. | 17,992,000,000 | 19,187,000,000 | 0.94 | Ameren Corp. 2025 10-K, p. 130 |
| American Electric Power Co Inc. | 44,930,000,000 | 47,322,000,000 | 0.95 | American Electric Power Co. 2025 10-K, p. 272 |
| CenterPoint Energy Inc. | 22,377,000,000 | 22,980,000,000 | 0.97 | CenterPoint Energy Inc. 2025 10-K, p. 147 |
| CMS Energy Corp. | 17,645,000,000 | 18,757,000,000 | 0.94 | CMS Energy Corp. 2025 10-K, p. 136 |
| DTE Energy Co. | 23,840,000,000 | 25,123,000,000 | 0.95 | DTE Energy Co. 2025 10-K, p. 110 |
| Evergy Inc. | 13,018,900,000 | 13,406,200,000 | 0.97 | Evergy Inc. 2025 10-K, p. 139 |
| MGE Energy Inc. | 768,889,000 | 818,115,000 | 0.94 | MGE Energy 2025 10-K p. 100 |
| OGE Energy Corp. | 5,179,300,000 | 5,369,200,000 | 0.96 | OGE Energy Corp. 2025 10-K, p. 73 |
| Otter Tail Corp. | 923,639,000 | 1,043,517,000 | 0.89 | Otter Tail Corp. 2025 10-K, p. 84 |
| WEC Energy Group Inc. | 19,609,100,000 | 20,017,500,000 | 0.98 | WEC Energy Group. 2025 10-K, p. 138 |
| Xcel Energy Inc. | 29,943,000,000 | 32,333,000,000 | 0.93 | Xcel Energy Inc. 2025 10-K, p. 71 |
| Average | | | 0.95 | |

Application of Capital Structure as determined in the Capitalization Rate Study

| | Capital Structure | Market to Book | Composite |
|----------------|-------------------|----------------|-----------|
| Common Equity | 61.00% | 2.09 | 1.27 |
| Long-term Debt | 39.00% | 0.95 | 0.37 |
| 1.64 | | | |

Appendix B - Gas Distribution

Yield Rate

| | Capital Structure | Rate | Composite |
|-------------------|-------------------|-------|--------------|
| Long-Term Debt | 37.00% | 5.88% | 2.18% |
| Common Equity | 63.00% | 8.94% | 5.63% |
| Yield Rate | | | 7.81% |

| |
|--|
| Gas Distribution Yield Rate 7.81% |
|--|

Capital Structure

| Company | Market Value of Long-Term Debt ¹ | Value of Preferred Equity ² | Market Value of Common Equity ³ | Total Market Value | % Long-Term Debt | % Preferred Equity | % Common Equity |
|-----------------------------|---|--|--|--------------------|------------------|--------------------|-----------------|
| Atmos Energy Corp. | 8,272,978,000 | - | 27,363,221,514 | 35,636,199,514 | 23.22% | 0.00% | 76.78% |
| CenterPoint Energy Inc. | 22,377,000,000 | - | 25,241,397,399 | 47,618,397,399 | 46.99% | 0.00% | 53.01% |
| Chesapeake Utilities Corp. | 1,500,000,000 | - | 2,970,511,760 | 4,470,511,760 | 33.55% | 0.00% | 66.45% |
| CMS Energy Corp. | 17,645,000,000 | 224,000,000 | 21,578,159,848 | 39,447,159,848 | 44.73% | 0.57% | 54.70% |
| MGE Energy Inc. | 768,889,000 | - | 2,868,072,238 | 3,636,961,238 | 21.14% | 0.00% | 78.86% |
| New Jersey Resources Corp. | 3,145,412,000 | - | 4,632,202,085 | 7,777,614,085 | 40.44% | 0.00% | 59.56% |
| NiSource Inc. | 14,975,300,000 | - | 20,170,695,565 | 35,145,995,565 | 42.61% | 0.00% | 57.39% |
| Northwest Natural Gas | 2,164,200,000 | - | 1,942,681,589 | 4,106,881,589 | 52.70% | 0.00% | 47.30% |
| ONE Gas Inc. | 2,500,000,000 | - | 4,853,644,989 | 7,353,644,989 | 34.00% | 0.00% | 66.00% |
| Southwest Gas Holdings Inc. | 3,234,359,000 | - | 5,788,753,600 | 9,023,112,600 | 35.85% | 0.00% | 64.15% |
| WEC Energy Group Inc. | 19,609,100,000 | 30,400,000 | 34,651,887,928 | 54,291,387,928 | 36.12% | 0.06% | 63.83% |

| | | | |
|---------------|--------|-------|--------|
| Mean | 37.39% | 0.06% | 62.55% |
| Median | 36.12% | 0.00% | 63.83% |

| | | | |
|---|---------------|--------------|---------------|
| Indicated Industry Capital Structure | 37.00% | 0.00% | 63.00% |
|---|---------------|--------------|---------------|

Notes:

1. Source: 10-K or Annual Report
2. Source: Value Line
3. Source: Share price as of January 2, 2026 multiplied by common shares outstanding from companies' 2025 10-K

Indexed Rate of Debt

| Company | Debt Rating | Long-Term Debt Rate |
|-----------------------------|-------------|---------------------|
| Atmos Energy Corp. | A2 | 5.68% |
| CenterPoint Energy Inc. | Baa2 | 5.88% |
| Chesapeake Utilities Corp. | NR | N/A |
| CMS Energy Corp. | Baa2 | 5.88% |
| MGE Energy Inc. | NR | N/A |
| New Jersey Resources Corp. | NR | N/A |
| NiSource Inc. | Baa2 | 5.88% |
| Northwest Natural Gas | Baa1 | 5.88% |
| ONE Gas Inc. | A3 | 5.68% |
| Southwest Gas Holdings Inc. | Baa2 | 5.88% |
| WEC Energy Group Inc. | Baa1 | 5.88% |

Mean 5.83%
Median 5.88%
Mode 5.88%

| | |
|-------------------------------|--------------|
| Indicated Rate of Debt | 5.88% |
|-------------------------------|--------------|

Public Utility Bond Yield Averages from Mergent Bond Record, January 2026 Edition
Public Utility Bond Averages, December 2025

| Mergent | S&P | Dec. Yield Avg. |
|-------------------|-------------------|-----------------|
| Aaa, Aa1, Aa2 Aa3 | AAA, AA+, AA, AA- | 5.57% |
| A1, A2, A3 | A+, A, A- | 5.68% |
| Baa1, Baa2, Baa3 | BBB+, BBB, BBB- | 5.88% |

Indicated Rate of Equity

| Model | Rate |
|---|--------------|
| CAPM - Ex Ante, Three Stage | 7.05% |
| CAPM - Damodaran | 7.98% |
| CAPM - The CFO Survey | 9.02% |
| CAPM - Fernandez, Banuls, and Acin | 8.94% |
| CAPM - Ex Post (BVR Historical, Arithmetic) | 9.90% |
| CAPM - Ex Post (BVR Historical, Geometric) | 8.97% |
| Empirical CAPM - Ex Ante, Three Stage | 7.23% |
| Empirical CAPM - Damodaran | 8.25% |
| Empirical CAPM - Graham and Harvey | 9.37% |
| Empirical CAPM - Fernandez, Banuls, and Acin | 9.28% |
| Empirical CAPM - Ex Post (BVR Historical, Arithmetic) | 10.32% |
| Empirical CAPM - Ex Post (BVR Historical, Geometric) | 9.31% |
| DGM - Two-Stage | 8.84% |
| DGM - Three-Stage | 7.52% |
| Indicated Rate of Equity | 8.94% |

We established a range of acceptability for the cost of equity with all available models. We considered all of the data and placed equal reliance on the CAPM using the Business Valuation Resources Historical (arithmetic) equity risk premium, and the Damodaran CAPM.

Direct Rate

| | Capital Structure | Rate | Composite |
|------------------|-------------------|-------|-----------|
| Debt Component | 37.00% | 5.88% | 2.18% |
| Equity Component | 63.00% | 5.41% | 3.41% |
| Direct Rate | | | 5.59% |

| | |
|--------------------|--------------|
| Direct Rate | 5.59% |
|--------------------|--------------|

Capital Asset Pricing Model (CAPM)

$$(ERP \times \beta) + RFR = \text{Indicated Equity Rate}$$

| | Equity Risk Premium (ERP) | x Industry Beta (β) | = Industry Risk Premium | + Risk-Free Rate ¹ (RFR) | Indicated Equity Rate |
|--|---------------------------|-----------------------------|-------------------------|-------------------------------------|-----------------------|
| Three Stage Ex Ante ² | 2.98% | 0.75 | 2.24% | 4.81% | 7.05% |
| Dr. Damodaran ERP ³ | 4.23% | 0.75 | 3.17% | 4.81% | 7.98% |
| The CFO Survey ⁴ | 5.61% | 0.75 | 4.21% | 4.81% | 9.02% |
| Fernandez, Banuls and Acin ⁵ | 5.50% | 0.75 | 4.13% | 4.81% | 8.94% |
| BVR - Historical, Arithmetic Mean ⁶ | 6.78% | 0.75 | 5.09% | 4.81% | 9.90% |
| BVR - Historical, Geometric Mean ⁷ | 5.54% | 0.75 | 4.16% | 4.81% | 8.97% |

- 1 U.S. Treasury on January 2, 2026 - 20-year Coupon Bond Yield, Daily Observations, Retrieved January 22, 2026 from www.federalreserve.gov
- 2 Three Stage Dividend Growth Model, S&P 500. See Appendix F, Three Stage Ex Ante Calculation
- 3 Implied Equity Risk Premium on January 2, 2026 as determined by Dr. Aswath Damodaran; Retrieved January 22, 2026 from <http://pages.stern.nyu.edu/~adamodar/>
- 4 The CFO Survey (2025). Data & Results December 17, 2025. Mean average annual S&P return over next ten years (9.9%) less annual yield on 10-year Treasury Bonds (4.29%). Retrieved January 22, 2026 from https://www.richmondfed.org/research/national_economy/cfo_survey
- 5 Fernandez, P., Garcia D., & Acin, J. F. (2025). Survey: Market Risk Premium and Risk-Free Rate used for 54 countries in 2025. SSRN Electronic Journal. Retrieved January 22, 2026 from <https://ssrn.com/abstract=5260463>
- 6 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using arithmetic mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>
- 7 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using geometric mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>

Empirical Capital Asset Pricing Model (ECAPM)

$$(ERP \times \beta \times .75) + (ERP \times .25) + RFR = \text{Indicated Equity Rate}$$

| Model | Equity Risk Premium (ERP) | Industry Beta (β) | Weighted Industry Risk Premium (weighted at 75%) | Weighted Equity Risk Premium (weighted at 25%) | Risk-Free Rate (RFR) ¹ | Indicated Equity Rate |
|--|---------------------------|---------------------------|--|--|-----------------------------------|-----------------------|
| Three Stage Ex Ante ² | 2.98% | 0.75 | 1.68% | 0.75% | 4.81% | 7.23% |
| Dr. Damodaran ERP ³ | 4.23% | 0.75 | 2.38% | 1.06% | 4.81% | 8.25% |
| The CFO Survey ⁴ | 5.61% | 0.75 | 3.16% | 1.40% | 4.81% | 9.37% |
| Fernandez, Banuls and Acin ⁵ | 5.50% | 0.75 | 3.09% | 1.38% | 4.81% | 9.28% |
| BVR - Historical, Arithmetic Mean ⁶ | 6.78% | 0.75 | 3.81% | 1.70% | 4.81% | 10.32% |
| BVR - Historical, Geometric Mean ⁷ | 5.54% | 0.75 | 3.12% | 1.39% | 4.81% | 9.31% |

- 1 U.S. Treasury on January 2, 2026 - 20-year Coupon Bond Yield, Daily Observations, Retrieved January 22, 2026 from www.federalreserve.gov
- 2 Three Stage Dividend Growth Model, S&P 500. See Appendix F, Three Stage Ex Ante Calculation
- 3 Implied Equity Risk Premium on January 2, 2026 as determined by Dr. Aswath Damodaran; Retrieved January 22, 2026 from <http://pages.stern.nyu.edu/~adamodar/>
- 4 The CFO Survey (2025). Data & Results December 17, 2025. Mean average annual S&P return over next ten years (9.9%) less annual yield on 10-year Treasury Bonds (4.29%). Retrieved January 22, 2026 from https://www.richmondfed.org/research/national_economy/cfo_survey
- 5 Fernandez, P., Garcia D., & Acin, J. F. (2025). Survey: Market Risk Premium and Risk-Free Rate used for 54 countries in 2025. SSRN Electronic Journal. Retrieved January 22, 2026 from <https://ssrn.com/abstract=5260463>
- 6 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using arithmetic mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>
- 7 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using geometric mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>

Two-Stage Dividend Growth Model

$$K_E = (DY \times (1 + 0.5(G))) + 0.67(G_1) + 0.33(g)$$

K_E Cost of Equity

G₁ Short-term Growth Estimate

DY Dividend Yield

g Stable Growth

G Average Growth Rate

| Company | DY Dividend Yield | G1 Short-term Growth Estimate | g Stable Growth | G Average Growth Rate | K _E Cost of Equity |
|-----------------------------|-------------------------|-------------------------------------|--------------------|-----------------------------|----------------------------------|
| Atmos Energy Corp. | 2.36% | 8.50% | 3.80% | 6.15% | 9.38% |
| CenterPoint Energy Inc. | 2.27% | 7.00% | 3.80% | 5.40% | 8.28% |
| Chesapeake Utilities Corp. | 2.20% | 8.00% | 3.80% | 5.90% | 8.88% |
| CMS Energy Corp. | 3.08% | 8.50% | 3.80% | 6.15% | 10.13% |
| MGE Energy Inc. | 2.42% | 6.50% | 3.80% | 5.15% | 8.09% |
| New Jersey Resources Corp. | 4.13% | 6.50% | 3.80% | 5.15% | 9.85% |
| NiSource Inc. | 2.66% | 8.00% | 3.80% | 5.90% | 9.35% |
| Northwest Natural Gas | 4.22% | 6.50% | 3.80% | 5.15% | 9.93% |
| ONE Gas Inc. | 3.46% | 4.50% | 3.80% | 4.15% | 7.80% |
| Southwest Gas Holdings Inc. | 3.09% | 3.00% | 3.80% | 3.40% | 6.41% |
| WEC Energy Group Inc. | 3.35% | 6.00% | 3.80% | 4.90% | 8.71% |

Mean 8.80%
Median 8.88%

| | |
|--------------------------------------|--------------|
| Two-Stage DGM, Indicated Rate | 8.84% |
|--------------------------------------|--------------|

We placed equal reliance on the mean and median when selecting the indicated rate.

Notes:

Dividend Yield provided by Value Line

Growth Estimates, Next 5 Years for Earnings provided Value Line

Stable growth rate is the nominal growth rate determined in the Capitalization Rate Study Narrative (indicated long-term growth rate of the U.S. economy of 1.8% plus the expected inflation rate of 2.0%).

For Southwest Gas Holdings, given there are no earnings growth estimates, we utilized the dividends growth estimate

Three-Stage Dividend Growth Model

Start Price - recent price from Value Line

Expected dividends - estimated dividends from Value Line

Stage one growth - projected earnings growth rate from Value Line

Stage two growth - reversion to long-term growth rate

Stage three growth - long-term growth rate developed in Study

| Company | Year | Atmos Energy Corp. | | CenterPoint Energy Inc. | | Chesapeake Utilities Corp. | | CMS Energy Corp. | | MGE Energy Inc. | | New Jersey Resources Corp. | | NiSource Inc. | | Northwest Natural Holding Co. | | ONE Gas Inc. | | Southwest Gas Holdings Inc. | | WEC Energy Group Inc. | |
|--------------------|------|--------------------|---------|-------------------------|--------|----------------------------|---------|------------------|--------|-----------------|--------|----------------------------|--------|---------------|--------|-------------------------------|--------|--------------|--------|-----------------------------|--------|-----------------------|---------|
| Start Price | 2025 | | -169.36 | | -38.73 | | -124.31 | | -70.42 | | -78.44 | | -45.98 | | -42.16 | | -46.74 | | -77.42 | | -80.15 | | -106.47 |
| Expected Dividends | 2026 | | 4.00 | | 0.95 | | 2.82 | | 2.30 | | 1.95 | | 1.90 | | 1.20 | | 1.97 | | 2.72 | | 2.48 | | 3.81 |
| Stage One Growth | 2027 | 8.50% | 4.34 | 7.00% | 1.02 | 8.00% | 3.05 | 8.50% | 2.50 | 6.50% | 2.08 | 6.50% | 2.02 | 8.00% | 1.30 | 6.50% | 2.10 | 4.50% | 2.84 | 3.00% | 2.55 | 6.00% | 4.04 |
| Stage One Growth | 2028 | 8.50% | 4.71 | 7.00% | 1.09 | 8.00% | 3.29 | 8.50% | 2.71 | 6.50% | 2.21 | 6.50% | 2.16 | 8.00% | 1.40 | 6.50% | 2.23 | 4.50% | 2.97 | 3.00% | 2.63 | 6.00% | 4.28 |
| Stage One Growth | 2029 | 8.50% | 5.11 | 7.00% | 1.16 | 8.00% | 3.55 | 8.50% | 2.94 | 6.50% | 2.36 | 6.50% | 2.30 | 8.00% | 1.51 | 6.50% | 2.38 | 4.50% | 3.10 | 3.00% | 2.71 | 6.00% | 4.54 |
| Stage One Growth | 2030 | 8.50% | 5.54 | 7.00% | 1.25 | 8.00% | 3.84 | 8.50% | 3.19 | 6.50% | 2.51 | 6.50% | 2.44 | 8.00% | 1.63 | 6.50% | 2.53 | 4.50% | 3.24 | 3.00% | 2.79 | 6.00% | 4.81 |
| Stage One Growth | 2031 | 8.50% | 6.01 | 7.00% | 1.33 | 8.00% | 4.14 | 8.50% | 3.46 | 6.50% | 2.67 | 6.50% | 2.60 | 8.00% | 1.76 | 6.50% | 2.70 | 4.50% | 3.39 | 3.00% | 2.87 | 6.00% | 5.10 |
| Stage Two Growth | 2032 | 8.07% | 6.50 | 6.71% | 1.42 | 7.71% | 4.46 | 8.07% | 3.74 | 6.21% | 2.84 | 6.25% | 2.77 | 7.62% | 1.90 | 6.25% | 2.87 | 4.44% | 3.54 | 3.07% | 2.96 | 5.80% | 5.39 |
| Stage Two Growth | 2033 | 7.65% | 7.00 | 6.42% | 1.51 | 7.42% | 4.79 | 7.65% | 4.02 | 5.92% | 3.01 | 6.01% | 2.93 | 7.24% | 2.03 | 6.01% | 3.04 | 4.37% | 3.69 | 3.15% | 3.06 | 5.60% | 5.70 |
| Stage Two Growth | 2034 | 7.22% | 7.50 | 6.13% | 1.61 | 7.13% | 5.14 | 7.22% | 4.31 | 5.63% | 3.17 | 5.76% | 3.10 | 6.85% | 2.17 | 5.76% | 3.22 | 4.31% | 3.85 | 3.22% | 3.15 | 5.40% | 6.00 |
| Stage Two Growth | 2035 | 6.79% | 8.01 | 5.84% | 1.70 | 6.84% | 5.49 | 6.79% | 4.61 | 5.34% | 3.34 | 5.52% | 3.27 | 6.47% | 2.32 | 5.52% | 3.39 | 4.25% | 4.02 | 3.29% | 3.26 | 5.20% | 6.32 |
| Stage Two Growth | 2036 | 6.36% | 8.52 | 5.55% | 1.79 | 6.55% | 5.85 | 6.36% | 4.90 | 5.05% | 3.51 | 5.27% | 3.44 | 6.09% | 2.46 | 5.27% | 3.57 | 4.18% | 4.19 | 3.36% | 3.37 | 5.00% | 6.63 |
| Stage Two Growth | 2037 | 5.94% | 9.03 | 5.25% | 1.89 | 6.25% | 6.21 | 5.94% | 5.19 | 4.75% | 3.68 | 5.03% | 3.62 | 5.71% | 2.60 | 5.03% | 3.75 | 4.12% | 4.36 | 3.44% | 3.48 | 4.80% | 6.95 |
| Stage Two Growth | 2038 | 5.51% | 9.52 | 4.96% | 1.98 | 5.96% | 6.58 | 5.51% | 5.48 | 4.46% | 3.84 | 4.78% | 3.79 | 5.33% | 2.73 | 4.78% | 3.93 | 4.05% | 4.53 | 3.51% | 3.61 | 4.60% | 7.27 |
| Stage Two Growth | 2039 | 5.08% | 10.01 | 4.67% | 2.07 | 5.67% | 6.96 | 5.08% | 5.75 | 4.17% | 4.00 | 4.54% | 3.96 | 4.95% | 2.87 | 4.54% | 4.11 | 3.99% | 4.72 | 3.58% | 3.74 | 4.40% | 7.59 |
| Stage Two Growth | 2040 | 4.65% | 10.47 | 4.38% | 2.17 | 5.38% | 7.33 | 4.65% | 6.02 | 3.88% | 4.16 | 4.29% | 4.13 | 4.56% | 3.00 | 4.29% | 4.29 | 3.93% | 4.90 | 3.65% | 3.87 | 4.20% | 7.91 |
| Stage Two Growth | 2041 | 4.23% | 10.92 | 4.09% | 2.25 | 5.09% | 7.70 | 4.23% | 6.28 | 3.59% | 4.31 | 4.05% | 4.30 | 4.18% | 3.13 | 4.05% | 4.46 | 3.86% | 5.09 | 3.73% | 4.02 | 4.00% | 8.23 |
| Stage Three Growth | 2042 | 3.80% | 11.33 | 3.80% | 2.34 | 3.80% | 8.00 | 3.80% | 6.52 | 3.80% | 4.47 | 3.80% | 4.46 | 3.80% | 3.25 | 3.80% | 4.63 | 3.80% | 5.28 | 3.80% | 4.17 | 3.80% | 8.54 |
| Stage Three Growth | 2043 | 3.80% | 11.76 | 3.80% | 2.43 | 3.80% | 8.30 | 3.80% | 6.76 | 3.80% | 4.64 | 3.80% | 4.63 | 3.80% | 3.37 | 3.80% | 4.80 | 3.80% | 5.48 | 3.80% | 4.33 | 3.80% | 8.86 |
| Stage Three Growth | 2044 | 3.80% | 12.21 | 3.80% | 2.52 | 3.80% | 8.61 | 3.80% | 7.02 | 3.80% | 4.82 | 3.80% | 4.81 | 3.80% | 3.50 | 3.80% | 4.99 | 3.80% | 5.69 | 3.80% | 4.49 | 3.80% | 9.20 |
| Stage Three Growth | 2045 | 3.80% | 12.67 | 3.80% | 2.62 | 3.80% | 8.94 | 3.80% | 7.29 | 3.80% | 5.00 | 3.80% | 4.99 | 3.80% | 3.63 | 3.80% | 5.18 | 3.80% | 5.91 | 3.80% | 4.66 | 3.80% | 9.55 |
| Stage Three Growth | 2046 | 3.80% | 13.16 | 3.80% | 2.72 | 3.80% | 9.28 | 3.80% | 7.56 | 3.80% | 5.19 | 3.80% | 5.18 | 3.80% | 3.77 | 3.80% | 5.37 | 3.80% | 6.13 | 3.80% | 4.84 | 3.80% | 9.91 |
| Stage Three Growth | 2047 | 3.80% | 13.66 | 3.80% | 2.82 | 3.80% | 9.63 | 3.80% | 7.85 | 3.80% | 5.39 | 3.80% | 5.38 | 3.80% | 3.91 | 3.80% | 5.58 | 3.80% | 6.37 | 3.80% | 5.02 | 3.80% | 10.29 |
| Stage Three Growth | 2048 | 3.80% | 14.17 | 3.80% | 2.93 | 3.80% | 10.00 | 3.80% | 8.15 | 3.80% | 5.59 | 3.80% | 5.58 | 3.80% | 4.06 | 3.80% | 5.79 | 3.80% | 6.61 | 3.80% | 5.21 | 3.80% | 10.68 |
| Stage Three Growth | 2049 | 3.80% | 14.71 | 3.80% | 3.04 | 3.80% | 10.38 | 3.80% | 8.46 | 3.80% | 5.81 | 3.80% | 5.80 | 3.80% | 4.21 | 3.80% | 6.01 | 3.80% | 6.86 | 3.80% | 5.41 | 3.80% | 11.08 |

| | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Stage Three Growth | 2050 | 3.80% | 15.27 | 3.80% | 3.15 | 3.80% | 10.78 | 3.80% | 8.78 | 3.80% | 6.03 | 3.80% | 6.02 | 3.80% | 4.37 | 3.80% | 6.24 | 3.80% | 7.12 | 3.80% | 5.62 | 3.80% | 11.51 |
| Stage Three Growth | 2051 | 3.80% | 15.85 | 3.80% | 3.27 | 3.80% | 11.18 | 3.80% | 9.11 | 3.80% | 6.26 | 3.80% | 6.24 | 3.80% | 4.54 | 3.80% | 6.47 | 3.80% | 7.39 | 3.80% | 5.83 | 3.80% | 11.94 |
| Stage Three Growth | 2052 | 3.80% | 16.45 | 3.80% | 3.40 | 3.80% | 11.61 | 3.80% | 9.46 | 3.80% | 6.50 | 3.80% | 6.48 | 3.80% | 4.71 | 3.80% | 6.72 | 3.80% | 7.67 | 3.80% | 6.05 | 3.80% | 12.40 |
| Stage Three Growth | 2053 | 3.80% | 17.08 | 3.80% | 3.53 | 3.80% | 12.05 | 3.80% | 9.82 | 3.80% | 6.74 | 3.80% | 6.73 | 3.80% | 4.89 | 3.80% | 6.98 | 3.80% | 7.96 | 3.80% | 6.28 | 3.80% | 12.87 |
| Stage Three Growth | 2054 | 3.80% | 17.73 | 3.80% | 3.66 | 3.80% | 12.51 | 3.80% | 10.19 | 3.80% | 7.00 | 3.80% | 6.98 | 3.80% | 5.08 | 3.80% | 7.24 | 3.80% | 8.27 | 3.80% | 6.52 | 3.80% | 13.36 |
| Stage Three Growth | 2055 | 3.80% | 18.40 | 3.80% | 3.80 | 3.80% | 12.98 | 3.80% | 10.58 | 3.80% | 7.26 | 3.80% | 7.25 | 3.80% | 5.27 | 3.80% | 7.52 | 3.80% | 8.58 | 3.80% | 6.77 | 3.80% | 13.86 |
| Stage Three Growth | 2056 | 3.80% | 19.10 | 3.80% | 3.94 | 3.80% | 13.48 | 3.80% | 10.98 | 3.80% | 7.54 | 3.80% | 7.52 | 3.80% | 5.47 | 3.80% | 7.80 | 3.80% | 8.91 | 3.80% | 7.03 | 3.80% | 14.39 |
| Stage Three Growth | 2057 | 3.80% | 19.83 | 3.80% | 4.09 | 3.80% | 13.99 | 3.80% | 11.40 | 3.80% | 7.83 | 3.80% | 7.81 | 3.80% | 5.68 | 3.80% | 8.10 | 3.80% | 9.24 | 3.80% | 7.29 | 3.80% | 14.94 |
| Stage Three Growth | 2058 | 3.80% | 20.58 | 3.80% | 4.25 | 3.80% | 14.52 | 3.80% | 11.83 | 3.80% | 8.12 | 3.80% | 8.11 | 3.80% | 5.89 | 3.80% | 8.41 | 3.80% | 9.60 | 3.80% | 7.57 | 3.80% | 15.51 |
| Stage Three Growth | 2059 | 3.80% | 21.36 | 3.80% | 4.41 | 3.80% | 15.07 | 3.80% | 12.28 | 3.80% | 8.43 | 3.80% | 8.42 | 3.80% | 6.12 | 3.80% | 8.73 | 3.80% | 9.96 | 3.80% | 7.86 | 3.80% | 16.10 |
| Stage Three Growth | 2060 | 3.80% | 22.18 | 3.80% | 4.58 | 3.80% | 15.65 | 3.80% | 12.75 | 3.80% | 8.75 | 3.80% | 8.73 | 3.80% | 6.35 | 3.80% | 9.06 | 3.80% | 10.34 | 3.80% | 8.16 | 3.80% | 16.71 |
| Stage Three Growth | 2061 | 3.80% | 23.02 | 3.80% | 4.75 | 3.80% | 16.24 | 3.80% | 13.23 | 3.80% | 9.09 | 3.80% | 9.07 | 3.80% | 6.59 | 3.80% | 9.40 | 3.80% | 10.73 | 3.80% | 8.47 | 3.80% | 17.34 |
| Stage Three Growth | 2062 | 3.80% | 23.89 | 3.80% | 4.93 | 3.80% | 16.86 | 3.80% | 13.74 | 3.80% | 9.43 | 3.80% | 9.41 | 3.80% | 6.84 | 3.80% | 9.76 | 3.80% | 11.14 | 3.80% | 8.79 | 3.80% | 18.00 |
| Stage Three Growth | 2063 | 3.80% | 24.80 | 3.80% | 5.12 | 3.80% | 17.50 | 3.80% | 14.26 | 3.80% | 9.79 | 3.80% | 9.77 | 3.80% | 7.10 | 3.80% | 10.13 | 3.80% | 11.56 | 3.80% | 9.12 | 3.80% | 18.68 |
| Stage Three Growth | 2064 | 3.80% | 25.74 | 3.80% | 5.32 | 3.80% | 18.16 | 3.80% | 14.80 | 3.80% | 10.16 | 3.80% | 10.14 | 3.80% | 7.37 | 3.80% | 10.51 | 3.80% | 12.00 | 3.80% | 9.47 | 3.80% | 19.39 |
| Stage Three Growth | 2065 | 3.80% | 26.72 | 3.80% | 5.52 | 3.80% | 18.85 | 3.80% | 15.36 | 3.80% | 10.55 | 3.80% | 10.53 | 3.80% | 7.65 | 3.80% | 10.91 | 3.80% | 12.46 | 3.80% | 9.83 | 3.80% | 20.13 |
| Stage Three Growth | 2066 | 3.80% | 27.74 | 3.80% | 5.73 | 3.80% | 19.57 | 3.80% | 15.95 | 3.80% | 10.95 | 3.80% | 10.93 | 3.80% | 7.94 | 3.80% | 11.33 | 3.80% | 12.93 | 3.80% | 10.20 | 3.80% | 20.90 |
| Stage Three Growth | 2067 | 3.80% | 28.79 | 3.80% | 5.94 | 3.80% | 20.31 | 3.80% | 16.55 | 3.80% | 11.36 | 3.80% | 11.34 | 3.80% | 8.24 | 3.80% | 11.76 | 3.80% | 13.42 | 3.80% | 10.59 | 3.80% | 21.69 |
| Stage Three Growth | 2068 | 3.80% | 29.88 | 3.80% | 6.17 | 3.80% | 21.08 | 3.80% | 17.18 | 3.80% | 11.80 | 3.80% | 11.77 | 3.80% | 8.56 | 3.80% | 12.21 | 3.80% | 13.93 | 3.80% | 10.99 | 3.80% | 22.52 |
| Stage Three Growth | 2069 | 3.80% | 31.02 | 3.80% | 6.40 | 3.80% | 21.89 | 3.80% | 17.84 | 3.80% | 12.24 | 3.80% | 12.22 | 3.80% | 8.88 | 3.80% | 12.67 | 3.80% | 14.46 | 3.80% | 11.41 | 3.80% | 23.37 |
| Stage Three Growth | 2070 | 3.80% | 32.20 | 3.80% | 6.65 | 3.80% | 22.72 | 3.80% | 18.51 | 3.80% | 12.71 | 3.80% | 12.68 | 3.80% | 9.22 | 3.80% | 13.15 | 3.80% | 15.01 | 3.80% | 11.85 | 3.80% | 24.26 |
| Stage Three Growth | 2071 | 3.80% | 33.42 | 3.80% | 6.90 | 3.80% | 23.58 | 3.80% | 19.22 | 3.80% | 13.19 | 3.80% | 13.17 | 3.80% | 9.57 | 3.80% | 13.65 | 3.80% | 15.58 | 3.80% | 12.30 | 3.80% | 25.18 |
| Stage Three Growth | 2072 | 3.80% | 34.69 | 3.80% | 7.16 | 3.80% | 24.48 | 3.80% | 19.95 | 3.80% | 13.69 | 3.80% | 13.67 | 3.80% | 9.93 | 3.80% | 14.17 | 3.80% | 16.18 | 3.80% | 12.76 | 3.80% | 26.14 |
| Stage Three Growth | 2073 | 3.80% | 36.01 | 3.80% | 7.44 | 3.80% | 25.41 | 3.80% | 20.71 | 3.80% | 14.21 | 3.80% | 14.18 | 3.80% | 10.31 | 3.80% | 14.71 | 3.80% | 16.79 | 3.80% | 13.25 | 3.80% | 27.13 |
| Stage Three Growth | 2074 | 3.80% | 37.38 | 3.80% | 7.72 | 3.80% | 26.37 | 3.80% | 21.49 | 3.80% | 14.75 | 3.80% | 14.72 | 3.80% | 10.70 | 3.80% | 15.27 | 3.80% | 17.43 | 3.80% | 13.75 | 3.80% | 28.16 |
| Stage Three Growth | 2075 | 3.80% | 38.80 | 3.80% | 8.01 | 3.80% | 27.37 | 3.80% | 22.31 | 3.80% | 15.31 | 3.80% | 15.28 | 3.80% | 11.11 | 3.80% | 15.85 | 3.80% | 18.09 | 3.80% | 14.27 | 3.80% | 29.23 |
| Stage Three Growth | 2076 | 3.80% | 40.27 | 3.80% | 8.32 | 3.80% | 28.42 | 3.80% | 23.16 | 3.80% | 15.90 | 3.80% | 15.86 | 3.80% | 11.53 | 3.80% | 16.45 | 3.80% | 18.78 | 3.80% | 14.82 | 3.80% | 30.34 |
| Stage Three Growth | 2077 | 3.80% | 41.80 | 3.80% | 8.63 | 3.80% | 29.49 | 3.80% | 24.04 | 3.80% | 16.50 | 3.80% | 16.47 | 3.80% | 11.97 | 3.80% | 17.07 | 3.80% | 19.49 | 3.80% | 15.38 | 3.80% | 31.50 |
| Stage Three Growth | 2078 | 3.80% | 43.39 | 3.80% | 8.96 | 3.80% | 30.62 | 3.80% | 24.95 | 3.80% | 17.13 | 3.80% | 17.09 | 3.80% | 12.43 | 3.80% | 17.72 | 3.80% | 20.23 | 3.80% | 15.96 | 3.80% | 32.69 |
| Stage Three Growth | 2079 | 3.80% | 45.04 | 3.80% | 9.30 | 3.80% | 31.78 | 3.80% | 25.90 | 3.80% | 17.78 | 3.80% | 17.74 | 3.80% | 12.90 | 3.80% | 18.40 | 3.80% | 21.00 | 3.80% | 16.57 | 3.80% | 33.93 |
| Stage Three Growth | 2080 | 3.80% | 46.75 | 3.80% | 9.65 | 3.80% | 32.99 | 3.80% | 26.88 | 3.80% | 18.45 | 3.80% | 18.42 | 3.80% | 13.39 | 3.80% | 19.09 | 3.80% | 21.80 | 3.80% | 17.20 | 3.80% | 35.22 |
| Stage Three Growth | 2081 | 3.80% | 48.53 | 3.80% | 10.02 | 3.80% | 34.24 | 3.80% | 27.90 | 3.80% | 19.16 | 3.80% | 19.12 | 3.80% | 13.90 | 3.80% | 19.82 | 3.80% | 22.63 | 3.80% | 17.85 | 3.80% | 36.56 |
| Stage Three Growth | 2082 | 3.80% | 50.38 | 3.80% | 10.40 | 3.80% | 35.54 | 3.80% | 28.96 | 3.80% | 19.88 | 3.80% | 19.84 | 3.80% | 14.43 | 3.80% | 20.57 | 3.80% | 23.49 | 3.80% | 18.53 | 3.80% | 37.95 |
| Stage Three Growth | 2083 | 3.80% | 52.29 | 3.80% | 10.80 | 3.80% | 36.89 | 3.80% | 30.07 | 3.80% | 20.64 | 3.80% | 20.60 | 3.80% | 14.97 | 3.80% | 21.36 | 3.80% | 24.38 | 3.80% | 19.24 | 3.80% | 39.39 |
| Stage Three Growth | 2084 | 3.80% | 54.28 | 3.80% | 11.21 | 3.80% | 38.29 | 3.80% | 31.21 | 3.80% | 21.42 | 3.80% | 21.38 | 3.80% | 15.54 | 3.80% | 22.17 | 3.80% | 25.31 | 3.80% | 19.97 | 3.80% | 40.89 |
| Stage Three Growth | 2085 | 3.80% | 56.34 | 3.80% | 11.63 | 3.80% | 39.75 | 3.80% | 32.39 | 3.80% | 22.24 | 3.80% | 22.19 | 3.80% | 16.13 | 3.80% | 23.01 | 3.80% | 26.27 | 3.80% | 20.73 | 3.80% | 42.45 |
| Stage Three Growth | 2086 | 3.80% | 58.48 | 3.80% | 12.07 | 3.80% | 41.26 | 3.80% | 33.62 | 3.80% | 23.08 | 3.80% | 23.03 | 3.80% | 16.75 | 3.80% | 23.88 | 3.80% | 27.27 | 3.80% | 21.51 | 3.80% | 44.06 |
| Stage Three Growth | 2087 | 3.80% | 60.70 | 3.80% | 12.53 | 3.80% | 42.83 | 3.80% | 34.90 | 3.80% | 23.96 | 3.80% | 23.91 | 3.80% | 17.38 | 3.80% | 24.79 | 3.80% | 28.30 | 3.80% | 22.33 | 3.80% | 45.73 |

| | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------|------|-------|--------|-------|-------|-------|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|-------|-------|--------|
| Stage Three Growth | 2088 | 3.80% | 63.01 | 3.80% | 13.01 | 3.80% | 44.45 | 3.80% | 36.23 | 3.80% | 24.87 | 3.80% | 24.82 | 3.80% | 18.04 | 3.80% | 25.73 | 3.80% | 29.38 | 3.80% | 23.18 | 3.80% | 47.47 |
| Stage Three Growth | 2089 | 3.80% | 65.40 | 3.80% | 13.50 | 3.80% | 46.14 | 3.80% | 37.61 | 3.80% | 25.82 | 3.80% | 25.76 | 3.80% | 18.73 | 3.80% | 26.71 | 3.80% | 30.49 | 3.80% | 24.06 | 3.80% | 49.27 |
| Stage Three Growth | 2090 | 3.80% | 67.89 | 3.80% | 14.02 | 3.80% | 47.90 | 3.80% | 39.03 | 3.80% | 26.80 | 3.80% | 26.74 | 3.80% | 19.44 | 3.80% | 27.73 | 3.80% | 31.65 | 3.80% | 24.97 | 3.80% | 51.15 |
| Stage Three Growth | 2091 | 3.80% | 70.47 | 3.80% | 14.55 | 3.80% | 49.72 | 3.80% | 40.52 | 3.80% | 27.81 | 3.80% | 27.76 | 3.80% | 20.18 | 3.80% | 28.78 | 3.80% | 32.86 | 3.80% | 25.92 | 3.80% | 53.09 |
| Stage Three Growth | 2092 | 3.80% | 73.15 | 3.80% | 15.10 | 3.80% | 51.61 | 3.80% | 42.06 | 3.80% | 28.87 | 3.80% | 28.81 | 3.80% | 20.95 | 3.80% | 29.87 | 3.80% | 34.10 | 3.80% | 26.91 | 3.80% | 55.11 |
| Stage Three Growth | 2093 | 3.80% | 75.93 | 3.80% | 15.68 | 3.80% | 53.57 | 3.80% | 43.66 | 3.80% | 29.97 | 3.80% | 29.91 | 3.80% | 21.74 | 3.80% | 31.01 | 3.80% | 35.40 | 3.80% | 27.93 | 3.80% | 57.20 |
| Stage Three Growth | 2094 | 3.80% | 78.81 | 3.80% | 16.27 | 3.80% | 55.60 | 3.80% | 45.31 | 3.80% | 31.11 | 3.80% | 31.04 | 3.80% | 22.57 | 3.80% | 32.19 | 3.80% | 36.75 | 3.80% | 28.99 | 3.80% | 59.38 |
| Stage Three Growth | 2095 | 3.80% | 81.81 | 3.80% | 16.89 | 3.80% | 57.72 | 3.80% | 47.04 | 3.80% | 32.29 | 3.80% | 32.22 | 3.80% | 23.43 | 3.80% | 33.41 | 3.80% | 38.14 | 3.80% | 30.09 | 3.80% | 61.63 |
| Stage Three Growth | 2096 | 3.80% | 84.91 | 3.80% | 17.53 | 3.80% | 59.91 | 3.80% | 48.82 | 3.80% | 33.52 | 3.80% | 33.45 | 3.80% | 24.32 | 3.80% | 34.68 | 3.80% | 39.59 | 3.80% | 31.24 | 3.80% | 63.97 |
| Stage Three Growth | 2097 | 3.80% | 88.14 | 3.80% | 18.20 | 3.80% | 62.19 | 3.80% | 50.68 | 3.80% | 34.79 | 3.80% | 34.72 | 3.80% | 25.24 | 3.80% | 36.00 | 3.80% | 41.10 | 3.80% | 32.42 | 3.80% | 66.40 |
| Stage Three Growth | 2098 | 3.80% | 91.49 | 3.80% | 18.89 | 3.80% | 64.55 | 3.80% | 52.60 | 3.80% | 36.11 | 3.80% | 36.04 | 3.80% | 26.20 | 3.80% | 37.37 | 3.80% | 42.66 | 3.80% | 33.66 | 3.80% | 68.93 |
| Stage Three Growth | 2099 | 3.80% | 94.97 | 3.80% | 19.61 | 3.80% | 67.00 | 3.80% | 54.60 | 3.80% | 37.48 | 3.80% | 37.41 | 3.80% | 27.19 | 3.80% | 38.78 | 3.80% | 44.28 | 3.80% | 34.94 | 3.80% | 71.55 |
| Stage Three Growth | 2100 | 3.80% | 98.58 | 3.80% | 20.35 | 3.80% | 69.55 | 3.80% | 56.68 | 3.80% | 38.91 | 3.80% | 38.83 | 3.80% | 28.23 | 3.80% | 40.26 | 3.80% | 45.96 | 3.80% | 36.26 | 3.80% | 74.27 |
| Stage Three Growth | 2101 | 3.80% | 102.32 | 3.80% | 21.13 | 3.80% | 72.19 | 3.80% | 58.83 | 3.80% | 40.39 | 3.80% | 40.30 | 3.80% | 29.30 | 3.80% | 41.79 | 3.80% | 47.71 | 3.80% | 37.64 | 3.80% | 77.09 |
| Stage Three Growth | 2102 | 3.80% | 106.21 | 3.80% | 21.93 | 3.80% | 74.93 | 3.80% | 61.07 | 3.80% | 41.92 | 3.80% | 41.84 | 3.80% | 30.41 | 3.80% | 43.38 | 3.80% | 49.52 | 3.80% | 39.07 | 3.80% | 80.02 |
| Stage Three Growth | 2103 | 3.80% | 110.25 | 3.80% | 22.76 | 3.80% | 77.78 | 3.80% | 63.39 | 3.80% | 43.52 | 3.80% | 43.42 | 3.80% | 31.57 | 3.80% | 45.02 | 3.80% | 51.40 | 3.80% | 40.56 | 3.80% | 83.06 |
| Stage Three Growth | 2104 | 3.80% | 114.43 | 3.80% | 23.63 | 3.80% | 80.74 | 3.80% | 65.80 | 3.80% | 45.17 | 3.80% | 45.07 | 3.80% | 32.77 | 3.80% | 46.74 | 3.80% | 53.36 | 3.80% | 42.10 | 3.80% | 86.21 |
| Stage Three Growth | 2105 | 3.80% | 118.78 | 3.80% | 24.52 | 3.80% | 83.81 | 3.80% | 68.30 | 3.80% | 46.89 | 3.80% | 46.79 | 3.80% | 34.01 | 3.80% | 48.51 | 3.80% | 55.38 | 3.80% | 43.70 | 3.80% | 89.49 |
| Stage Three Growth | 2106 | 3.80% | 123.30 | 3.80% | 25.46 | 3.80% | 86.99 | 3.80% | 70.89 | 3.80% | 48.67 | 3.80% | 48.57 | 3.80% | 35.31 | 3.80% | 50.36 | 3.80% | 57.49 | 3.80% | 45.36 | 3.80% | 92.89 |
| Stage Three Growth | 2107 | 3.80% | 127.98 | 3.80% | 26.42 | 3.80% | 90.30 | 3.80% | 73.59 | 3.80% | 50.52 | 3.80% | 50.41 | 3.80% | 36.65 | 3.80% | 52.27 | 3.80% | 59.67 | 3.80% | 47.08 | 3.80% | 96.42 |
| Stage Three Growth | 2108 | 3.80% | 132.85 | 3.80% | 27.43 | 3.80% | 93.73 | 3.80% | 76.38 | 3.80% | 52.44 | 3.80% | 52.33 | 3.80% | 38.04 | 3.80% | 54.25 | 3.80% | 61.94 | 3.80% | 48.87 | 3.80% | 100.09 |
| Stage Three Growth | 2109 | 3.80% | 137.89 | 3.80% | 28.47 | 3.80% | 97.29 | 3.80% | 79.29 | 3.80% | 54.43 | 3.80% | 54.32 | 3.80% | 39.49 | 3.80% | 56.32 | 3.80% | 64.29 | 3.80% | 50.73 | 3.80% | 103.89 |
| Stage Three Growth | 2110 | 3.80% | 143.13 | 3.80% | 29.55 | 3.80% | 100.99 | 3.80% | 82.30 | 3.80% | 56.50 | 3.80% | 56.38 | 3.80% | 40.99 | 3.80% | 58.46 | 3.80% | 66.74 | 3.80% | 52.65 | 3.80% | 107.84 |
| Stage Three Growth | 2111 | 3.80% | 148.57 | 3.80% | 30.67 | 3.80% | 104.82 | 3.80% | 85.43 | 3.80% | 58.64 | 3.80% | 58.52 | 3.80% | 42.55 | 3.80% | 60.68 | 3.80% | 69.27 | 3.80% | 54.66 | 3.80% | 111.93 |
| Stage Three Growth | 2112 | 3.80% | 154.22 | 3.80% | 31.84 | 3.80% | 108.81 | 3.80% | 88.67 | 3.80% | 60.87 | 3.80% | 60.75 | 3.80% | 44.16 | 3.80% | 62.98 | 3.80% | 71.90 | 3.80% | 56.73 | 3.80% | 116.19 |
| Stage Three Growth | 2113 | 3.80% | 160.08 | 3.80% | 33.05 | 3.80% | 112.94 | 3.80% | 92.04 | 3.80% | 63.18 | 3.80% | 63.05 | 3.80% | 45.84 | 3.80% | 65.38 | 3.80% | 74.64 | 3.80% | 58.89 | 3.80% | 120.60 |
| Stage Three Growth | 2114 | 3.80% | 166.16 | 3.80% | 34.31 | 3.80% | 117.23 | 3.80% | 95.54 | 3.80% | 65.59 | 3.80% | 65.45 | 3.80% | 47.58 | 3.80% | 67.86 | 3.80% | 77.47 | 3.80% | 61.13 | 3.80% | 125.19 |
| Stage Three Growth | 2115 | 3.80% | 172.48 | 3.80% | 35.61 | 3.80% | 121.69 | 3.80% | 99.17 | 3.80% | 68.08 | 3.80% | 67.94 | 3.80% | 49.39 | 3.80% | 70.44 | 3.80% | 80.42 | 3.80% | 63.45 | 3.80% | 129.94 |
| Stage Three Growth | 2116 | 3.80% | 179.03 | 3.80% | 36.96 | 3.80% | 126.31 | 3.80% | 102.94 | 3.80% | 70.67 | 3.80% | 70.52 | 3.80% | 51.27 | 3.80% | 73.12 | 3.80% | 83.47 | 3.80% | 65.86 | 3.80% | 134.88 |
| Stage Three Growth | 2117 | 3.80% | 185.83 | 3.80% | 38.37 | 3.80% | 131.11 | 3.80% | 106.85 | 3.80% | 73.35 | 3.80% | 73.20 | 3.80% | 53.22 | 3.80% | 75.90 | 3.80% | 86.64 | 3.80% | 68.36 | 3.80% | 140.01 |
| Stage Three Growth | 2118 | 3.80% | 192.89 | 3.80% | 39.83 | 3.80% | 136.09 | 3.80% | 110.91 | 3.80% | 76.14 | 3.80% | 75.98 | 3.80% | 55.24 | 3.80% | 78.78 | 3.80% | 89.94 | 3.80% | 70.96 | 3.80% | 145.33 |
| Stage Three Growth | 2119 | 3.80% | 200.22 | 3.80% | 41.34 | 3.80% | 141.27 | 3.80% | 115.12 | 3.80% | 79.03 | 3.80% | 78.87 | 3.80% | 57.34 | 3.80% | 81.77 | 3.80% | 93.35 | 3.80% | 73.66 | 3.80% | 150.85 |
| Stage Three Growth | 2120 | 3.80% | 207.83 | 3.80% | 42.91 | 3.80% | 146.63 | 3.80% | 119.50 | 3.80% | 82.03 | 3.80% | 81.86 | 3.80% | 59.52 | 3.80% | 84.88 | 3.80% | 96.90 | 3.80% | 76.46 | 3.80% | 156.58 |
| Stage Three Growth | 2121 | 3.80% | 215.73 | 3.80% | 44.54 | 3.80% | 152.21 | 3.80% | 124.04 | 3.80% | 85.15 | 3.80% | 84.97 | 3.80% | 61.78 | 3.80% | 88.11 | 3.80% | 100.58 | 3.80% | 79.36 | 3.80% | 162.53 |
| Stage Three Growth | 2122 | 3.80% | 223.93 | 3.80% | 46.23 | 3.80% | 157.99 | 3.80% | 128.75 | 3.80% | 88.39 | 3.80% | 88.20 | 3.80% | 64.12 | 3.80% | 91.45 | 3.80% | 104.41 | 3.80% | 82.38 | 3.80% | 168.71 |
| Stage Three Growth | 2123 | 3.80% | 232.44 | 3.80% | 47.99 | 3.80% | 163.99 | 3.80% | 133.65 | 3.80% | 91.75 | 3.80% | 91.56 | 3.80% | 66.56 | 3.80% | 94.93 | 3.80% | 108.37 | 3.80% | 85.51 | 3.80% | 175.12 |
| Stage Three Growth | 2124 | 3.80% | 241.27 | 3.80% | 49.81 | 3.80% | 170.23 | 3.80% | 138.72 | 3.80% | 95.23 | 3.80% | 95.03 | 3.80% | 69.09 | 3.80% | 98.54 | 3.80% | 112.49 | 3.80% | 88.76 | 3.80% | 181.77 |
| Stage Three Growth | 2125 | 3.80% | 250.44 | 3.80% | 51.71 | 3.80% | 176.69 | 3.80% | 144.00 | 3.80% | 98.85 | 3.80% | 98.65 | 3.80% | 71.72 | 3.80% | 102.28 | 3.80% | 116.77 | 3.80% | 92.13 | 3.80% | 188.68 |

| | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|
| Stage Three Growth | 2126 | 3.80% | 259.96 | 3.80% | 53.67 | 3.80% | 183.41 | 3.80% | 149.47 | 3.80% | 102.61 | 3.80% | 102.39 | 3.80% | 74.44 | 3.80% | 106.17 | 3.80% | 121.20 | 3.80% | 95.63 | 3.80% | 195.85 |
| Stage Three Growth | 2127 | 3.80% | 269.83 | 3.80% | 55.71 | 3.80% | 190.38 | 3.80% | 155.15 | 3.80% | 106.51 | 3.80% | 106.29 | 3.80% | 77.27 | 3.80% | 110.20 | 3.80% | 125.81 | 3.80% | 99.26 | 3.80% | 203.29 |
| Stage Three Growth | 2128 | 3.80% | 280.09 | 3.80% | 57.83 | 3.80% | 197.61 | 3.80% | 161.04 | 3.80% | 110.55 | 3.80% | 110.32 | 3.80% | 80.21 | 3.80% | 114.39 | 3.80% | 130.59 | 3.80% | 103.04 | 3.80% | 211.02 |
| Stage Three Growth | 2129 | 3.80% | 290.73 | 3.80% | 60.03 | 3.80% | 205.12 | 3.80% | 167.16 | 3.80% | 114.75 | 3.80% | 114.52 | 3.80% | 83.25 | 3.80% | 118.74 | 3.80% | 135.55 | 3.80% | 106.95 | 3.80% | 219.04 |
| Stage Three Growth | 2130 | 3.80% | 301.78 | 3.80% | 62.31 | 3.80% | 212.92 | 3.80% | 173.52 | 3.80% | 119.12 | 3.80% | 118.87 | 3.80% | 86.42 | 3.80% | 123.25 | 3.80% | 140.70 | 3.80% | 111.01 | 3.80% | 227.36 |
| Stage Three Growth | 2131 | 3.80% | 313.25 | 3.80% | 64.67 | 3.80% | 221.01 | 3.80% | 180.11 | 3.80% | 123.64 | 3.80% | 123.38 | 3.80% | 89.70 | 3.80% | 127.93 | 3.80% | 146.05 | 3.80% | 115.23 | 3.80% | 236.00 |
| Stage Three Growth | 2132 | 3.80% | 325.15 | 3.80% | 67.13 | 3.80% | 229.41 | 3.80% | 186.95 | 3.80% | 128.34 | 3.80% | 128.07 | 3.80% | 93.11 | 3.80% | 132.79 | 3.80% | 151.60 | 3.80% | 119.61 | 3.80% | 244.97 |
| Stage Three Growth | 2133 | 3.80% | 337.51 | 3.80% | 69.68 | 3.80% | 238.12 | 3.80% | 194.06 | 3.80% | 133.22 | 3.80% | 132.94 | 3.80% | 96.65 | 3.80% | 137.84 | 3.80% | 157.36 | 3.80% | 124.16 | 3.80% | 254.27 |
| Stage Three Growth | 2134 | 3.80% | 350.33 | 3.80% | 72.33 | 3.80% | 247.17 | 3.80% | 201.43 | 3.80% | 138.28 | 3.80% | 137.99 | 3.80% | 100.32 | 3.80% | 143.08 | 3.80% | 163.34 | 3.80% | 128.88 | 3.80% | 263.94 |
| Stage Three Growth | 2135 | 3.80% | 363.64 | 3.80% | 75.08 | 3.80% | 256.56 | 3.80% | 209.09 | 3.80% | 143.53 | 3.80% | 143.24 | 3.80% | 104.13 | 3.80% | 148.51 | 3.80% | 169.55 | 3.80% | 133.77 | 3.80% | 273.97 |
| Stage Three Growth | 2136 | 3.80% | 377.46 | 3.80% | 77.93 | 3.80% | 266.31 | 3.80% | 217.03 | 3.80% | 148.99 | 3.80% | 148.68 | 3.80% | 108.09 | 3.80% | 154.16 | 3.80% | 175.99 | 3.80% | 138.86 | 3.80% | 284.38 |
| Stage Three Growth | 2137 | 3.80% | 391.81 | 3.80% | 80.89 | 3.80% | 276.43 | 3.80% | 225.28 | 3.80% | 154.65 | 3.80% | 154.33 | 3.80% | 112.20 | 3.80% | 160.02 | 3.80% | 182.68 | 3.80% | 144.13 | 3.80% | 295.18 |
| Stage Three Growth | 2138 | 3.80% | 406.69 | 3.80% | 83.97 | 3.80% | 286.94 | 3.80% | 233.84 | 3.80% | 160.53 | 3.80% | 160.19 | 3.80% | 116.46 | 3.80% | 166.10 | 3.80% | 189.62 | 3.80% | 149.61 | 3.80% | 306.40 |
| Stage Three Growth | 2139 | 3.80% | 422.15 | 3.80% | 87.16 | 3.80% | 297.84 | 3.80% | 242.73 | 3.80% | 166.63 | 3.80% | 166.28 | 3.80% | 120.89 | 3.80% | 172.41 | 3.80% | 196.83 | 3.80% | 155.29 | 3.80% | 318.04 |
| Stage Three Growth | 2140 | 3.80% | 438.19 | 3.80% | 90.47 | 3.80% | 309.16 | 3.80% | 251.95 | 3.80% | 172.96 | 3.80% | 172.60 | 3.80% | 125.48 | 3.80% | 178.96 | 3.80% | 204.31 | 3.80% | 161.20 | 3.80% | 330.13 |
| Stage Three Growth | 2141 | 3.80% | 454.84 | 3.80% | 93.91 | 3.80% | 320.91 | 3.80% | 261.52 | 3.80% | 179.53 | 3.80% | 179.16 | 3.80% | 130.25 | 3.80% | 185.76 | 3.80% | 212.07 | 3.80% | 167.32 | 3.80% | 342.67 |
| Implied Cost of Equity | | | 7.15% | | 6.87% | | 7.00% | | 8.43% | | 6.72% | | 8.82% | | 7.70% | | 8.92% | | 7.44% | | 6.56% | | 7.99% |

Mean 7.60%
Median 7.44%

Selected Three-Stage DGM Cost of Equity 7.52%

Equity Component of the Direct Rate

| Company | Value Line P/E Ratio |
|--|----------------------|
| Atmos Energy Corp. | 21.1 |
| CenterPoint Energy Inc. | 20.3 |
| Chesapeake Utilities Corp. | 18.9 |
| CMS Energy Corp. | 18.3 |
| MGE Energy Inc. | 20.0 |
| New Jersey Resources Corp. | 14.6 |
| NiSource Inc. | 20.7 |
| Northwest Natural Holding Co. | 15.3 |
| ONE Gas Inc. | 16.5 |
| Southwest Gas Holdings Inc. | 18.8 |
| WEC Energy Group Inc. | 19.0 |
| Mean | 18.5 |
| Median | 18.9 |
| Selected Price to Earnings (P/E) Ratio | 18.5 |
| Indicated Equity Component of the Direct Rate | 5.41% |

We placed the most reliance on the mean price to earnings ratio.

Notes:

The Price/Earnings Ratio was downloaded from Value Line.

Beta Analysis

| Company | Beta |
|-------------------------------|-------------|
| Atmos Energy Corp. | 0.75 |
| CenterPoint Energy Inc. | 0.80 |
| Chesapeake Utilities Corp. | 0.70 |
| CMS Energy Corp. | 0.70 |
| MGE Energy Inc. | 0.80 |
| New Jersey Resources Corp. | 0.75 |
| NiSource Inc. | 0.85 |
| Northwest Natural Holding Co. | 0.75 |
| ONE Gas Inc. | 0.75 |
| Southwest Gas Holdings Inc. | 0.75 |
| WEC Energy Group Inc. | 0.65 |
| | |
| Beta Mean | 0.75 |
| Beta Median | 0.75 |
| Unlevered and Relevered Mean* | 0.74 |
| | |
| Indicated Beta | 0.75 |

We considered the mean, median, and unlevered/relevered mean. We placed more reliance on the median, and unlevered/relevered mean when selecting the indicated beta.

Notes:

*See the Unlevering Relevering Beta page for the calculation

Unlevering/Relevering Betas

| Unlevering of Betas | | | | | |
|-----------------------------|--|--|---|---|------------------------------|
| Company | Value Line Actual Income Tax Rate | From Capital Structure Page Actual Debt in Capital Structure | From Capital Structure Page Actual Equity in Capital Structure | Value Line Levered Beta (Published) | Formula Unlevered Beta |
| Atmos Energy Corp. | 19.00% | 23.22% | 76.78% | 0.75 | 0.6 |
| CenterPoint Energy Inc. | 16.00% | 46.99% | 53.01% | 0.80 | 0.46 |
| Chesapeake Utilities Corp. | 27.00% | 33.55% | 66.45% | 0.70 | 0.51 |
| CMS Energy Corp. | 15.50% | 44.73% | 54.70% | 0.70 | 0.41 |
| MGE Energy Inc. | 19.00% | 21.14% | 78.86% | 0.80 | 0.66 |
| New Jersey Resources Corp. | 21.50% | 40.44% | 59.56% | 0.75 | 0.49 |
| NiSource Inc. | 19.00% | 42.61% | 57.39% | 0.85 | 0.53 |
| Northwest Natural Gas | 25.00% | 52.70% | 47.30% | 0.75 | 0.41 |
| ONE Gas Inc. | 18.00% | 34.00% | 66.00% | 0.75 | 0.53 |
| Southwest Gas Holdings Inc. | 20.00% | 35.85% | 64.15% | 0.75 | 0.52 |
| WEC Energy Group Inc. | 19.00% | 36.12% | 63.83% | 0.65 | 0.45 |
| Average | | | | 0.75 | |

| Relevering of Betas | | | | |
|-----------------------------|--|--|---|-------------------------|
| Company | Formula Composite Income Tax Rate | From Capital Structure Page Industry Debt in Capital Structure | From Capital Structure Page Industry Equity in Capital Structure | Formula Levered Beta |
| Atmos Energy Corp. | 19.91% | 37.00% | 63.00% | 0.88 |
| CenterPoint Energy Inc. | 19.91% | 37.00% | 63.00% | 0.68 |
| Chesapeake Utilities Corp. | 19.91% | 37.00% | 63.00% | 0.75 |
| CMS Energy Corp. | 19.91% | 37.00% | 63.00% | 0.60 |
| MGE Energy Inc. | 19.91% | 37.00% | 63.00% | 0.97 |
| New Jersey Resources Corp. | 19.91% | 37.00% | 63.00% | 0.72 |
| NiSource Inc. | 19.91% | 37.00% | 63.00% | 0.78 |
| Northwest Natural Gas | 19.91% | 37.00% | 63.00% | 0.60 |
| ONE Gas Inc. | 19.91% | 37.00% | 63.00% | 0.78 |
| Southwest Gas Holdings Inc. | 19.91% | 37.00% | 63.00% | 0.76 |
| WEC Energy Group Inc. | 19.91% | 37.00% | 63.00% | 0.66 |
| Average | | | | 0.74 |

Notes:

Uses the Hamada Formula

Unlevered Beta = Levered Beta / [1 + (1 - Tax Rate) x (Debt/Equity)], using company-specific components

Relevered Beta = Unlevered Beta [1 + (1 - Tax Rate) x (Debt/Equity)], Using industry components for Tax Rate, Debt, and Equity

Calculation of Market to Book Ratios for the Gas Distribution Market Segment

- December 31, 2025 calendar year information for the January 2, 2026 Assessment
- A market to book ratio over one would be an indication of no obsolescence.
- Market value of common equity equals share price as of January 2, 2026 multiplied by common shares outstanding from companies' 2025 10-K

Market to Book Ratio for Equity

| Company | Market Value of Common Equity | Book Value of Common Equity from 10-K | Market to Book Ratio | Source | Fiscal Year End |
|-------------------------------|-------------------------------|---------------------------------------|----------------------|--|-----------------|
| Atmos Energy Corp. | 27,363,221,514 | 13,558,890,000 | 2.02 | Atmos Energy Corp. 2025 10-K, p. 41 | |
| CenterPoint Energy Inc. | 25,241,397,399 | 11,153,000,000 | 2.26 | CenterPoint Energy Inc. 2025 10-K, p. 97 | |
| Chesapeake Utilities Corp. | 2,970,511,760 | 1,598,500,000 | 1.86 | Chesapeake Utilites 2025 10-K, p. 48 | |
| CMS Energy Corp. | 21,578,159,848 | 9,711,000,000 | 2.22 | CMS Energy Corp. 2025 10-K, p. 99 | |
| MGE Energy Inc. | 2,868,072,238 | 1,303,936,000 | 2.20 | MGE Energy Inc. 2025 10-K, p. 60 | |
| New Jersey Resources Corp. | 4,632,202,085 | 2,391,666,000 | 1.94 | New Jersey Resources. 2025 10-K, p. 68 | |
| NiSource Inc. | 20,170,695,565 | 11,659,900,000 | 1.73 | NiSource Inc. 2025 10-K, p. 73 | |
| Northwest Natural Holding Co. | 1,942,681,589 | 1,475,076,000 | 1.32 | Northwest Natural Gas 2025 10-K, p. 84 | |
| ONE Gas Inc. | 4,853,644,989 | 3,440,123,000 | 1.41 | One Gas Inc. 2025 10-K, p. 43 | |
| Southwest Gas Holdings Inc. | 5,788,753,600 | 3,961,119,000 | 1.46 | Southwest Gas Holdings 2025 10-K, p. 52 | |
| WEC Energy Group Inc. | 34,651,887,928 | 13,613,600,000 | 2.55 | WEC Energy Group. 2025 10-K, p. 89 | |
| Average | | | 1.91 | | |

Market to Book Ratio for Debt

| Company | Market Value of Long-Term Debt from 10-K | Book Value of Long-Term Debt from 10-K | Market to Book Ratio | Source | Fiscal Year End |
|----------------------------|--|--|----------------------|---|-----------------|
| Atmos Energy Corp. | 8,272,978,000 | 8,935,000,000 | 0.93 | Atmos Energy Corp. 2025 10-K, p. 85 | |
| CenterPoint Energy Inc. | 22,377,000,000 | 22,980,000,000 | 0.97 | CenterPoint Energy Inc. 2025 10-K, p. 147 | |
| Chesapeake Utilities Corp. | 1,500,000,000 | 1,500,000,000 | 1.00 | Chesapeake Utilites 2025 10-K, p.84/85 | |
| CMS Energy Corp. | 17,645,000,000 | 18,757,000,000 | 0.94 | CMS Energy Corp. 2025 10-K, p. 136 | |
| MGE Energy Inc. | 768,889,000 | 818,115,000 | 0.94 | MGE Energy 2025 10-K p. 100 | |
| New Jersey Resources Corp. | 3,145,412,000 | 3,250,387,000 | 0.97 | New Jersey Resources. 2025 10-K, p. 93 & 97 | |
| NiSource Inc. | 14,975,300,000 | 15,477,500,000 | 0.97 | NiSource Inc. 2025 10-K, p. 104 | |

| | | | | |
|-------------------------------|----------------|----------------|-------------|--|
| Northwest Natural Holding Co. | 2,164,200,000 | 2,432,800,000 | 0.89 | Northwest Natural Holding 2025 10-K, p. 84/124 |
| ONE Gas Inc. | 2,500,000,000 | 2,636,278,000 | 0.95 | One Gas Inc. 2025 10-K, p. 75 FV & 55 BV |
| Southwest Gas Holdings Inc. | 3,234,359,000 | 3,433,012,000 | 0.94 | Southwest Gas Holdings 2025 10-K, p. 78 |
| WEC Energy Group Inc. | 19,609,100,000 | 20,017,500,000 | 0.98 | WEC Energy Group. 2025 10-K, p. 138 |
| Average | | | 0.95 | |

Application of Capital Structure as determined in the Capitalization Rate Study

| | Capital Structure | Market to Book | Composite |
|----------------|-------------------|----------------|-------------|
| Common Equity | 63.00% | 1.91 | 1.20 |
| Long-term Debt | 37.00% | 0.95 | 0.35 |
| | | | 1.55 |

Appendix C - Gas Transmission Pipeline

Yield Rate

| | Capital Structure | Rate | Composite |
|-----------------------|-------------------|--------|--------------|
| Long-Term Debt | 34.00% | 5.88% | 2.00% |
| Common Equity | 66.00% | 10.04% | 6.63% |
| Yield Rate | | | 8.63% |

| | |
|---|--------------|
| Gas Transmission Pipeline Yield Rate | 8.63% |
|---|--------------|

Capital Structure

| Company | Market Value of Long-Term Debt ¹ | Value of Preferred Equity ² | Market Value of Common Equity ³ | Total Market Value | % Long-Term Debt | % Preferred Equity | % Common Equity | |
|---|---|--|--|--------------------|------------------|--------------------|-----------------|--------|
| DT Midstream Inc. | 3,318,000,000 | - | 12,301,528,186 | 15,619,528,186 | 21.24% | 0.00% | 78.76% | |
| Enbridge Inc. | 74,127,360,000 | 5,652,211,200 | 105,158,488,831 | 184,938,060,031 | 40.08% | 3.06% | 56.86% | |
| Kinder Morgan Inc. | 31,966,000,000 | - | 61,648,591,453 | 93,614,591,453 | 34.15% | 0.00% | 65.85% | |
| ONEOK Inc. | 32,700,000,000 | - | 46,812,469,749 | 79,512,469,749 | 41.13% | 0.00% | 58.87% | |
| Pembina Pipeline Corp. | 9,271,756,800 | 1,610,956,800 | 22,456,499,514 | 33,339,213,114 | 27.81% | 4.83% | 67.36% | |
| TC Energy Corp. | 43,616,217,600 | 1,829,300,000 | 56,536,001,550 | 101,981,519,150 | 42.77% | 1.79% | 55.44% | |
| Williams Companies Inc. | 25,830,000,000 | - | 76,731,850,000 | 102,561,850,000 | 25.18% | 0.00% | 74.82% | |
| | | | | | Mean | 33.19% | 1.38% | 65.42% |
| | | | | | Median | 34.15% | 0.00% | 65.85% |
| Indicated Industry Capital Structure | | | | | 34.00% | | 66.00% | |

Notes:

1. Source: 10-K or Annual Report
2. Source: Value Line
3. Source: Share Price as of January 2, 2026 multiplied by common shares outstanding from companies' 2025 10-K

Converted CAD to USD in instances where company's annual report is reported in CAD. Using CAD to USD exchange rate of 0.7296 as of December 31, 2025, per Bank of Canada.

Indexed Rate of Debt

| Company | Debt Rating | Long-Term Debt Rate |
|-------------------------|-------------|---------------------|
| DT Midstream Inc. | Baa3 | 5.88% |
| Enbridge Inc. | Baa2 | 5.88% |
| Kinder Morgan Inc. | Baa2 | 5.88% |
| ONEOK Inc. | Baa2 | 5.88% |
| Pembina Pipeline Corp. | BBB | 5.88% |
| TC Energy Corp. | Baa3 | 5.88% |
| Williams Companies Inc. | Baa2 | 5.88% |

Mean 5.88%
Median 5.88%
Mode 5.88%

| | |
|-------------------------------|--------------|
| Indicated Rate of Debt | 5.88% |
|-------------------------------|--------------|

Corporate Bond Yield Averages from Mergent Bond Record, January 2026 Edition Industrial Bond Averages, December 2025

| Mergent | S&P | Dec. Yield Avg. |
|------------------|-----------------|-----------------|
| Aa1, Aa2 Aa3 | AA+, AA, AA- | 5.57% |
| A1, A2, A3 | A+, A, A- | 5.68% |
| Baa1, Baa2, Baa3 | BBB+, BBB, BBB- | 5.88% |

Indicated Rate of Equity

| Model | Rate |
|---|---------------|
| CAPM - Ex Ante, Three Stage | 7.64% |
| CAPM - Damodaran | 8.83% |
| CAPM - The CFO Survey | 10.14% |
| CAPM - Fernandez, Banuls, and Acin | 10.04% |
| CAPM - Ex Post (BVR Historical, Arithmetic) | 11.25% |
| CAPM - Ex Post (BVR Historical, Geometric) | 10.07% |
| Empirical CAPM - Ex Ante, Three Stage | 7.68% |
| Empirical CAPM - Damodaran | 8.88% |
| Empirical CAPM - Graham and Harvey | 10.21% |
| Empirical CAPM - Fernandez, Banuls, and Acin | 10.10% |
| Empirical CAPM - Ex Post (BVR Historical, Arithmetic) | 11.34% |
| Empirical CAPM - Ex Post (BVR Historical, Geometric) | 10.14% |
| DGM - Two-Stage | 10.73% |
| DGM - Three-Stage | 10.21% |
| Indicated Rate of Equity | 10.04% |

We established a range of acceptability for the cost of equity with all available models. We considered all of the data and placed equal reliance on the CAPM using the Business Valuation Resources Historical (arithmetic) equity risk premium, and the Damodaran CAPM.

Direct Rate

| | Capital Structure | Rate | Composite |
|------------------|-------------------|-------|--------------|
| Debt Component | 34.00% | 5.88% | 2.00% |
| Equity Component | 66.00% | 4.61% | 3.04% |
| Direct Rate | | | 5.04% |

| | |
|--------------------|--------------|
| Direct Rate | 5.04% |
|--------------------|--------------|

Capital Asset Pricing Model (CAPM)

$(ERP \times \beta) + RFR = \text{Indicated Equity Rate}$

| | Equity Risk Premium (ERP) | x Industry Beta (β) | = Industry Risk Premium | + Risk-Free Rate ¹ (RFR) | Indicated Equity Rate |
|--|---------------------------|-----------------------------|-------------------------|-------------------------------------|-----------------------|
| Three Stage Ex Ante ² | 2.98% | 0.95 | 2.83% | 4.81% | 7.64% |
| Dr. Damodaran ERP ³ | 4.23% | 0.95 | 4.02% | 4.81% | 8.83% |
| The CFO Survey ⁴ | 5.61% | 0.95 | 5.33% | 4.81% | 10.14% |
| Fernandez, Banuls and Acin ⁵ | 5.50% | 0.95 | 5.23% | 4.81% | 10.04% |
| BVR - Historical, Arithmetic Mean ⁶ | 6.78% | 0.95 | 6.44% | 4.81% | 11.25% |
| BVR - Historical, Geometric Mean ⁷ | 5.54% | 0.95 | 5.26% | 4.81% | 10.07% |

Notes:

- 1 U.S. Treasury on January 2, 2026 - 20-year Coupon Bond Yield, Daily Observations, Retrieved January 22, 2026 from www.federalreserve.gov
- 2 Three Stage Dividend Growth Model, S&P 500. See Appendix F, Three Stage Ex Ante Calculation
- 3 Implied Equity Risk Premium on January 2, 2026 as determined by Dr. Aswath Damodaran; Retrieved January 22, 2026 from <http://pages.stern.nyu.edu/~adamodar/>
- 4 The CFO Survey (2025). Data & Results December 17, 2025. Mean average annual S&P return over next ten years (9.9%) less annual yield on 10-year Treasury Bonds (4.29%). Retrieved January 22, 2026 from https://www.richmondfed.org/research/national_economy/cfo_survey
- 5 Fernandez, P., Garcia D., & Acin, J. F. (2025). Survey: Market Risk Premium and Risk-Free Rate used for 54 countries in 2025. SSRN Electronic Journal. Retrieved January 22, 2026 from <https://ssrn.com/abstract=5260463>
- 6 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using arithmetic mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>
- 7 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using geometric mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>

Empirical Capital Asset Pricing Model (ECAPM)

$$(ERP \times \beta \times .75) + (ERP \times .25) + RFR = \text{Indicated Equity Rate}$$

| Model | Equity Risk Premium (ERP) | Industry Beta (β) | Weighted Industry Risk Premium (weighted at 75%) | Weighted Equity Risk Premium (weighted at 25%) | Risk-Free Rate (RFR) ¹ | Indicated Equity Rate |
|--|---------------------------|---------------------------|--|--|-----------------------------------|-----------------------|
| Three Stage Ex Ante ² | 2.98% | 0.95 | 2.12% | 0.75% | 4.81% | 7.68% |
| Dr. Damodaran ERP ³ | 4.23% | 0.95 | 3.01% | 1.06% | 4.81% | 8.88% |
| The CFO Survey ⁴ | 5.61% | 0.95 | 4.00% | 1.40% | 4.81% | 10.21% |
| Fernandez, Banuls and Acin ⁵ | 5.50% | 0.95 | 3.92% | 1.38% | 4.81% | 10.10% |
| BVR - Historical, Arithmetic Mean ⁶ | 6.78% | 0.95 | 4.83% | 1.70% | 4.81% | 11.34% |
| BVR - Historical, Geometric Mean ⁷ | 5.54% | 0.95 | 3.95% | 1.39% | 4.81% | 10.14% |

Notes:

- 1 U.S. Treasury on January 2, 2026 - 20-year Coupon Bond Yield, Daily Observations, Retrieved January 22, 2026 from www.federalreserve.gov
- 2 Three Stage Dividend Growth Model, S&P 500. See Appendix F, Three Stage Ex Ante Calculation
- 3 Implied Equity Risk Premium on January 2, 2026 as determined by Dr. Aswath Damodaran; Retrieved January 22, 2026 from <http://pages.stern.nyu.edu/~adamodar/>
- 4 The CFO Survey (2025). Data & Results December 17, 2025. Mean average annual S&P return over next ten years (9.9%) less annual yield on 10-year Treasury Bonds (4.29%). Retrieved January 22, 2026 from https://www.richmondfed.org/research/national_economy/cfo_survey
- 5 Fernandez, P., Garcia D., & Acin, J. F. (2025). Survey: Market Risk Premium and Risk-Free Rate used for 54 countries in 2025. SSRN Electronic Journal. Retrieved January 22, 2026 from <https://ssrn.com/abstract=5260463>
- 6 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using arithmetic mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>
- 7 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using geometric mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>

Two-Stage Dividend Growth Model

$$K_E = (DY \times (1 + 0.5(G))) + 0.67(G_1) + 0.33(g)$$

K_E Cost of Equity

G_1 Short-term Growth Estimate

DY Dividend Yield

g Stable Growth

G Average Growth Rate

| Company | DY Dividend Yield | G1 Short-term Growth Estimate | g Stable Growth | G Average Growth Rate | K_E Cost of Equity |
|-------------------------|-------------------|-------------------------------|-----------------|-----------------------|----------------------|
| DT Midstream Inc. | 2.77% | 4.00% | 3.80% | 3.90% | 6.76% |
| Enbridge Inc. | 5.59% | 5.00% | 3.80% | 4.40% | 10.32% |
| Kinder Morgan Inc. | 4.22% | 8.50% | 3.80% | 6.15% | 11.30% |
| ONEOK Inc. | 5.54% | 10.50% | 3.80% | 7.15% | 14.03% |
| Pembina Pipeline Corp. | 5.27% | 2.50% | 3.80% | 3.15% | 8.28% |
| TC Energy Corp. | 4.35% | 8.50% | 3.80% | 6.15% | 11.43% |
| Williams Companies Inc. | 3.29% | 9.50% | 3.80% | 6.65% | 11.02% |

Mean 10.45%

Median 11.02%

| | |
|--------------------------------------|---------------|
| Two-Stage DGM, Indicated Rate | 10.73% |
|--------------------------------------|---------------|

We placed equal reliance on the mean and median when selecting the indicated rate.

Notes:

Dividend Yield provided by Value Line

Growth Estimates, Next 5 Years for Earnings provided Value Line

Stable growth rate is the nominal growth rate determined in the Capitalization Rate Study Narrative (indicated long-term growth rate of the U.S. economy of 1.8% plus the expected inflation rate of 2.0%).

Three-Stage Dividend Growth Model

Start Price - recent price from Value Line

Expected dividends - estimated dividends from Value Line

Stage one growth - projected earnings growth rate from Value Line

Stage two growth - reversion to long-term growth rate

Stage three growth - long-term growth rate developed in Study

| Company | Year | DT Midstream Inc. | | Enbridge Inc. | | Kinder Morgan Inc. | | ONEOK Inc. | | Pembina Pipeline Corp. | | TC Energy Corp. | | Williams Companies Inc. | |
|--------------------|------|-------------------|---------|---------------|--------|--------------------|--------|------------|--------|------------------------|--------|-----------------|--------|-------------------------|--------|
| Start Price | 2025 | | -120.99 | | -48.20 | | -27.71 | | -74.34 | | -38.65 | | -55.93 | | -60.85 |
| Expected Dividends | 2026 | | 3.30 | | 3.90 | | 1.19 | | 4.28 | | 2.90 | | 2.60 | | 2.09 |
| Stage One Growth | 2027 | 4.00% | 3.43 | 5.00% | 4.10 | 8.50% | 1.29 | 10.50% | 4.73 | 2.50% | 2.97 | 8.50% | 2.82 | 9.50% | 2.29 |
| Stage One Growth | 2028 | 4.00% | 3.57 | 5.00% | 4.30 | 8.50% | 1.40 | 10.50% | 5.23 | 2.50% | 3.05 | 8.50% | 3.06 | 9.50% | 2.51 |
| Stage One Growth | 2029 | 4.00% | 3.71 | 5.00% | 4.51 | 8.50% | 1.52 | 10.50% | 5.77 | 2.50% | 3.12 | 8.50% | 3.32 | 9.50% | 2.74 |
| Stage One Growth | 2030 | 4.00% | 3.86 | 5.00% | 4.74 | 8.50% | 1.65 | 10.50% | 6.38 | 2.50% | 3.20 | 8.50% | 3.60 | 9.50% | 3.00 |
| Stage One Growth | 2031 | 4.00% | 4.02 | 5.00% | 4.98 | 8.50% | 1.79 | 10.50% | 7.05 | 2.50% | 3.28 | 8.50% | 3.91 | 9.50% | 3.29 |
| Stage Two Growth | 2032 | 3.98% | 4.17 | 4.89% | 5.22 | 8.07% | 1.93 | 9.89% | 7.75 | 2.62% | 3.37 | 8.07% | 4.23 | 8.98% | 3.59 |
| Stage Two Growth | 2033 | 3.96% | 4.34 | 4.78% | 5.47 | 7.65% | 2.08 | 9.28% | 8.47 | 2.74% | 3.46 | 7.65% | 4.55 | 8.46% | 3.89 |
| Stage Two Growth | 2034 | 3.95% | 4.51 | 4.67% | 5.73 | 7.22% | 2.23 | 8.67% | 9.20 | 2.85% | 3.56 | 7.22% | 4.88 | 7.95% | 4.20 |
| Stage Two Growth | 2035 | 3.93% | 4.69 | 4.56% | 5.99 | 6.79% | 2.38 | 8.06% | 9.94 | 2.97% | 3.66 | 6.79% | 5.21 | 7.43% | 4.51 |
| Stage Two Growth | 2036 | 3.91% | 4.87 | 4.45% | 6.25 | 6.36% | 2.54 | 7.45% | 10.69 | 3.09% | 3.78 | 6.36% | 5.54 | 6.91% | 4.82 |
| Stage Two Growth | 2037 | 3.89% | 5.06 | 4.35% | 6.53 | 5.94% | 2.69 | 6.85% | 11.42 | 3.21% | 3.90 | 5.94% | 5.87 | 6.39% | 5.13 |
| Stage Two Growth | 2038 | 3.87% | 5.26 | 4.24% | 6.80 | 5.51% | 2.83 | 6.24% | 12.13 | 3.33% | 4.03 | 5.51% | 6.19 | 5.87% | 5.43 |
| Stage Two Growth | 2039 | 3.85% | 5.46 | 4.13% | 7.08 | 5.08% | 2.98 | 5.63% | 12.81 | 3.45% | 4.17 | 5.08% | 6.51 | 5.35% | 5.72 |
| Stage Two Growth | 2040 | 3.84% | 5.67 | 4.02% | 7.37 | 4.65% | 3.12 | 5.02% | 13.45 | 3.56% | 4.32 | 4.65% | 6.81 | 4.84% | 6.00 |
| Stage Two Growth | 2041 | 3.82% | 5.89 | 3.91% | 7.66 | 4.23% | 3.25 | 4.41% | 14.05 | 3.68% | 4.47 | 4.23% | 7.10 | 4.32% | 6.26 |
| Stage Three Growth | 2042 | 3.80% | 6.11 | 3.80% | 7.95 | 3.80% | 3.37 | 3.80% | 14.58 | 3.80% | 4.64 | 3.80% | 7.37 | 3.80% | 6.50 |
| Stage Three Growth | 2043 | 3.80% | 6.34 | 3.80% | 8.25 | 3.80% | 3.50 | 3.80% | 15.14 | 3.80% | 4.82 | 3.80% | 7.65 | 3.80% | 6.74 |
| Stage Three Growth | 2044 | 3.80% | 6.58 | 3.80% | 8.56 | 3.80% | 3.63 | 3.80% | 15.71 | 3.80% | 5.00 | 3.80% | 7.94 | 3.80% | 7.00 |
| Stage Three Growth | 2045 | 3.80% | 6.83 | 3.80% | 8.89 | 3.80% | 3.77 | 3.80% | 16.31 | 3.80% | 5.19 | 3.80% | 8.24 | 3.80% | 7.26 |
| Stage Three Growth | 2046 | 3.80% | 7.09 | 3.80% | 9.23 | 3.80% | 3.91 | 3.80% | 16.93 | 3.80% | 5.39 | 3.80% | 8.55 | 3.80% | 7.54 |
| Stage Three Growth | 2047 | 3.80% | 7.36 | 3.80% | 9.58 | 3.80% | 4.06 | 3.80% | 17.57 | 3.80% | 5.60 | 3.80% | 8.88 | 3.80% | 7.83 |
| Stage Three Growth | 2048 | 3.80% | 7.64 | 3.80% | 9.94 | 3.80% | 4.22 | 3.80% | 18.24 | 3.80% | 5.81 | 3.80% | 9.21 | 3.80% | 8.12 |
| Stage Three Growth | 2049 | 3.80% | 7.93 | 3.80% | 10.32 | 3.80% | 4.38 | 3.80% | 18.93 | 3.80% | 6.03 | 3.80% | 9.56 | 3.80% | 8.43 |
| Stage Three Growth | 2050 | 3.80% | 8.23 | 3.80% | 10.71 | 3.80% | 4.54 | 3.80% | 19.65 | 3.80% | 6.26 | 3.80% | 9.93 | 3.80% | 8.75 |

| | | | | | | | | | | | | | | | |
|--------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Stage Three Growth | 2051 | 3.80% | 8.55 | 3.80% | 11.12 | 3.80% | 4.72 | 3.80% | 20.40 | 3.80% | 6.50 | 3.80% | 10.30 | 3.80% | 9.09 |
| Stage Three Growth | 2052 | 3.80% | 8.87 | 3.80% | 11.54 | 3.80% | 4.90 | 3.80% | 21.17 | 3.80% | 6.74 | 3.80% | 10.70 | 3.80% | 9.43 |
| Stage Three Growth | 2053 | 3.80% | 9.21 | 3.80% | 11.98 | 3.80% | 5.08 | 3.80% | 21.98 | 3.80% | 7.00 | 3.80% | 11.10 | 3.80% | 9.79 |
| Stage Three Growth | 2054 | 3.80% | 9.56 | 3.80% | 12.43 | 3.80% | 5.27 | 3.80% | 22.81 | 3.80% | 7.27 | 3.80% | 11.52 | 3.80% | 10.16 |
| Stage Three Growth | 2055 | 3.80% | 9.92 | 3.80% | 12.91 | 3.80% | 5.48 | 3.80% | 23.68 | 3.80% | 7.54 | 3.80% | 11.96 | 3.80% | 10.55 |
| Stage Three Growth | 2056 | 3.80% | 10.30 | 3.80% | 13.40 | 3.80% | 5.68 | 3.80% | 24.58 | 3.80% | 7.83 | 3.80% | 12.42 | 3.80% | 10.95 |
| Stage Three Growth | 2057 | 3.80% | 10.69 | 3.80% | 13.90 | 3.80% | 5.90 | 3.80% | 25.51 | 3.80% | 8.13 | 3.80% | 12.89 | 3.80% | 11.36 |
| Stage Three Growth | 2058 | 3.80% | 11.10 | 3.80% | 14.43 | 3.80% | 6.12 | 3.80% | 26.48 | 3.80% | 8.43 | 3.80% | 13.38 | 3.80% | 11.80 |
| Stage Three Growth | 2059 | 3.80% | 11.52 | 3.80% | 14.98 | 3.80% | 6.36 | 3.80% | 27.49 | 3.80% | 8.75 | 3.80% | 13.89 | 3.80% | 12.25 |
| Stage Three Growth | 2060 | 3.80% | 11.96 | 3.80% | 15.55 | 3.80% | 6.60 | 3.80% | 28.53 | 3.80% | 9.09 | 3.80% | 14.41 | 3.80% | 12.71 |
| Stage Three Growth | 2061 | 3.80% | 12.41 | 3.80% | 16.14 | 3.80% | 6.85 | 3.80% | 29.62 | 3.80% | 9.43 | 3.80% | 14.96 | 3.80% | 13.19 |
| Stage Three Growth | 2062 | 3.80% | 12.88 | 3.80% | 16.76 | 3.80% | 7.11 | 3.80% | 30.74 | 3.80% | 9.79 | 3.80% | 15.53 | 3.80% | 13.69 |
| Stage Three Growth | 2063 | 3.80% | 13.37 | 3.80% | 17.39 | 3.80% | 7.38 | 3.80% | 31.91 | 3.80% | 10.16 | 3.80% | 16.12 | 3.80% | 14.22 |
| Stage Three Growth | 2064 | 3.80% | 13.88 | 3.80% | 18.05 | 3.80% | 7.66 | 3.80% | 33.12 | 3.80% | 10.55 | 3.80% | 16.73 | 3.80% | 14.76 |
| Stage Three Growth | 2065 | 3.80% | 14.41 | 3.80% | 18.74 | 3.80% | 7.95 | 3.80% | 34.38 | 3.80% | 10.95 | 3.80% | 17.37 | 3.80% | 15.32 |
| Stage Three Growth | 2066 | 3.80% | 14.95 | 3.80% | 19.45 | 3.80% | 8.25 | 3.80% | 35.69 | 3.80% | 11.37 | 3.80% | 18.03 | 3.80% | 15.90 |
| Stage Three Growth | 2067 | 3.80% | 15.52 | 3.80% | 20.19 | 3.80% | 8.57 | 3.80% | 37.04 | 3.80% | 11.80 | 3.80% | 18.71 | 3.80% | 16.50 |
| Stage Three Growth | 2068 | 3.80% | 16.11 | 3.80% | 20.96 | 3.80% | 8.89 | 3.80% | 38.45 | 3.80% | 12.25 | 3.80% | 19.42 | 3.80% | 17.13 |
| Stage Three Growth | 2069 | 3.80% | 16.73 | 3.80% | 21.75 | 3.80% | 9.23 | 3.80% | 39.91 | 3.80% | 12.71 | 3.80% | 20.16 | 3.80% | 17.78 |
| Stage Three Growth | 2070 | 3.80% | 17.36 | 3.80% | 22.58 | 3.80% | 9.58 | 3.80% | 41.43 | 3.80% | 13.20 | 3.80% | 20.93 | 3.80% | 18.46 |
| Stage Three Growth | 2071 | 3.80% | 18.02 | 3.80% | 23.44 | 3.80% | 9.94 | 3.80% | 43.00 | 3.80% | 13.70 | 3.80% | 21.72 | 3.80% | 19.16 |
| Stage Three Growth | 2072 | 3.80% | 18.71 | 3.80% | 24.33 | 3.80% | 10.32 | 3.80% | 44.64 | 3.80% | 14.22 | 3.80% | 22.55 | 3.80% | 19.88 |
| Stage Three Growth | 2073 | 3.80% | 19.42 | 3.80% | 25.25 | 3.80% | 10.71 | 3.80% | 46.34 | 3.80% | 14.76 | 3.80% | 23.41 | 3.80% | 20.64 |
| Stage Three Growth | 2074 | 3.80% | 20.15 | 3.80% | 26.21 | 3.80% | 11.12 | 3.80% | 48.10 | 3.80% | 15.32 | 3.80% | 24.30 | 3.80% | 21.42 |
| Stage Three Growth | 2075 | 3.80% | 20.92 | 3.80% | 27.21 | 3.80% | 11.54 | 3.80% | 49.92 | 3.80% | 15.90 | 3.80% | 25.22 | 3.80% | 22.24 |
| Stage Three Growth | 2076 | 3.80% | 21.71 | 3.80% | 28.24 | 3.80% | 11.98 | 3.80% | 51.82 | 3.80% | 16.50 | 3.80% | 26.18 | 3.80% | 23.08 |
| Stage Three Growth | 2077 | 3.80% | 22.54 | 3.80% | 29.32 | 3.80% | 12.44 | 3.80% | 53.79 | 3.80% | 17.13 | 3.80% | 27.17 | 3.80% | 23.96 |
| Stage Three Growth | 2078 | 3.80% | 23.40 | 3.80% | 30.43 | 3.80% | 12.91 | 3.80% | 55.83 | 3.80% | 17.78 | 3.80% | 28.21 | 3.80% | 24.87 |
| Stage Three Growth | 2079 | 3.80% | 24.29 | 3.80% | 31.59 | 3.80% | 13.40 | 3.80% | 57.96 | 3.80% | 18.46 | 3.80% | 29.28 | 3.80% | 25.82 |
| Stage Three Growth | 2080 | 3.80% | 25.21 | 3.80% | 32.79 | 3.80% | 13.91 | 3.80% | 60.16 | 3.80% | 19.16 | 3.80% | 30.39 | 3.80% | 26.80 |
| Stage Three Growth | 2081 | 3.80% | 26.17 | 3.80% | 34.03 | 3.80% | 14.44 | 3.80% | 62.44 | 3.80% | 19.89 | 3.80% | 31.54 | 3.80% | 27.82 |
| Stage Three Growth | 2082 | 3.80% | 27.16 | 3.80% | 35.33 | 3.80% | 14.99 | 3.80% | 64.82 | 3.80% | 20.64 | 3.80% | 32.74 | 3.80% | 28.87 |
| Stage Three Growth | 2083 | 3.80% | 28.19 | 3.80% | 36.67 | 3.80% | 15.56 | 3.80% | 67.28 | 3.80% | 21.43 | 3.80% | 33.99 | 3.80% | 29.97 |
| Stage Three Growth | 2084 | 3.80% | 29.26 | 3.80% | 38.06 | 3.80% | 16.15 | 3.80% | 69.84 | 3.80% | 22.24 | 3.80% | 35.28 | 3.80% | 31.11 |
| Stage Three Growth | 2085 | 3.80% | 30.38 | 3.80% | 39.51 | 3.80% | 16.76 | 3.80% | 72.49 | 3.80% | 23.09 | 3.80% | 36.62 | 3.80% | 32.29 |
| Stage Three Growth | 2086 | 3.80% | 31.53 | 3.80% | 41.01 | 3.80% | 17.40 | 3.80% | 75.24 | 3.80% | 23.96 | 3.80% | 38.01 | 3.80% | 33.52 |
| Stage Three Growth | 2087 | 3.80% | 32.73 | 3.80% | 42.57 | 3.80% | 18.06 | 3.80% | 78.10 | 3.80% | 24.88 | 3.80% | 39.46 | 3.80% | 34.79 |
| Stage Three Growth | 2088 | 3.80% | 33.97 | 3.80% | 44.18 | 3.80% | 18.75 | 3.80% | 81.07 | 3.80% | 25.82 | 3.80% | 40.95 | 3.80% | 36.11 |
| Stage Three Growth | 2089 | 3.80% | 35.26 | 3.80% | 45.86 | 3.80% | 19.46 | 3.80% | 84.15 | 3.80% | 26.80 | 3.80% | 42.51 | 3.80% | 37.49 |

| | | | | | | | | | | | | | | | |
|--------------------|------|-------|--------|-------|--------|-------|-------|-------|--------|-------|--------|-------|--------|-------|--------|
| Stage Three Growth | 2090 | 3.80% | 36.60 | 3.80% | 47.61 | 3.80% | 20.20 | 3.80% | 87.35 | 3.80% | 27.82 | 3.80% | 44.13 | 3.80% | 38.91 |
| Stage Three Growth | 2091 | 3.80% | 37.99 | 3.80% | 49.42 | 3.80% | 20.97 | 3.80% | 90.67 | 3.80% | 28.88 | 3.80% | 45.80 | 3.80% | 40.39 |
| Stage Three Growth | 2092 | 3.80% | 39.44 | 3.80% | 51.29 | 3.80% | 21.76 | 3.80% | 94.11 | 3.80% | 29.98 | 3.80% | 47.54 | 3.80% | 41.92 |
| Stage Three Growth | 2093 | 3.80% | 40.94 | 3.80% | 53.24 | 3.80% | 22.59 | 3.80% | 97.69 | 3.80% | 31.11 | 3.80% | 49.35 | 3.80% | 43.52 |
| Stage Three Growth | 2094 | 3.80% | 42.49 | 3.80% | 55.27 | 3.80% | 23.45 | 3.80% | 101.40 | 3.80% | 32.30 | 3.80% | 51.23 | 3.80% | 45.17 |
| Stage Three Growth | 2095 | 3.80% | 44.11 | 3.80% | 57.37 | 3.80% | 24.34 | 3.80% | 105.26 | 3.80% | 33.52 | 3.80% | 53.17 | 3.80% | 46.89 |
| Stage Three Growth | 2096 | 3.80% | 45.78 | 3.80% | 59.55 | 3.80% | 25.26 | 3.80% | 109.26 | 3.80% | 34.80 | 3.80% | 55.19 | 3.80% | 48.67 |
| Stage Three Growth | 2097 | 3.80% | 47.52 | 3.80% | 61.81 | 3.80% | 26.22 | 3.80% | 113.41 | 3.80% | 36.12 | 3.80% | 57.29 | 3.80% | 50.52 |
| Stage Three Growth | 2098 | 3.80% | 49.33 | 3.80% | 64.16 | 3.80% | 27.22 | 3.80% | 117.72 | 3.80% | 37.49 | 3.80% | 59.47 | 3.80% | 52.44 |
| Stage Three Growth | 2099 | 3.80% | 51.20 | 3.80% | 66.60 | 3.80% | 28.25 | 3.80% | 122.19 | 3.80% | 38.92 | 3.80% | 61.73 | 3.80% | 54.43 |
| Stage Three Growth | 2100 | 3.80% | 53.15 | 3.80% | 69.13 | 3.80% | 29.33 | 3.80% | 126.83 | 3.80% | 40.40 | 3.80% | 64.07 | 3.80% | 56.50 |
| Stage Three Growth | 2101 | 3.80% | 55.17 | 3.80% | 71.75 | 3.80% | 30.44 | 3.80% | 131.65 | 3.80% | 41.93 | 3.80% | 66.51 | 3.80% | 58.65 |
| Stage Three Growth | 2102 | 3.80% | 57.26 | 3.80% | 74.48 | 3.80% | 31.60 | 3.80% | 136.66 | 3.80% | 43.52 | 3.80% | 69.03 | 3.80% | 60.88 |
| Stage Three Growth | 2103 | 3.80% | 59.44 | 3.80% | 77.31 | 3.80% | 32.80 | 3.80% | 141.85 | 3.80% | 45.18 | 3.80% | 71.66 | 3.80% | 63.19 |
| Stage Three Growth | 2104 | 3.80% | 61.70 | 3.80% | 80.25 | 3.80% | 34.05 | 3.80% | 147.24 | 3.80% | 46.90 | 3.80% | 74.38 | 3.80% | 65.59 |
| Stage Three Growth | 2105 | 3.80% | 64.04 | 3.80% | 83.30 | 3.80% | 35.34 | 3.80% | 152.84 | 3.80% | 48.68 | 3.80% | 77.21 | 3.80% | 68.08 |
| Stage Three Growth | 2106 | 3.80% | 66.48 | 3.80% | 86.46 | 3.80% | 36.68 | 3.80% | 158.64 | 3.80% | 50.53 | 3.80% | 80.14 | 3.80% | 70.67 |
| Stage Three Growth | 2107 | 3.80% | 69.00 | 3.80% | 89.75 | 3.80% | 38.08 | 3.80% | 164.67 | 3.80% | 52.45 | 3.80% | 83.19 | 3.80% | 73.35 |
| Stage Three Growth | 2108 | 3.80% | 71.63 | 3.80% | 93.16 | 3.80% | 39.52 | 3.80% | 170.93 | 3.80% | 54.44 | 3.80% | 86.35 | 3.80% | 76.14 |
| Stage Three Growth | 2109 | 3.80% | 74.35 | 3.80% | 96.70 | 3.80% | 41.03 | 3.80% | 177.42 | 3.80% | 56.51 | 3.80% | 89.63 | 3.80% | 79.04 |
| Stage Three Growth | 2110 | 3.80% | 77.17 | 3.80% | 100.37 | 3.80% | 42.58 | 3.80% | 184.17 | 3.80% | 58.66 | 3.80% | 93.03 | 3.80% | 82.04 |
| Stage Three Growth | 2111 | 3.80% | 80.10 | 3.80% | 104.19 | 3.80% | 44.20 | 3.80% | 191.17 | 3.80% | 60.89 | 3.80% | 96.57 | 3.80% | 85.16 |
| Stage Three Growth | 2112 | 3.80% | 83.15 | 3.80% | 108.15 | 3.80% | 45.88 | 3.80% | 198.43 | 3.80% | 63.20 | 3.80% | 100.24 | 3.80% | 88.39 |
| Stage Three Growth | 2113 | 3.80% | 86.31 | 3.80% | 112.26 | 3.80% | 47.63 | 3.80% | 205.97 | 3.80% | 65.60 | 3.80% | 104.05 | 3.80% | 91.75 |
| Stage Three Growth | 2114 | 3.80% | 89.59 | 3.80% | 116.52 | 3.80% | 49.44 | 3.80% | 213.80 | 3.80% | 68.09 | 3.80% | 108.00 | 3.80% | 95.24 |
| Stage Three Growth | 2115 | 3.80% | 92.99 | 3.80% | 120.95 | 3.80% | 51.31 | 3.80% | 221.92 | 3.80% | 70.68 | 3.80% | 112.11 | 3.80% | 98.86 |
| Stage Three Growth | 2116 | 3.80% | 96.53 | 3.80% | 125.55 | 3.80% | 53.26 | 3.80% | 230.35 | 3.80% | 73.37 | 3.80% | 116.37 | 3.80% | 102.61 |
| Stage Three Growth | 2117 | 3.80% | 100.19 | 3.80% | 130.32 | 3.80% | 55.29 | 3.80% | 239.11 | 3.80% | 76.15 | 3.80% | 120.79 | 3.80% | 106.51 |
| Stage Three Growth | 2118 | 3.80% | 104.00 | 3.80% | 135.27 | 3.80% | 57.39 | 3.80% | 248.19 | 3.80% | 79.05 | 3.80% | 125.38 | 3.80% | 110.56 |
| Stage Three Growth | 2119 | 3.80% | 107.95 | 3.80% | 140.41 | 3.80% | 59.57 | 3.80% | 257.62 | 3.80% | 82.05 | 3.80% | 130.14 | 3.80% | 114.76 |
| Stage Three Growth | 2120 | 3.80% | 112.06 | 3.80% | 145.74 | 3.80% | 61.83 | 3.80% | 267.41 | 3.80% | 85.17 | 3.80% | 135.09 | 3.80% | 119.12 |
| Stage Three Growth | 2121 | 3.80% | 116.31 | 3.80% | 151.28 | 3.80% | 64.18 | 3.80% | 277.58 | 3.80% | 88.41 | 3.80% | 140.22 | 3.80% | 123.65 |
| Stage Three Growth | 2122 | 3.80% | 120.73 | 3.80% | 157.03 | 3.80% | 66.62 | 3.80% | 288.12 | 3.80% | 91.77 | 3.80% | 145.55 | 3.80% | 128.35 |
| Stage Three Growth | 2123 | 3.80% | 125.32 | 3.80% | 163.00 | 3.80% | 69.15 | 3.80% | 299.07 | 3.80% | 95.25 | 3.80% | 151.08 | 3.80% | 133.22 |
| Stage Three Growth | 2124 | 3.80% | 130.08 | 3.80% | 169.19 | 3.80% | 71.78 | 3.80% | 310.44 | 3.80% | 98.87 | 3.80% | 156.82 | 3.80% | 138.29 |
| Stage Three Growth | 2125 | 3.80% | 135.03 | 3.80% | 175.62 | 3.80% | 74.51 | 3.80% | 322.23 | 3.80% | 102.63 | 3.80% | 162.78 | 3.80% | 143.54 |
| Stage Three Growth | 2126 | 3.80% | 140.16 | 3.80% | 182.29 | 3.80% | 77.34 | 3.80% | 334.48 | 3.80% | 106.53 | 3.80% | 168.97 | 3.80% | 149.00 |
| Stage Three Growth | 2127 | 3.80% | 145.48 | 3.80% | 189.22 | 3.80% | 80.28 | 3.80% | 347.19 | 3.80% | 110.58 | 3.80% | 175.39 | 3.80% | 154.66 |
| Stage Three Growth | 2128 | 3.80% | 151.01 | 3.80% | 196.41 | 3.80% | 83.33 | 3.80% | 360.38 | 3.80% | 114.78 | 3.80% | 182.05 | 3.80% | 160.54 |

| | | | | | | | | | | | | | | | |
|-------------------------------|------|-------|--------------|-------|---------------|-------|--------------|-------|---------------|-------|---------------|-------|---------------|-------|--------------|
| Stage Three Growth | 2129 | 3.80% | 156.75 | 3.80% | 203.88 | 3.80% | 86.50 | 3.80% | 374.08 | 3.80% | 119.14 | 3.80% | 188.97 | 3.80% | 166.64 |
| Stage Three Growth | 2130 | 3.80% | 162.71 | 3.80% | 211.62 | 3.80% | 89.78 | 3.80% | 388.29 | 3.80% | 123.67 | 3.80% | 196.15 | 3.80% | 172.97 |
| Stage Three Growth | 2131 | 3.80% | 168.89 | 3.80% | 219.66 | 3.80% | 93.20 | 3.80% | 403.05 | 3.80% | 128.37 | 3.80% | 203.61 | 3.80% | 179.54 |
| Stage Three Growth | 2132 | 3.80% | 175.31 | 3.80% | 228.01 | 3.80% | 96.74 | 3.80% | 418.36 | 3.80% | 133.25 | 3.80% | 211.34 | 3.80% | 186.36 |
| Stage Three Growth | 2133 | 3.80% | 181.97 | 3.80% | 236.68 | 3.80% | 100.41 | 3.80% | 434.26 | 3.80% | 138.31 | 3.80% | 219.37 | 3.80% | 193.45 |
| Stage Three Growth | 2134 | 3.80% | 188.88 | 3.80% | 245.67 | 3.80% | 104.23 | 3.80% | 450.76 | 3.80% | 143.57 | 3.80% | 227.71 | 3.80% | 200.80 |
| Stage Three Growth | 2135 | 3.80% | 196.06 | 3.80% | 255.01 | 3.80% | 108.19 | 3.80% | 467.89 | 3.80% | 149.02 | 3.80% | 236.36 | 3.80% | 208.43 |
| Stage Three Growth | 2136 | 3.80% | 203.51 | 3.80% | 264.70 | 3.80% | 112.30 | 3.80% | 485.67 | 3.80% | 154.68 | 3.80% | 245.34 | 3.80% | 216.35 |
| Stage Three Growth | 2137 | 3.80% | 211.25 | 3.80% | 274.75 | 3.80% | 116.57 | 3.80% | 504.13 | 3.80% | 160.56 | 3.80% | 254.67 | 3.80% | 224.57 |
| Stage Three Growth | 2138 | 3.80% | 219.27 | 3.80% | 285.19 | 3.80% | 121.00 | 3.80% | 523.28 | 3.80% | 166.66 | 3.80% | 264.34 | 3.80% | 233.10 |
| Stage Three Growth | 2139 | 3.80% | 227.61 | 3.80% | 296.03 | 3.80% | 125.60 | 3.80% | 543.17 | 3.80% | 173.00 | 3.80% | 274.39 | 3.80% | 241.96 |
| Stage Three Growth | 2140 | 3.80% | 236.26 | 3.80% | 307.28 | 3.80% | 130.37 | 3.80% | 563.81 | 3.80% | 179.57 | 3.80% | 284.82 | 3.80% | 251.15 |
| Stage Three Growth | 2141 | 3.80% | 245.23 | 3.80% | 318.96 | 3.80% | 135.32 | 3.80% | 585.23 | 3.80% | 186.39 | 3.80% | 295.64 | 3.80% | 260.70 |
| Implied Cost of Equity | | | 6.42% | | 12.52% | | 9.79% | | 12.61% | | 10.68% | | 10.25% | | 9.01% |

Mean 10.18%
Median 10.25%

Selected Three-Stage DGM Cost of Equity 10.21%

Equity Component of the Direct Rate

| Company | Value Line P/E Ratio |
|--|----------------------|
| DT Midstream Inc. | 27.0 |
| Enbridge Inc. | 23.1 |
| Kinder Morgan Inc. | 20.5 |
| ONEOK Inc. | 14.8 |
| Pembina Pipeline Corp. | 18.4 |
| TC Energy Corp. | 21.8 |
| Williams Companies Inc. | 26.2 |
| | |
| Mean | 21.7 |
| Median | 21.8 |
| Selected Price to Earnings (P/E) Ratio | 21.7 |
| | |
| Indicated Equity Component of the Direct Rate | 4.61% |

We placed equal reliance on the mean price to earnings ratio.

Notes:

The Price/Earnings Ratio was downloaded from Value Line.

Beta Analysis

| Company | Beta |
|-------------------------------|-------------|
| DT Midstream Inc. | 0.95 |
| Enbridge Inc. | 0.70 |
| Kinder Morgan Inc. | 1.00 |
| ONEOK Inc. | 1.30 |
| Pembina Pipeline Corp. | 0.80 |
| TC Energy Corp. | 0.90 |
| Williams Companies Inc. | 0.95 |
| | |
| Beta Mean | 0.94 |
| Beta Median | 0.95 |
| Unlevered and Relevered Mean* | 0.94 |
| | |
| Indicated Beta | 0.95 |

We considered the mean, median, and unlevered/relevered mean. We placed more reliance on the median and unlevered/relevered mean when selecting the indicated beta.

Notes:

*See the Unlevering Relevering Beta page for the calculation

Unlevering/Relevering Betas

| Unlevering of Betas | | | | | |
|-------------------------|---|---|---|---|------------------------------|
| Company | Value Line Actual Income Tax Rate | From Capital Structure Page Actual Debt in Capital Structure | From Capital Structure Page Actual Equity in Capital Structure | Value Line Levered Beta (Published) | Formula Unlevered Beta |
| DT Midstream Inc. | 25.00% | 21.24% | 78.76% | 0.95 | 0.79 |
| Enbridge Inc. | 15.00% | 40.08% | 56.86% | 0.70 | 0.44 |
| Kinder Morgan Inc. | 21.00% | 34.15% | 65.85% | 1.00 | 0.71 |
| ONEOK Inc. | 23.00% | 41.13% | 58.87% | 1.30 | 0.85 |
| Pembina Pipeline Corp. | 21.00% | 27.81% | 67.36% | 0.80 | 0.6 |
| TC Energy Corp. | 22.00% | 42.77% | 55.44% | 0.90 | 0.56 |
| Williams Companies Inc. | 21.00% | 25.18% | 74.82% | 0.95 | 0.75 |
| Average | | | | 0.94 | |

| Relevering of Betas | | | | |
|---------------------------|--|---|---|-------------------------|
| Three Stage Dividend Grow | Formula Composite Income Tax Rate | From Capital Structure Page Industry Debt in Capital Structure | From Capital Structure Page Industry Equity in Capital Structure | Formula Levered Beta |
| DT Midstream Inc. | 21.14% | 34.00% | 66.00% | 1.11 |
| Enbridge Inc. | 21.14% | 34.00% | 66.00% | 0.62 |
| Kinder Morgan Inc. | 21.14% | 34.00% | 66.00% | 1.00 |
| ONEOK Inc. | 21.14% | 34.00% | 66.00% | 1.20 |
| Pembina Pipeline Corp. | 21.14% | 34.00% | 66.00% | 0.84 |
| TC Energy Corp. | 21.14% | 34.00% | 66.00% | 0.79 |
| Williams Companies Inc. | 21.14% | 34.00% | 66.00% | 1.05 |
| Average | | | | 0.94 |

Notes:

Uses the Hamada Formula

Unlevered Beta = Levered Beta / [1 + (1 - Tax Rate) x (Debt/Equity)], using company-specific components
Using company-specific components

Relevered Beta = Unlevered Beta [1 + (1 - Tax Rate) x (Debt/Equity)]
Using industry components for Tax Rate, Debt, and Equity

Calculation of Market to Book Ratios for the Gas Transmission Pipeline Market Segment

- December 31, 2025 calendar year information for the January 2, 2026 Assessment
- A market to book ratio over one would be an indication of no obsolescence.
- Market value of common equity equals share price as of January 2, 2026 multiplied by common shares outstanding from companies' 2025 10-K

Market to Book Ratio for Equity

| Company | Market Value of Common Equity | Book Value of Common Equity from 10-K | Market to Book Ratio | Source |
|-------------------------|-------------------------------|---------------------------------------|----------------------|--|
| DT Midstream Inc. | 12,301,528,186 | 4,736,000,000 | 2.60 | DT Midstream Inc. 2025 10-K, p. 61 |
| Enbridge Inc. | 105,158,488,831 | 45,478,156,800 | 2.31 | Enbridge Inc. 2025 10-K, p. 109* |
| Kinder Morgan Inc. | 61,648,591,453 | 31,162,000,000 | 1.98 | Kinder Morgan Inc. 2025 10-K, p. 71 |
| ONEOK Inc. | 46,812,469,749 | 22,485,000,000 | 2.08 | ONEOK Inc. 2025 10-K, p. 68 |
| Pembina Pipeline Corp. | 22,456,499,514 | 12,236,121,600 | 1.84 | Pembina Pipeline. 2025 Annual Report, p. 85* |
| TC Energy Corp. | 56,536,001,550 | 22,047,052,800 | 2.56 | TC Energy Corp. 2025 Annual Report, p. 136* |
| Williams Companies Inc. | 76,731,850,000 | 12,807,000,000 | 5.99 | Williams Companies 2025 10-K, p. 97 |
| Average | | | 2.77 | |

Market to Book Ratio for Debt

| Company | Market Value of Long-Term Debt from 10-K | Book Value of Long-Term Debt from 10-K | Market to Book Ratio | Source |
|-------------------------|--|--|----------------------|---|
| DT Midstream Inc. | 3,318,000,000 | 3,324,000,000 | 1.00 | DT Midstream Inc. 2025 10-K, p. 79 |
| Enbridge Inc. | 74,127,360,000 | 76,170,240,000 | 0.97 | Enbridge Inc. 2025 10-K, p. 167* |
| Kinder Morgan Inc. | 31,966,000,000 | 32,003,000,000 | 1.00 | Kinder Morgan Inc. 2025 10-K, p. 95 |
| ONEOK Inc. | 32,700,000,000 | 32,000,000,000 | 1.02 | ONEOK Inc. 2025 10-K, p. 87 |
| Pembina Pipeline Corp. | 9,271,756,800 | 9,257,164,800 | 1.00 | Pembina Pipeline Corp 2024 Annual Report, p. 141* |
| TC Energy Corp. | 43,616,217,600 | 42,963,225,600 | 1.02 | TC Energy Corp. 2025 Annual Report, p. 213* |
| Williams Companies Inc. | 25,830,000,000 | 26,456,000,000 | 0.98 | Williams Companies 2025 10-K, p. 175 |
| Average | | | 1.00 | |

Application of Capital Structure as determined in the Capitalization Rate Study

| | Capital Structure | Market to Book | Composite |
|----------------|-------------------|----------------|-------------|
| Common Equity | 66.00% | 2.77 | 1.83 |
| Long-term Debt | 34.00% | 1.00 | 0.34 |
| | | | 2.17 |

Notes:

* Converted CAD to USD in instances where company's annual report is reported in CAD. Using CAD to USD exchange rate of 0.7296 as of December 31, 2025, per Bank of Canada.

Appendix D - Fluid Transportation Pipeline

Yield Rate

| | Capital Structure | Rate | Composite |
|----------------|-------------------|--------|--------------|
| Long-Term Debt | 40.00% | 5.88% | 2.35% |
| Common Equity | 60.00% | 10.32% | 6.19% |
| Yield Rate | | | 8.54% |

| | |
|---|--------------|
| Fluid Transportation Pipeline Yield Rate | 8.54% |
|---|--------------|

Capital Structure

| Company | Market Value of Long-Term Debt ¹ | Value of Preferred Equity ² | Market Value of Common Equity ³ | Total Market Value | % Long-Term Debt | % Preferred Equity | % Common Equity |
|---------------------------------|---|--|--|--------------------|------------------|--------------------|-----------------|
| Energy Transfer LP | 68,550,000,000 | - | 57,069,380,664 | 125,619,380,664 | 54.57% | 0.00% | 45.43% |
| Enterprise Products Partners LP | 32,200,000,000 | - | 69,522,223,565 | 101,722,223,565 | 31.65% | 0.00% | 68.35% |
| MPLX LP | 24,887,000,000 | 965,000,000 | 54,715,868,895 | 80,567,868,895 | 30.89% | 1.20% | 67.91% |
| Plains All American Pipeline LP | 9,000,000,000 | 2,034,000,000 | 12,847,531,892 | 23,881,531,892 | 37.69% | 8.52% | 53.80% |

| | | | |
|---------------|--------|-------|--------|
| Mean | 38.70% | 2.43% | 58.87% |
| Median | 34.67% | 0.60% | 60.85% |

| | | | |
|---|---------------|--|---------------|
| Indicated Industry Capital Structure | 40.00% | | 60.00% |
|---|---------------|--|---------------|

Notes:

1. Source: 10-K or Annual Report
2. Source: Value Line
3. Source: Share Price as of January 2, 2026 multiplied by common shares outstanding from companies' 2025 10-K

Indexed Rate of Debt

| Company | Debt Rating | Long-Term Debt Rate |
|---------------------------------|-------------|---------------------|
| Energy Transfer LP | Baa2 | 5.88% |
| Enterprise Products Partners LP | A3 | 5.68% |
| MPLX LP | Baa2 | 5.88% |
| Plains All American Pipeline LP | Baa2 | 5.88% |

Mean 5.83%
Median 5.88%
Mode 5.88%

| | |
|-------------------------------|--------------|
| Indicated Rate of Debt | 5.88% |
|-------------------------------|--------------|

Corporate Bond Yield Averages from Mergent Bond Record, January 2026 Edition Industrial Bond Averages, December 2025

| Mergent | S&P | Dec. Yield Avg. |
|------------------|-----------------|-----------------|
| Aa1, Aa2 Aa3 | AA+, AA, AA- | 5.57% |
| A1, A2, A3 | A+, A, A- | 5.68% |
| Baa1, Baa2, Baa3 | BBB+, BBB, BBB- | 5.88% |

*Enterprise Products Partners LP is not rated by Moody's, but its wholly owned subsidiary, Enterprise Products Operating LLC is rated A3.

Indicated Rate of Equity

| Model | Rate |
|---|---------------|
| CAPM - Ex Ante, Three Stage | 7.79% |
| CAPM - Damodaran | 9.04% |
| CAPM - The CFO Survey | 10.42% |
| CAPM - Fernandez, Banuls, and Acin | 10.31% |
| CAPM - Ex Post (BVR Historical, Arithmetic) | 11.59% |
| CAPM - Ex Post (BVR Historical, Geometric) | 10.35% |
| Empirical CAPM - Ex Ante, Three Stage | 7.79% |
| Empirical CAPM - Damodaran | 9.04% |
| Empirical CAPM - Graham and Harvey | 10.42% |
| Empirical CAPM - Fernandez, Banuls, and Acin | 10.31% |
| Empirical CAPM - Ex Post (BVR Historical, Arithmetic) | 11.59% |
| Empirical CAPM - Ex Post (BVR Historical, Geometric) | 10.35% |
| DGM - Two-Stage | 14.83% |
| DGM - Three-Stage | 14.26% |
| Indicated Rate of Equity | 10.32% |

We established a range of acceptability for the cost of equity with all available models. We considered all of the data and placed equal reliance on the CAPM using the Business Valuation Resources Historical (arithmetic) equity risk premium, and the Damodaran CAPM.

Direct Rate

| | Capital Structure | Rate | Composite |
|-------------------------|-------------------|-------|--------------|
| Debt Component | 40.00% | 5.88% | 2.35% |
| Equity Component | 60.00% | 8.46% | 5.08% |
| Direct Rate | | | 7.43% |

| | |
|--------------------|--------------|
| Direct Rate | 7.43% |
|--------------------|--------------|

Capital Asset Pricing Model (CAPM)

$$(ERP \times \beta) + RFR = \text{Indicated Equity Rate}$$

| | Equity Risk Premium (ERP) | x Industry Beta (β) | = Industry Risk Premium | + Risk-Free Rate ¹ (RFR) | Indicated Equity Rate |
|--|---------------------------|-----------------------------|-------------------------|-------------------------------------|-----------------------|
| Three Stage Ex Ante ² | 2.98% | 1.00 | 2.98% | 4.81% | 7.79% |
| Dr. Damodaran ERP ³ | 4.23% | 1.00 | 4.23% | 4.81% | 9.04% |
| The CFO Survey ⁴ | 5.61% | 1.00 | 5.61% | 4.81% | 10.42% |
| Fernandez, Banuls and Acin ⁵ | 5.50% | 1.00 | 5.50% | 4.81% | 10.31% |
| BVR - Historical, Arithmetic Mean ⁶ | 6.78% | 1.00 | 6.78% | 4.81% | 11.59% |
| BVR - Historical, Geometric Mean ⁷ | 5.54% | 1.00 | 5.54% | 4.81% | 10.35% |

Notes:

- 1 U.S. Treasury on January 2, 2026 - 20-year Coupon Bond Yield, Daily Observations, Retrieved January 22, 2026 from www.federalreserve.gov
- 2 Three Stage Dividend Growth Model, S&P 500. See Appendix F, Three Stage Ex Ante Calculation
- 3 Implied Equity Risk Premium on January 2, 2026 as determined by Dr. Aswath Damodaran; Retrieved January 22, 2026 from <http://pages.stern.nyu.edu/~adamodar/>
- 4 The CFO Survey (2025). Data & Results December 17, 2025. Mean average annual S&P return over next ten years (9.9%) less annual yield on 10-year Treasury Bonds (4.29%). Retrieved January 22, 2026 from https://www.richmondfed.org/research/national_economy/cfo_survey
- 5 Fernandez, P., Garcia D., & Acin, J. F. (2025). Survey: Market Risk Premium and Risk-Free Rate used for 54 countries in 2025. SSRN Electronic Journal. Retrieved January 22, 2026 from <https://ssrn.com/abstract=5260463>
- 6 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using arithmetic mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>
- 7 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using geometric mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>

Empirical Capital Asset Pricing Model (ECAPM)

$$(ERP \times \beta \times .75) + (ERP \times .25) + RFR = \text{Indicated Equity Rate}$$

| Model | Equity Risk Premium (ERP) | Industry Beta (β) | Weighted Industry Risk Premium (weighted at 75%) | Weighted Equity Risk Premium (weighted at 25%) | Risk-Free Rate (RFR) ¹ | Indicated Equity Rate |
|--|---------------------------|---------------------------|--|--|-----------------------------------|-----------------------|
| Three Stage Ex Ante ² | 2.98% | 1.00 | 2.24% | 0.75% | 4.81% | 7.79% |
| Dr. Damodaran ERP ³ | 4.23% | 1.00 | 3.17% | 1.06% | 4.81% | 9.04% |
| The CFO Survey ⁴ | 5.61% | 1.00 | 4.21% | 1.40% | 4.81% | 10.42% |
| Fernandez, Banuls and Acin ⁵ | 5.50% | 1.00 | 4.13% | 1.38% | 4.81% | 10.31% |
| BVR - Historical, Arithmetic Mean ⁶ | 6.78% | 1.00 | 5.09% | 1.70% | 4.81% | 11.59% |
| BVR - Historical, Geometric Mean ⁷ | 5.54% | 1.00 | 4.16% | 1.39% | 4.81% | 10.35% |

Notes:

- 1 U.S. Treasury on January 2, 2026 - 20-year Coupon Bond Yield, Daily Observations, Retrieved January 22, 2026 from www.federalreserve.gov
- 2 Three Stage Dividend Growth Model, S&P 500. See Appendix F, Three Stage Ex Ante Calculation
- 3 Implied Equity Risk Premium on January 2, 2026 as determined by Dr. Aswath Damodaran; Retrieved January 22, 2026 from <http://pages.stern.nyu.edu/~adamodar/>
- 4 The CFO Survey (2025). Data & Results December 17, 2025. Mean average annual S&P return over next ten years (9.9%) less annual yield on 10-year Treasury Bonds (4.29%). Retrieved January 22, 2026 from https://www.richmondfed.org/research/national_economy/cfo_survey
- 5 Fernandez, P., Garcia D., & Acin, J. F. (2025). Survey: Market Risk Premium and Risk-Free Rate used for 54 countries in 2025. SSRN Electronic Journal. Retrieved January 22, 2026 from <https://ssrn.com/abstract=5260463>
- 6 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using arithmetic mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>
- 7 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using geometric mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>

Two-Stage Dividend Growth Model

$$K_E = (DY \times (1 + 0.5(G))) + 0.67(G_1) + 0.33(g)$$

K_E Cost of Equity

G₁ Short-term Growth Estimate

DY Dividend Yield

g Stable Growth

G Average Growth Rate

| Company | DY Dividend Yield | G ₁ Short-term Growth Estimate | g Stable Growth | G Average Growth Rate | K _E Cost of Equity |
|---------------------------------|-------------------|---|-----------------|-----------------------|-------------------------------|
| Energy Transfer LP | 8.02% | 7.50% | 3.80% | 5.65% | 14.52% |
| Enterprise Products Partners LP | 6.78% | 6.00% | 3.80% | 4.90% | 12.22% |
| MPLX LP | 7.99% | 8.00% | 3.80% | 5.90% | 14.84% |
| Plains All American Pipeline LP | 8.35% | 12.50% | 3.80% | 8.15% | 18.32% |

Mean 14.98%
Median 14.68%

| | |
|--------------------------------------|---------------|
| Two-Stage DGM, Indicated Rate | 14.83% |
|--------------------------------------|---------------|

We placed more reliance on the median to select the indicated rate.

Notes:

Dividend Yield provided by Value Line

Growth Estimates, Next 5 Years for Earnings provided Value Line

Stable growth rate is the nominal growth rate determined in the Capitalization Rate Study Narrative (indicated long-term growth rate of the U.S. economy of 1.8% plus the expected inflation rate of 2.0%).

Three-Stage Dividend Growth Model

Start Price - recent price from Value Line

Expected dividends - estimated dividends from Value Line

Stage one growth - projected earnings growth rate from Value Line

Stage two growth - reversion to long-term growth rate

Stage three growth - long-term growth rate developed in Study

| Company | Year | Energy Transfer LP | | Enterprise Products Partners LP | | MPLX LP | | Plains All American Pipeline LP | |
|--------------------|------|--------------------|--------|---------------------------------|--------|---------|--------|---------------------------------|--------|
| Start Price | 2025 | | -16.59 | | -32.16 | | -53.87 | | -18.21 |
| Expected Dividends | 2026 | | 1.36 | | 2.24 | | 4.32 | | 1.64 |
| Stage One Growth | 2027 | 7.50% | 1.46 | 6.00% | 2.37 | 8.00% | 4.67 | 12.50% | 1.85 |
| Stage One Growth | 2028 | 7.50% | 1.57 | 6.00% | 2.52 | 8.00% | 5.04 | 12.50% | 2.08 |
| Stage One Growth | 2029 | 7.50% | 1.69 | 6.00% | 2.67 | 8.00% | 5.44 | 12.50% | 2.34 |
| Stage One Growth | 2030 | 7.50% | 1.82 | 6.00% | 2.83 | 8.00% | 5.88 | 12.50% | 2.63 |
| Stage One Growth | 2031 | 7.50% | 1.95 | 6.00% | 3.00 | 8.00% | 6.35 | 12.50% | 2.96 |
| Stage Two Growth | 2032 | 7.16% | 2.09 | 5.80% | 3.17 | 7.62% | 6.83 | 11.71% | 3.30 |
| Stage Two Growth | 2033 | 6.83% | 2.24 | 5.60% | 3.35 | 7.24% | 7.33 | 10.92% | 3.66 |
| Stage Two Growth | 2034 | 6.49% | 2.38 | 5.40% | 3.53 | 6.85% | 7.83 | 10.13% | 4.03 |
| Stage Two Growth | 2035 | 6.15% | 2.53 | 5.20% | 3.71 | 6.47% | 8.33 | 9.34% | 4.41 |
| Stage Two Growth | 2036 | 5.82% | 2.67 | 5.00% | 3.90 | 6.09% | 8.84 | 8.55% | 4.79 |
| Stage Two Growth | 2037 | 5.48% | 2.82 | 4.80% | 4.09 | 5.71% | 9.35 | 7.75% | 5.16 |
| Stage Two Growth | 2038 | 5.15% | 2.97 | 4.60% | 4.27 | 5.33% | 9.84 | 6.96% | 5.52 |
| Stage Two Growth | 2039 | 4.81% | 3.11 | 4.40% | 4.46 | 4.95% | 10.33 | 6.17% | 5.86 |
| Stage Two Growth | 2040 | 4.47% | 3.25 | 4.20% | 4.65 | 4.56% | 10.80 | 5.38% | 6.17 |
| Stage Two Growth | 2041 | 4.14% | 3.38 | 4.00% | 4.84 | 4.18% | 11.25 | 4.59% | 6.46 |
| Stage Three Growth | 2042 | 3.80% | 3.51 | 3.80% | 5.02 | 3.80% | 11.68 | 3.80% | 6.70 |
| Stage Three Growth | 2043 | 3.80% | 3.64 | 3.80% | 5.21 | 3.80% | 12.13 | 3.80% | 6.96 |
| Stage Three Growth | 2044 | 3.80% | 3.78 | 3.80% | 5.41 | 3.80% | 12.59 | 3.80% | 7.22 |
| Stage Three Growth | 2045 | 3.80% | 3.93 | 3.80% | 5.61 | 3.80% | 13.07 | 3.80% | 7.49 |

| | | | | | | | | | |
|--------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Stage Three Growth | 2046 | 3.80% | 4.07 | 3.80% | 5.83 | 3.80% | 13.56 | 3.80% | 7.78 |
| Stage Three Growth | 2047 | 3.80% | 4.23 | 3.80% | 6.05 | 3.80% | 14.08 | 3.80% | 8.07 |
| Stage Three Growth | 2048 | 3.80% | 4.39 | 3.80% | 6.28 | 3.80% | 14.61 | 3.80% | 8.38 |
| Stage Three Growth | 2049 | 3.80% | 4.56 | 3.80% | 6.52 | 3.80% | 15.17 | 3.80% | 8.70 |
| Stage Three Growth | 2050 | 3.80% | 4.73 | 3.80% | 6.77 | 3.80% | 15.74 | 3.80% | 9.03 |
| Stage Three Growth | 2051 | 3.80% | 4.91 | 3.80% | 7.02 | 3.80% | 16.34 | 3.80% | 9.37 |
| Stage Three Growth | 2052 | 3.80% | 5.10 | 3.80% | 7.29 | 3.80% | 16.96 | 3.80% | 9.73 |
| Stage Three Growth | 2053 | 3.80% | 5.29 | 3.80% | 7.57 | 3.80% | 17.61 | 3.80% | 10.10 |
| Stage Three Growth | 2054 | 3.80% | 5.49 | 3.80% | 7.85 | 3.80% | 18.28 | 3.80% | 10.48 |
| Stage Three Growth | 2055 | 3.80% | 5.70 | 3.80% | 8.15 | 3.80% | 18.97 | 3.80% | 10.88 |
| Stage Three Growth | 2056 | 3.80% | 5.92 | 3.80% | 8.46 | 3.80% | 19.69 | 3.80% | 11.30 |
| Stage Three Growth | 2057 | 3.80% | 6.14 | 3.80% | 8.78 | 3.80% | 20.44 | 3.80% | 11.72 |
| Stage Three Growth | 2058 | 3.80% | 6.37 | 3.80% | 9.12 | 3.80% | 21.22 | 3.80% | 12.17 |
| Stage Three Growth | 2059 | 3.80% | 6.62 | 3.80% | 9.46 | 3.80% | 22.02 | 3.80% | 12.63 |
| Stage Three Growth | 2060 | 3.80% | 6.87 | 3.80% | 9.82 | 3.80% | 22.86 | 3.80% | 13.11 |
| Stage Three Growth | 2061 | 3.80% | 7.13 | 3.80% | 10.20 | 3.80% | 23.73 | 3.80% | 13.61 |
| Stage Three Growth | 2062 | 3.80% | 7.40 | 3.80% | 10.58 | 3.80% | 24.63 | 3.80% | 14.13 |
| Stage Three Growth | 2063 | 3.80% | 7.68 | 3.80% | 10.99 | 3.80% | 25.57 | 3.80% | 14.66 |
| Stage Three Growth | 2064 | 3.80% | 7.97 | 3.80% | 11.40 | 3.80% | 26.54 | 3.80% | 15.22 |
| Stage Three Growth | 2065 | 3.80% | 8.28 | 3.80% | 11.84 | 3.80% | 27.55 | 3.80% | 15.80 |
| Stage Three Growth | 2066 | 3.80% | 8.59 | 3.80% | 12.29 | 3.80% | 28.59 | 3.80% | 16.40 |
| Stage Three Growth | 2067 | 3.80% | 8.92 | 3.80% | 12.75 | 3.80% | 29.68 | 3.80% | 17.02 |
| Stage Three Growth | 2068 | 3.80% | 9.26 | 3.80% | 13.24 | 3.80% | 30.81 | 3.80% | 17.67 |
| Stage Three Growth | 2069 | 3.80% | 9.61 | 3.80% | 13.74 | 3.80% | 31.98 | 3.80% | 18.34 |
| Stage Three Growth | 2070 | 3.80% | 9.97 | 3.80% | 14.26 | 3.80% | 33.19 | 3.80% | 19.04 |
| Stage Three Growth | 2071 | 3.80% | 10.35 | 3.80% | 14.81 | 3.80% | 34.46 | 3.80% | 19.76 |
| Stage Three Growth | 2072 | 3.80% | 10.75 | 3.80% | 15.37 | 3.80% | 35.76 | 3.80% | 20.51 |
| Stage Three Growth | 2073 | 3.80% | 11.15 | 3.80% | 15.95 | 3.80% | 37.12 | 3.80% | 21.29 |
| Stage Three Growth | 2074 | 3.80% | 11.58 | 3.80% | 16.56 | 3.80% | 38.53 | 3.80% | 22.10 |
| Stage Three Growth | 2075 | 3.80% | 12.02 | 3.80% | 17.19 | 3.80% | 40.00 | 3.80% | 22.94 |
| Stage Three Growth | 2076 | 3.80% | 12.47 | 3.80% | 17.84 | 3.80% | 41.52 | 3.80% | 23.81 |
| Stage Three Growth | 2077 | 3.80% | 12.95 | 3.80% | 18.52 | 3.80% | 43.10 | 3.80% | 24.72 |
| Stage Three Growth | 2078 | 3.80% | 13.44 | 3.80% | 19.22 | 3.80% | 44.73 | 3.80% | 25.66 |
| Stage Three Growth | 2079 | 3.80% | 13.95 | 3.80% | 19.95 | 3.80% | 46.43 | 3.80% | 26.63 |

| | | | | | | | | | |
|--------------------|------|-------|-------|-------|-------|-------|--------|-------|-------|
| Stage Three Growth | 2080 | 3.80% | 14.48 | 3.80% | 20.71 | 3.80% | 48.20 | 3.80% | 27.65 |
| Stage Three Growth | 2081 | 3.80% | 15.03 | 3.80% | 21.50 | 3.80% | 50.03 | 3.80% | 28.70 |
| Stage Three Growth | 2082 | 3.80% | 15.60 | 3.80% | 22.31 | 3.80% | 51.93 | 3.80% | 29.79 |
| Stage Three Growth | 2083 | 3.80% | 16.20 | 3.80% | 23.16 | 3.80% | 53.90 | 3.80% | 30.92 |
| Stage Three Growth | 2084 | 3.80% | 16.81 | 3.80% | 24.04 | 3.80% | 55.95 | 3.80% | 32.09 |
| Stage Three Growth | 2085 | 3.80% | 17.45 | 3.80% | 24.96 | 3.80% | 58.08 | 3.80% | 33.31 |
| Stage Three Growth | 2086 | 3.80% | 18.11 | 3.80% | 25.90 | 3.80% | 60.29 | 3.80% | 34.58 |
| Stage Three Growth | 2087 | 3.80% | 18.80 | 3.80% | 26.89 | 3.80% | 62.58 | 3.80% | 35.89 |
| Stage Three Growth | 2088 | 3.80% | 19.52 | 3.80% | 27.91 | 3.80% | 64.96 | 3.80% | 37.26 |
| Stage Three Growth | 2089 | 3.80% | 20.26 | 3.80% | 28.97 | 3.80% | 67.42 | 3.80% | 38.67 |
| Stage Three Growth | 2090 | 3.80% | 21.03 | 3.80% | 30.07 | 3.80% | 69.99 | 3.80% | 40.14 |
| Stage Three Growth | 2091 | 3.80% | 21.83 | 3.80% | 31.22 | 3.80% | 72.65 | 3.80% | 41.67 |
| Stage Three Growth | 2092 | 3.80% | 22.66 | 3.80% | 32.40 | 3.80% | 75.41 | 3.80% | 43.25 |
| Stage Three Growth | 2093 | 3.80% | 23.52 | 3.80% | 33.63 | 3.80% | 78.27 | 3.80% | 44.89 |
| Stage Three Growth | 2094 | 3.80% | 24.41 | 3.80% | 34.91 | 3.80% | 81.25 | 3.80% | 46.60 |
| Stage Three Growth | 2095 | 3.80% | 25.34 | 3.80% | 36.24 | 3.80% | 84.33 | 3.80% | 48.37 |
| Stage Three Growth | 2096 | 3.80% | 26.30 | 3.80% | 37.61 | 3.80% | 87.54 | 3.80% | 50.21 |
| Stage Three Growth | 2097 | 3.80% | 27.30 | 3.80% | 39.04 | 3.80% | 90.86 | 3.80% | 52.12 |
| Stage Three Growth | 2098 | 3.80% | 28.34 | 3.80% | 40.53 | 3.80% | 94.32 | 3.80% | 54.10 |
| Stage Three Growth | 2099 | 3.80% | 29.41 | 3.80% | 42.07 | 3.80% | 97.90 | 3.80% | 56.15 |
| Stage Three Growth | 2100 | 3.80% | 30.53 | 3.80% | 43.67 | 3.80% | 101.62 | 3.80% | 58.29 |
| Stage Three Growth | 2101 | 3.80% | 31.69 | 3.80% | 45.32 | 3.80% | 105.48 | 3.80% | 60.50 |
| Stage Three Growth | 2102 | 3.80% | 32.90 | 3.80% | 47.05 | 3.80% | 109.49 | 3.80% | 62.80 |
| Stage Three Growth | 2103 | 3.80% | 34.15 | 3.80% | 48.83 | 3.80% | 113.65 | 3.80% | 65.19 |
| Stage Three Growth | 2104 | 3.80% | 35.44 | 3.80% | 50.69 | 3.80% | 117.97 | 3.80% | 67.66 |
| Stage Three Growth | 2105 | 3.80% | 36.79 | 3.80% | 52.62 | 3.80% | 122.45 | 3.80% | 70.24 |
| Stage Three Growth | 2106 | 3.80% | 38.19 | 3.80% | 54.62 | 3.80% | 127.11 | 3.80% | 72.90 |
| Stage Three Growth | 2107 | 3.80% | 39.64 | 3.80% | 56.69 | 3.80% | 131.94 | 3.80% | 75.67 |
| Stage Three Growth | 2108 | 3.80% | 41.15 | 3.80% | 58.85 | 3.80% | 136.95 | 3.80% | 78.55 |
| Stage Three Growth | 2109 | 3.80% | 42.71 | 3.80% | 61.08 | 3.80% | 142.15 | 3.80% | 81.54 |
| Stage Three Growth | 2110 | 3.80% | 44.33 | 3.80% | 63.40 | 3.80% | 147.56 | 3.80% | 84.63 |
| Stage Three Growth | 2111 | 3.80% | 46.02 | 3.80% | 65.81 | 3.80% | 153.16 | 3.80% | 87.85 |
| Stage Three Growth | 2112 | 3.80% | 47.77 | 3.80% | 68.31 | 3.80% | 158.98 | 3.80% | 91.19 |
| Stage Three Growth | 2113 | 3.80% | 49.58 | 3.80% | 70.91 | 3.80% | 165.02 | 3.80% | 94.65 |

| | | | | | | | | | |
|-------------------------------|------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|
| Stage Three Growth | 2114 | 3.80% | 51.46 | 3.80% | 73.60 | 3.80% | 171.30 | 3.80% | 98.25 |
| Stage Three Growth | 2115 | 3.80% | 53.42 | 3.80% | 76.40 | 3.80% | 177.80 | 3.80% | 101.98 |
| Stage Three Growth | 2116 | 3.80% | 55.45 | 3.80% | 79.30 | 3.80% | 184.56 | 3.80% | 105.86 |
| Stage Three Growth | 2117 | 3.80% | 57.56 | 3.80% | 82.32 | 3.80% | 191.57 | 3.80% | 109.88 |
| Stage Three Growth | 2118 | 3.80% | 59.74 | 3.80% | 85.45 | 3.80% | 198.85 | 3.80% | 114.06 |
| Stage Three Growth | 2119 | 3.80% | 62.01 | 3.80% | 88.69 | 3.80% | 206.41 | 3.80% | 118.39 |
| Stage Three Growth | 2120 | 3.80% | 64.37 | 3.80% | 92.06 | 3.80% | 214.25 | 3.80% | 122.89 |
| Stage Three Growth | 2121 | 3.80% | 66.82 | 3.80% | 95.56 | 3.80% | 222.40 | 3.80% | 127.56 |
| Stage Three Growth | 2122 | 3.80% | 69.36 | 3.80% | 99.19 | 3.80% | 230.85 | 3.80% | 132.41 |
| Stage Three Growth | 2123 | 3.80% | 71.99 | 3.80% | 102.96 | 3.80% | 239.62 | 3.80% | 137.44 |
| Stage Three Growth | 2124 | 3.80% | 74.73 | 3.80% | 106.87 | 3.80% | 248.72 | 3.80% | 142.66 |
| Stage Three Growth | 2125 | 3.80% | 77.57 | 3.80% | 110.94 | 3.80% | 258.18 | 3.80% | 148.08 |
| Stage Three Growth | 2126 | 3.80% | 80.51 | 3.80% | 115.15 | 3.80% | 267.99 | 3.80% | 153.71 |
| Stage Three Growth | 2127 | 3.80% | 83.57 | 3.80% | 119.53 | 3.80% | 278.17 | 3.80% | 159.55 |
| Stage Three Growth | 2128 | 3.80% | 86.75 | 3.80% | 124.07 | 3.80% | 288.74 | 3.80% | 165.61 |
| Stage Three Growth | 2129 | 3.80% | 90.05 | 3.80% | 128.78 | 3.80% | 299.71 | 3.80% | 171.91 |
| Stage Three Growth | 2130 | 3.80% | 93.47 | 3.80% | 133.68 | 3.80% | 311.10 | 3.80% | 178.44 |
| Stage Three Growth | 2131 | 3.80% | 97.02 | 3.80% | 138.76 | 3.80% | 322.92 | 3.80% | 185.22 |
| Stage Three Growth | 2132 | 3.80% | 100.71 | 3.80% | 144.03 | 3.80% | 335.19 | 3.80% | 192.26 |
| Stage Three Growth | 2133 | 3.80% | 104.53 | 3.80% | 149.50 | 3.80% | 347.93 | 3.80% | 199.56 |
| Stage Three Growth | 2134 | 3.80% | 108.51 | 3.80% | 155.18 | 3.80% | 361.15 | 3.80% | 207.15 |
| Stage Three Growth | 2135 | 3.80% | 112.63 | 3.80% | 161.08 | 3.80% | 374.88 | 3.80% | 215.02 |
| Stage Three Growth | 2136 | 3.80% | 116.91 | 3.80% | 167.20 | 3.80% | 389.12 | 3.80% | 223.19 |
| Stage Three Growth | 2137 | 3.80% | 121.35 | 3.80% | 173.56 | 3.80% | 403.91 | 3.80% | 231.67 |
| Stage Three Growth | 2138 | 3.80% | 125.96 | 3.80% | 180.15 | 3.80% | 419.26 | 3.80% | 240.47 |
| Stage Three Growth | 2139 | 3.80% | 130.75 | 3.80% | 187.00 | 3.80% | 435.19 | 3.80% | 249.61 |
| Stage Three Growth | 2140 | 3.80% | 135.72 | 3.80% | 194.10 | 3.80% | 451.73 | 3.80% | 259.10 |
| Stage Three Growth | 2141 | 3.80% | 140.87 | 3.80% | 201.48 | 3.80% | 468.89 | 3.80% | 268.94 |
| Implied Cost of Equity | | | 14.01% | | 11.83% | | 14.08% | | 17.99% |

Mean 14.48%
Median 14.04%

| | |
|--|---------------|
| Selected Three-Stage DGM Cost of Equity | 14.26% |
|--|---------------|

Equity Component of the Direct Rate

| Company | Value Line P/E Ratio |
|--|----------------------|
| Energy Transfer LP | 11.3 |
| Enterprise Products Partners LP | 11.4 |
| MPLX LP | 12.2 |
| Plains All American Pipeline LP | 13.0 |
| Mean | 11.97 |
| Median | 11.82 |
| Selected Price to Earnings (P/E) Ratio | 11.82 |
| Indicated Equity Component of the Direct Rate | 8.46% |

We placed most reliance median price to earnings ratio.

Notes:

The Price/Earnings Ratio was downloaded from Value Line.

Beta Analysis

| Company | Beta |
|---------------------------------|-------------|
| Energy Transfer LP | 1.10 |
| Enterprise Products Partners LP | 0.90 |
| MPLX LP | 0.90 |
| Plains All American Pipeline LP | 1.15 |
| | |
| Beta Mean | 1.01 |
| Beta Median | 1.00 |
| Unlevered and Relevered Mean* | 1.06 |
| | |
| Indicated Beta | 1.00 |

We considered the mean, median, and unlevered/relevered mean. We placed more reliance on the median when selecting the indicated beta. We placed no reliance on the unlevered and relevered mean given the minimal tax rate applicable to the guideline companies. The Hamada formula used to unlever and relever betas relies on an income tax component, which these guideline companies do not have.

Notes:

*See the Unlevering Relevering Beta page for the calculation

Unlevering/Relevering Betas

| Unlevering of Betas | | | | | |
|---------------------------------|--|--|---|---|------------------------------|
| Company | Value Line Actual Income Tax Rate | From Capital Structure Page Actual Debt in Capital Structure | From Capital Structure Page Actual Equity in Capital Structure | Value Line Levered Beta (Published) | Formula Unlevered Beta |
| Energy Transfer LP | 8.00% | 54.57% | 45.43% | 1.10 | N/A |
| Enterprise Products Partners LP | 1.00% | 31.65% | 68.35% | 0.90 | 0.62 |
| MPLX LP | 3.00% | 30.89% | 67.91% | 0.90 | 0.62 |
| Plains All American Pipeline LP | 13.00% | 37.69% | 53.80% | 1.15 | 0.71 |
| Average | | | | 1.01 | |

| Relevering of Betas | | | | |
|---------------------------------|--|--|--|-------------------------|
| Company | Formula Composite Income Tax Rate | From Capital Structure Page Industry Debt in Capital Structure | From Capital Structure Page Industry Equity in Capital Structure | Formula Levered Beta |
| Energy Transfer LP | 6.25% | 40.00% | 60.00% | N/A |
| Enterprise Products Partners LP | 6.25% | 40.00% | 60.00% | 1.01 |
| MPLX LP | 6.25% | 40.00% | 60.00% | 1.01 |
| Plains All American Pipeline LP | 6.25% | 40.00% | 60.00% | 1.15 |
| Average | | | | 1.06 |

Notes:

Uses the Hamada Formula

Unlevered Beta = Levered Beta / [1 + (1 - Tax Rate) x (Debt/Equity)], using company-specific components
Using company-specific components

Relevered Beta = Unlevered Beta [1 + (1 - Tax Rate) x (Debt/Equity)]
Using industry components for Tax Rate, Debt, and Equity

Calculation of Market to Book Ratios for the Fluid Transportation Market Segment

- December 31, 2025 calendar year information for the January 2, 2026 Assessment
- A market to book ratio over one would be an indication of no obsolescence.
- Market value of common equity equals share price as of January 2, 2026 multiplied by common shares outstanding from companies' 2025 10-K

Market to Book Ratio for Equity

| Company | Market Value of Common Equity | Book Value of Common Equity from 10-K | Market to Book Ratio | Source |
|---------------------------------|-------------------------------|---------------------------------------|----------------------|---|
| Energy Transfer LP | 57,069,380,664 | 49,010,000,000 | 1.16 | Energy Transfer LP 2025 10-K, p. F-8 |
| Enterprise Products Partners LP | 69,522,223,565 | 30,570,000,000 | 2.27 | Enterprise Products Partners LP 2025 10-K, p. F-8 |
| MPLX LP | 54,715,868,895 | 14,528,000,000 | 3.77 | MPLX LP 2025 10-K, p. 82 |
| Plains All American Pipeline LP | 12,847,531,892 | 9,836,000,000 | 1.31 | Plains All American Pipeline LP 2025 10-K, p. F-5 |
| Average | | | 2.13 | |

Market to Book Ratio for Debt

| Company | Market Value of Long-Term Debt from 10-K | Book Value of Long-Term Debt from 10-K | Market to Book Ratio | Source |
|---------------------------------|--|--|----------------------|--|
| Energy Transfer LP | 68,550,000,000 | 68,330,000,000 | 1.00 | Energy Transfer LP 2025 10-K, p. F-20 |
| Enterprise Products Partners LP | 32,200,000,000 | 34,100,000,000 | 0.94 | Enterprise Products Partners LP 2025 10-K, p. F-59 |
| MPLX LP | 24,887,000,000 | 25,821,000,000 | 0.96 | MPLX LP 2025 10-K, p. 106 |
| Plains All American Pipeline LP | 9,000,000,000 | 9,200,000,000 | 0.98 | Plains All American Pipeline LP 2025 10-K, p. F-34 |
| Average | | | 0.97 | |

Application of Capital Structure as determined in the Capitalization Rate Study

| | Capital Structure | Market to Book | Composite |
|----------------|-------------------|----------------|-------------|
| Common Equity | 60.00% | 2.13 | 1.28 |
| Long-term Debt | 40.00% | 0.97 | 0.39 |
| Average | | | 1.67 |

Appendix E - Railroad

Yield Rate

| | Capital Structure | Rate | Composite |
|-----------------------|-------------------|--------|--------------|
| Long-Term Debt | 19.00% | 5.78% | 1.10% |
| Common Equity | 81.00% | 10.09% | 8.17% |
| Yield Rate | | | 9.27% |

| | |
|-------------------|--------------|
| Yield Rate | 9.27% |
|-------------------|--------------|

Capital Structure

| Company | Market Value of Long-Term Debt ¹ | Value of Preferred Equity ² | Market Value of Common Equity ³ | Total Market Value | % Long-Term Debt | % Preferred Equity | % Common Equity |
|------------------------------------|---|--|--|--------------------|------------------|--------------------|-----------------|
| Canadian National Railway Co. | 14,771,481,600 | - | 61,513,990,000 | 76,285,471,600 | 19.36% | 0.00% | 80.64% |
| Canadian Pacific Kansas City Ltd. | 15,131,904,000 | - | 66,328,204,790 | 81,460,108,790 | 18.58% | 0.00% | 81.42% |
| CSX Corp. | 17,305,000,000 | - | 67,408,933,964 | 84,713,933,964 | 20.43% | 0.00% | 79.57% |
| Norfolk Southern Corp. | 15,865,000,000 | - | 64,838,435,058 | 80,703,435,058 | 19.66% | 0.00% | 80.34% |
| Union Pacific Corp. | 26,500,000,000 | - | 137,263,312,527 | 163,763,312,527 | 16.18% | 0.00% | 83.82% |
| | | | | Mean | 18.84% | 0.00% | 81.16% |
| | | | | Median | 19.36% | 0.00% | 80.64% |
| Indicated Capital Structure | | | | | 19.00% | | 81.00% |

Notes:

1. Source: 10-K or Annual Report
2. Source: Value Line
3. Source: Share Price as of January 2, 2026 multiplied by common shares outstanding from companies' 2025 10-K

Converted CAD to USD in instances where company's annual report is reported in CAD. Using CAD to USD exchange rate of 0.7296 as of December 31, 2025, per Bank of Canada.

Indexed Rate of Debt

| Company | Debt Rating | Long-Term Debt Rate |
|-----------------------------------|-------------|---------------------|
| Canadian National Railway Co. | A2 | 5.68% |
| Canadian Pacific Kansas City Ltd. | Baa1 | 5.88% |
| CSX Corp. | A3 | 5.68% |
| Norfolk Southern Corp. | Baa1 | 5.88% |
| Union Pacific Corp. | A3 | 5.68% |

Mean 5.76%
Median 5.68%
Mode 5.68%

| | |
|-------------------------------|--------------|
| Indicated Rate of Debt | 5.78% |
|-------------------------------|--------------|

We used an average of the high (5.88%) and low (5.68%) from the sample above.

Corporate Bond Yield Averages from Mergent Bond Record, January 2026 Edition Industrial Bond Averages, December 2025

| Mergent | S&P | Dec. Yield Avg. |
|------------------|-----------------|-----------------|
| Aa1, Aa2 Aa3 | AA+, AA, AA- | 5.57% |
| A1, A2, A3 | A+, A, A- | 5.68% |
| Baa1, Baa2, Baa3 | BBB+, BBB, BBB- | 5.88% |

Indicated Rate of Equity

| Model | Rate |
|---|---------------|
| CAPM - Ex Ante, Three Stage | 7.67% |
| CAPM - Damodaran | 8.87% |
| CAPM - The CFO Survey | 10.20% |
| CAPM - Fernandez, Banuls, and Acin | 10.09% |
| CAPM - Ex Post (BVR Historical, Arithmetic) | 11.32% |
| CAPM - Ex Post (BVR Historical, Geometric) | 10.13% |
| Empirical CAPM - Ex Ante, Three Stage | 7.70% |
| Empirical CAPM - Damodaran | 8.91% |
| Empirical CAPM - Graham and Harvey | 10.25% |
| Empirical CAPM - Fernandez, Banuls, and Acin | 10.15% |
| Empirical CAPM - Ex Post (BVR Historical, Arithmetic) | 11.39% |
| Empirical CAPM - Ex Post (BVR Historical, Geometric) | 10.18% |
| DGM - Two-Stage | 8.94% |
| DGM - Three-Stage | 6.57% |
| Indicated Rate of Equity | 10.09% |

We established a range of acceptability for the cost of equity with all available models. We considered all of the data and placed equal reliance on the CAPM using the Business Valuation Resources Historical (arithmetic) equity risk premium, and the Damodaran CAPM.

Direct Rate

| | Capital Structure | Rate | Composite |
|-------------------------|-------------------|-------|--------------|
| Debt Component | 19.00% | 5.78% | 1.10% |
| Equity Component | 81.00% | 5.21% | 4.22% |
| Direct Rate | | | 5.32% |
| Direct Rate | | | 5.32% |

Capital Asset Pricing Model (CAPM)

$$(ERP \times \beta) + RFR = \text{Indicated Equity Rate}$$

| | Equity Risk Premium (ERP) | x Industry Beta (β) | = Industry Risk Premium | + Risk-Free Rate ¹ (RFR) | Indicated Equity Rate |
|--|---------------------------|-----------------------------|-------------------------|-------------------------------------|-----------------------|
| Three Stage Ex Ante ² | 2.98% | 0.96 | 2.86% | 4.81% | 7.67% |
| Dr. Damodaran ERP ³ | 4.23% | 0.96 | 4.06% | 4.81% | 8.87% |
| The CFO Survey ⁴ | 5.61% | 0.96 | 5.39% | 4.81% | 10.20% |
| Fernandez, Banuls and Acin ⁵ | 5.50% | 0.96 | 5.28% | 4.81% | 10.09% |
| BVR - Historical, Arithmetic Mean ⁶ | 6.78% | 0.96 | 6.51% | 4.81% | 11.32% |
| BVR - Historical, Geometric Mean ⁷ | 5.54% | 0.96 | 5.32% | 4.81% | 10.13% |

Notes:

- 1 U.S. Treasury on January 2, 2026 - 20-year Coupon Bond Yield, Daily Observations, Retrieved January 22, 2026 from www.federalreserve.gov
- 2 Three Stage Dividend Growth Model, S&P 500. See Appendix F, Three Stage Ex Ante Calculation
- 3 Implied Equity Risk Premium on January 2, 2026 as determined by Dr. Aswath Damodaran; Retrieved January 22, 2026 from <http://pages.stern.nyu.edu/~adamodar/>
- 4 The CFO Survey (2025). Data & Results December 17, 2025. Mean average annual S&P return over next ten years (9.9%) less annual yield on 10-year Treasury Bonds (4.29%). Retrieved January 22, 2026 from https://www.richmondfed.org/research/national_economy/cfo_survey
- 5 Fernandez, P., Garcia D., & Acin, J. F. (2025). Survey: Market Risk Premium and Risk-Free Rate used for 54 countries in 2025. SSRN Electronic Journal. Retrieved January 22, 2026 from <https://ssrn.com/abstract=5260463>
- 6 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using arithmetic mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>
- 7 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using geometric mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>

Empirical Capital Asset Pricing Model (ECAPM)

$$(ERP \times \beta \times .75) + (ERP \times .25) + RFR = \text{Indicated Equity Rate}$$

| Model | Equity Risk Premium (ERP) | Industry Beta (β) | Weighted Industry Risk Premium (weighted at 75%) | Weighted Equity Risk Premium (weighted at 25%) | Risk-Free Rate (RFR) | Indicated Equity Rate |
|--|---------------------------|---------------------------|--|--|----------------------|-----------------------|
| Three Stage Ex Ante ² | 2.98% | 0.96 | 2.15% | 0.75% | 4.81% | 7.70% |
| Dr. Damodaran ERP ³ | 4.23% | 0.96 | 3.05% | 1.06% | 4.81% | 8.91% |
| The CFO Survey ⁴ | 5.61% | 0.96 | 4.04% | 1.40% | 4.81% | 10.25% |
| Fernandez, Banuls and Acin ⁵ | 5.50% | 0.96 | 3.96% | 1.38% | 4.81% | 10.15% |
| BVR - Historical, Arithmetic Mean ⁶ | 6.78% | 0.96 | 4.88% | 1.70% | 4.81% | 11.39% |
| BVR - Historical, Geometric Mean ⁷ | 5.54% | 0.96 | 3.99% | 1.39% | 4.81% | 10.18% |

Notes:

- 1 U.S. Treasury on January 2, 2026 - 20-year Coupon Bond Yield, Daily Observations, Retrieved January 22, 2026 from www.federalreserve.gov
- 2 Three Stage Dividend Growth Model, S&P 500. See Appendix F, Three Stage Ex Ante Calculation
- 3 Implied Equity Risk Premium on January 2, 2026 as determined by Dr. Aswath Damodaran; Retrieved January 22, 2026 from <http://pages.stern.nyu.edu/~adamodar/>
- 4 The CFO Survey (2025). Data & Results December 17, 2025. Mean average annual S&P return over next ten years (9.9%) less annual yield on 10-year Treasury Bonds (4.29%). Retrieved January 22, 2026 from https://www.richmondfed.org/research/national_economy/cfo_survey
- 5 Fernandez, P., Garcia D., & Acin, J. F. (2025). Survey: Market Risk Premium and Risk-Free Rate used for 54 countries in 2025. SSRN Electronic Journal. Retrieved January 22, 2026 from <https://ssrn.com/abstract=5260463>
- 6 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using arithmetic mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>
- 7 Business Valuation Resources, Cost of Capital Professional. (2026). Historical ERP, using geometric mean and 20-Year Treasury Securities. Retrieved February 3, 2026 from <https://www.bvresources.com/products/faqs/cost-of-capital-professional>

Two-Stage Dividend Growth Model

$$K_E = (DY \times (1 + 0.5(G))) + 0.67(G_1) + 0.33(g)$$

K_E Cost of Equity

G_1 Short-term Growth Estimate

DY Dividend Yield

g Stable Growth

G Average Growth Rate

| Company | DY Dividend Yield | G1 Short-term Growth Estimate | g Stable Growth | G Average Growth Rate | K_E Cost of Equity |
|-----------------------------------|-------------------|-------------------------------|-----------------|-----------------------|----------------------|
| Canadian National Railway Co. | 2.53% | 8.00% | 3.80% | 5.90% | 9.21% |
| Canadian Pacific Kansas City Ltd. | 0.88% | 10.00% | 3.80% | 6.90% | 8.86% |
| CSX Corp. | 1.43% | 8.50% | 3.80% | 6.15% | 8.43% |
| Norfolk Southern Corp. | 1.88% | 11.00% | 3.80% | 7.40% | 10.57% |
| Union Pacific Corp. | 2.38% | 6.50% | 3.80% | 5.15% | 8.05% |

Mean 9.02%

Median 8.86%

| | |
|--------------------------------------|--------------|
| Two-Stage DGM, Indicated Rate | 8.94% |
|--------------------------------------|--------------|

We placed equal reliance on the mean and median to select the indicated rate.

Notes:

Dividend Yield provided by Zack's

Growth Estimates, Next 5 Years for Earnings provided Value Line

Stable growth rate is the nominal growth rate determined in the Capitalization Rate Study Narrative (indicated long-term real growth rate of the U.S. economy of 1.8% plus the expected inflation rate of 2.0%).

Three-Stage Dividend Growth Model

Start Price - recent price from Value Line

Expected dividends - estimated dividends from Value Line

Stage one growth - projected earnings growth rate from Value Line

Stage two growth - reversion to long-term growth rate

Stage three growth - long-term growth rate developed in Study

| Company | Year | Canadian National Railway Co. | | Canadian Pacific Kansas City Ltd. | | CSX Corp. | | Norfolk Southern Corp. | | Union Pacific Corp. | |
|--------------------|------|-------------------------------|--------|-----------------------------------|--------|-----------|--------|------------------------|---------|---------------------|---------|
| Start Price | 2025 | | -100.3 | | -73.63 | | -36.25 | | -288.72 | | -231.32 |
| Expected Dividends | 2026 | | 2.80 | | 0.64 | | 0.60 | | 5.40 | | 5.60 |
| Stage One Growth | 2027 | 8.00% | 3.02 | 10.00% | 0.70 | 8.50% | 0.65 | 11.00% | 5.99 | 6.50% | 5.96 |
| Stage One Growth | 2028 | 8.00% | 3.27 | 10.00% | 0.77 | 8.50% | 0.71 | 11.00% | 6.65 | 6.50% | 6.35 |
| Stage One Growth | 2029 | 8.00% | 3.53 | 10.00% | 0.85 | 8.50% | 0.77 | 11.00% | 7.39 | 6.50% | 6.76 |
| Stage One Growth | 2030 | 8.00% | 3.81 | 10.00% | 0.94 | 8.50% | 0.83 | 11.00% | 8.20 | 6.50% | 7.20 |
| Stage One Growth | 2031 | 8.00% | 4.11 | 10.00% | 1.03 | 8.50% | 0.90 | 11.00% | 9.10 | 6.50% | 7.67 |
| Stage Two Growth | 2032 | 7.62% | 4.43 | 9.44% | 1.13 | 8.07% | 0.97 | 10.35% | 10.04 | 6.25% | 8.15 |
| Stage Two Growth | 2033 | 7.24% | 4.75 | 8.87% | 1.23 | 7.65% | 1.05 | 9.69% | 11.01 | 6.01% | 8.64 |
| Stage Two Growth | 2034 | 6.85% | 5.07 | 8.31% | 1.33 | 7.22% | 1.13 | 9.04% | 12.01 | 5.76% | 9.14 |
| Stage Two Growth | 2035 | 6.47% | 5.40 | 7.75% | 1.43 | 6.79% | 1.20 | 8.38% | 13.02 | 5.52% | 9.64 |
| Stage Two Growth | 2036 | 6.09% | 5.73 | 7.18% | 1.54 | 6.36% | 1.28 | 7.73% | 14.02 | 5.27% | 10.15 |
| Stage Two Growth | 2037 | 5.71% | 6.06 | 6.62% | 1.64 | 5.94% | 1.35 | 7.07% | 15.01 | 5.03% | 10.66 |
| Stage Two Growth | 2038 | 5.33% | 6.38 | 6.05% | 1.74 | 5.51% | 1.43 | 6.42% | 15.98 | 4.78% | 11.17 |
| Stage Two Growth | 2039 | 4.95% | 6.70 | 5.49% | 1.83 | 5.08% | 1.50 | 5.76% | 16.90 | 4.54% | 11.68 |
| Stage Two Growth | 2040 | 4.56% | 7.00 | 4.93% | 1.92 | 4.65% | 1.57 | 5.11% | 17.76 | 4.29% | 12.18 |
| Stage Two Growth | 2041 | 4.18% | 7.29 | 4.36% | 2.01 | 4.23% | 1.64 | 4.45% | 18.55 | 4.05% | 12.67 |
| Stage Three Growth | 2042 | 3.80% | 7.57 | 3.80% | 2.08 | 3.80% | 1.70 | 3.80% | 19.26 | 3.80% | 13.16 |
| Stage Three Growth | 2043 | 3.80% | 7.86 | 3.80% | 2.16 | 3.80% | 1.76 | 3.80% | 19.99 | 3.80% | 13.66 |
| Stage Three Growth | 2044 | 3.80% | 8.16 | 3.80% | 2.24 | 3.80% | 1.83 | 3.80% | 20.75 | 3.80% | 14.18 |
| Stage Three Growth | 2045 | 3.80% | 8.47 | 3.80% | 2.33 | 3.80% | 1.90 | 3.80% | 21.54 | 3.80% | 14.71 |

| | | | | | | | | | | | |
|--------------------|------|-------|-------|-------|------|-------|------|-------|-------|-------|-------|
| Stage Three Growth | 2046 | 3.80% | 8.79 | 3.80% | 2.42 | 3.80% | 1.97 | 3.80% | 22.36 | 3.80% | 15.27 |
| Stage Three Growth | 2047 | 3.80% | 9.12 | 3.80% | 2.51 | 3.80% | 2.05 | 3.80% | 23.20 | 3.80% | 15.85 |
| Stage Three Growth | 2048 | 3.80% | 9.47 | 3.80% | 2.61 | 3.80% | 2.13 | 3.80% | 24.09 | 3.80% | 16.46 |
| Stage Three Growth | 2049 | 3.80% | 9.83 | 3.80% | 2.70 | 3.80% | 2.21 | 3.80% | 25.00 | 3.80% | 17.08 |
| Stage Three Growth | 2050 | 3.80% | 10.20 | 3.80% | 2.81 | 3.80% | 2.29 | 3.80% | 25.95 | 3.80% | 17.73 |
| Stage Three Growth | 2051 | 3.80% | 10.59 | 3.80% | 2.91 | 3.80% | 2.38 | 3.80% | 26.94 | 3.80% | 18.40 |
| Stage Three Growth | 2052 | 3.80% | 10.99 | 3.80% | 3.02 | 3.80% | 2.47 | 3.80% | 27.96 | 3.80% | 19.10 |
| Stage Three Growth | 2053 | 3.80% | 11.41 | 3.80% | 3.14 | 3.80% | 2.56 | 3.80% | 29.02 | 3.80% | 19.83 |
| Stage Three Growth | 2054 | 3.80% | 11.85 | 3.80% | 3.26 | 3.80% | 2.66 | 3.80% | 30.13 | 3.80% | 20.58 |
| Stage Three Growth | 2055 | 3.80% | 12.30 | 3.80% | 3.38 | 3.80% | 2.76 | 3.80% | 31.27 | 3.80% | 21.36 |
| Stage Three Growth | 2056 | 3.80% | 12.76 | 3.80% | 3.51 | 3.80% | 2.86 | 3.80% | 32.46 | 3.80% | 22.18 |
| Stage Three Growth | 2057 | 3.80% | 13.25 | 3.80% | 3.64 | 3.80% | 2.97 | 3.80% | 33.69 | 3.80% | 23.02 |
| Stage Three Growth | 2058 | 3.80% | 13.75 | 3.80% | 3.78 | 3.80% | 3.09 | 3.80% | 34.97 | 3.80% | 23.89 |
| Stage Three Growth | 2059 | 3.80% | 14.27 | 3.80% | 3.93 | 3.80% | 3.20 | 3.80% | 36.30 | 3.80% | 24.80 |
| Stage Three Growth | 2060 | 3.80% | 14.82 | 3.80% | 4.08 | 3.80% | 3.33 | 3.80% | 37.68 | 3.80% | 25.74 |
| Stage Three Growth | 2061 | 3.80% | 15.38 | 3.80% | 4.23 | 3.80% | 3.45 | 3.80% | 39.11 | 3.80% | 26.72 |
| Stage Three Growth | 2062 | 3.80% | 15.96 | 3.80% | 4.39 | 3.80% | 3.58 | 3.80% | 40.60 | 3.80% | 27.74 |
| Stage Three Growth | 2063 | 3.80% | 16.57 | 3.80% | 4.56 | 3.80% | 3.72 | 3.80% | 42.14 | 3.80% | 28.79 |
| Stage Three Growth | 2064 | 3.80% | 17.20 | 3.80% | 4.73 | 3.80% | 3.86 | 3.80% | 43.74 | 3.80% | 29.89 |
| Stage Three Growth | 2065 | 3.80% | 17.85 | 3.80% | 4.91 | 3.80% | 4.01 | 3.80% | 45.41 | 3.80% | 31.02 |
| Stage Three Growth | 2066 | 3.80% | 18.53 | 3.80% | 5.10 | 3.80% | 4.16 | 3.80% | 47.13 | 3.80% | 32.20 |
| Stage Three Growth | 2067 | 3.80% | 19.24 | 3.80% | 5.29 | 3.80% | 4.32 | 3.80% | 48.92 | 3.80% | 33.42 |
| Stage Three Growth | 2068 | 3.80% | 19.97 | 3.80% | 5.49 | 3.80% | 4.48 | 3.80% | 50.78 | 3.80% | 34.69 |
| Stage Three Growth | 2069 | 3.80% | 20.73 | 3.80% | 5.70 | 3.80% | 4.65 | 3.80% | 52.71 | 3.80% | 36.01 |
| Stage Three Growth | 2070 | 3.80% | 21.52 | 3.80% | 5.92 | 3.80% | 4.83 | 3.80% | 54.72 | 3.80% | 37.38 |
| Stage Three Growth | 2071 | 3.80% | 22.33 | 3.80% | 6.14 | 3.80% | 5.01 | 3.80% | 56.79 | 3.80% | 38.80 |
| Stage Three Growth | 2072 | 3.80% | 23.18 | 3.80% | 6.38 | 3.80% | 5.20 | 3.80% | 58.95 | 3.80% | 40.28 |
| Stage Three Growth | 2073 | 3.80% | 24.06 | 3.80% | 6.62 | 3.80% | 5.40 | 3.80% | 61.19 | 3.80% | 41.81 |
| Stage Three Growth | 2074 | 3.80% | 24.98 | 3.80% | 6.87 | 3.80% | 5.61 | 3.80% | 63.52 | 3.80% | 43.40 |
| Stage Three Growth | 2075 | 3.80% | 25.93 | 3.80% | 7.13 | 3.80% | 5.82 | 3.80% | 65.93 | 3.80% | 45.04 |
| Stage Three Growth | 2076 | 3.80% | 26.91 | 3.80% | 7.40 | 3.80% | 6.04 | 3.80% | 68.44 | 3.80% | 46.76 |
| Stage Three Growth | 2077 | 3.80% | 27.93 | 3.80% | 7.68 | 3.80% | 6.27 | 3.80% | 71.04 | 3.80% | 48.53 |
| Stage Three Growth | 2078 | 3.80% | 28.99 | 3.80% | 7.98 | 3.80% | 6.51 | 3.80% | 73.74 | 3.80% | 50.38 |
| Stage Three Growth | 2079 | 3.80% | 30.10 | 3.80% | 8.28 | 3.80% | 6.76 | 3.80% | 76.54 | 3.80% | 52.29 |

| | | | | | | | | | | | |
|--------------------|------|-------|--------|-------|-------|-------|-------|-------|--------|-------|--------|
| Stage Three Growth | 2080 | 3.80% | 31.24 | 3.80% | 8.59 | 3.80% | 7.01 | 3.80% | 79.45 | 3.80% | 54.28 |
| Stage Three Growth | 2081 | 3.80% | 32.43 | 3.80% | 8.92 | 3.80% | 7.28 | 3.80% | 82.47 | 3.80% | 56.34 |
| Stage Three Growth | 2082 | 3.80% | 33.66 | 3.80% | 9.26 | 3.80% | 7.56 | 3.80% | 85.60 | 3.80% | 58.48 |
| Stage Three Growth | 2083 | 3.80% | 34.94 | 3.80% | 9.61 | 3.80% | 7.84 | 3.80% | 88.85 | 3.80% | 60.70 |
| Stage Three Growth | 2084 | 3.80% | 36.27 | 3.80% | 9.98 | 3.80% | 8.14 | 3.80% | 92.23 | 3.80% | 63.01 |
| Stage Three Growth | 2085 | 3.80% | 37.64 | 3.80% | 10.35 | 3.80% | 8.45 | 3.80% | 95.73 | 3.80% | 65.41 |
| Stage Three Growth | 2086 | 3.80% | 39.08 | 3.80% | 10.75 | 3.80% | 8.77 | 3.80% | 99.37 | 3.80% | 67.89 |
| Stage Three Growth | 2087 | 3.80% | 40.56 | 3.80% | 11.16 | 3.80% | 9.10 | 3.80% | 103.15 | 3.80% | 70.47 |
| Stage Three Growth | 2088 | 3.80% | 42.10 | 3.80% | 11.58 | 3.80% | 9.45 | 3.80% | 107.07 | 3.80% | 73.15 |
| Stage Three Growth | 2089 | 3.80% | 43.70 | 3.80% | 12.02 | 3.80% | 9.81 | 3.80% | 111.14 | 3.80% | 75.93 |
| Stage Three Growth | 2090 | 3.80% | 45.36 | 3.80% | 12.48 | 3.80% | 10.18 | 3.80% | 115.36 | 3.80% | 78.81 |
| Stage Three Growth | 2091 | 3.80% | 47.09 | 3.80% | 12.95 | 3.80% | 10.57 | 3.80% | 119.74 | 3.80% | 81.81 |
| Stage Three Growth | 2092 | 3.80% | 48.87 | 3.80% | 13.44 | 3.80% | 10.97 | 3.80% | 124.29 | 3.80% | 84.92 |
| Stage Three Growth | 2093 | 3.80% | 50.73 | 3.80% | 13.95 | 3.80% | 11.39 | 3.80% | 129.02 | 3.80% | 88.14 |
| Stage Three Growth | 2094 | 3.80% | 52.66 | 3.80% | 14.48 | 3.80% | 11.82 | 3.80% | 133.92 | 3.80% | 91.49 |
| Stage Three Growth | 2095 | 3.80% | 54.66 | 3.80% | 15.03 | 3.80% | 12.27 | 3.80% | 139.01 | 3.80% | 94.97 |
| Stage Three Growth | 2096 | 3.80% | 56.74 | 3.80% | 15.61 | 3.80% | 12.73 | 3.80% | 144.29 | 3.80% | 98.58 |
| Stage Three Growth | 2097 | 3.80% | 58.89 | 3.80% | 16.20 | 3.80% | 13.22 | 3.80% | 149.77 | 3.80% | 102.33 |
| Stage Three Growth | 2098 | 3.80% | 61.13 | 3.80% | 16.81 | 3.80% | 13.72 | 3.80% | 155.47 | 3.80% | 106.21 |
| Stage Three Growth | 2099 | 3.80% | 63.45 | 3.80% | 17.45 | 3.80% | 14.24 | 3.80% | 161.37 | 3.80% | 110.25 |
| Stage Three Growth | 2100 | 3.80% | 65.87 | 3.80% | 18.12 | 3.80% | 14.78 | 3.80% | 167.51 | 3.80% | 114.44 |
| Stage Three Growth | 2101 | 3.80% | 68.37 | 3.80% | 18.81 | 3.80% | 15.35 | 3.80% | 173.87 | 3.80% | 118.79 |
| Stage Three Growth | 2102 | 3.80% | 70.97 | 3.80% | 19.52 | 3.80% | 15.93 | 3.80% | 180.48 | 3.80% | 123.30 |
| Stage Three Growth | 2103 | 3.80% | 73.66 | 3.80% | 20.26 | 3.80% | 16.53 | 3.80% | 187.34 | 3.80% | 127.99 |
| Stage Three Growth | 2104 | 3.80% | 76.46 | 3.80% | 21.03 | 3.80% | 17.16 | 3.80% | 194.46 | 3.80% | 132.85 |
| Stage Three Growth | 2105 | 3.80% | 79.37 | 3.80% | 21.83 | 3.80% | 17.81 | 3.80% | 201.84 | 3.80% | 137.90 |
| Stage Three Growth | 2106 | 3.80% | 82.38 | 3.80% | 22.66 | 3.80% | 18.49 | 3.80% | 209.51 | 3.80% | 143.14 |
| Stage Three Growth | 2107 | 3.80% | 85.52 | 3.80% | 23.52 | 3.80% | 19.19 | 3.80% | 217.48 | 3.80% | 148.58 |
| Stage Three Growth | 2108 | 3.80% | 88.76 | 3.80% | 24.42 | 3.80% | 19.92 | 3.80% | 225.74 | 3.80% | 154.23 |
| Stage Three Growth | 2109 | 3.80% | 92.14 | 3.80% | 25.34 | 3.80% | 20.68 | 3.80% | 234.32 | 3.80% | 160.09 |
| Stage Three Growth | 2110 | 3.80% | 95.64 | 3.80% | 26.31 | 3.80% | 21.47 | 3.80% | 243.22 | 3.80% | 166.17 |
| Stage Three Growth | 2111 | 3.80% | 99.27 | 3.80% | 27.31 | 3.80% | 22.28 | 3.80% | 252.46 | 3.80% | 172.48 |
| Stage Three Growth | 2112 | 3.80% | 103.05 | 3.80% | 28.34 | 3.80% | 23.13 | 3.80% | 262.06 | 3.80% | 179.04 |
| Stage Three Growth | 2113 | 3.80% | 106.96 | 3.80% | 29.42 | 3.80% | 24.01 | 3.80% | 272.02 | 3.80% | 185.84 |

| | | | | | | | | | | | |
|-------------------------------|------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|
| Stage Three Growth | 2114 | 3.80% | 111.03 | 3.80% | 30.54 | 3.80% | 24.92 | 3.80% | 282.35 | 3.80% | 192.90 |
| Stage Three Growth | 2115 | 3.80% | 115.24 | 3.80% | 31.70 | 3.80% | 25.87 | 3.80% | 293.08 | 3.80% | 200.23 |
| Stage Three Growth | 2116 | 3.80% | 119.62 | 3.80% | 32.90 | 3.80% | 26.85 | 3.80% | 304.22 | 3.80% | 207.84 |
| Stage Three Growth | 2117 | 3.80% | 124.17 | 3.80% | 34.15 | 3.80% | 27.87 | 3.80% | 315.78 | 3.80% | 215.74 |
| Stage Three Growth | 2118 | 3.80% | 128.89 | 3.80% | 35.45 | 3.80% | 28.93 | 3.80% | 327.78 | 3.80% | 223.94 |
| Stage Three Growth | 2119 | 3.80% | 133.79 | 3.80% | 36.80 | 3.80% | 30.03 | 3.80% | 340.24 | 3.80% | 232.45 |
| Stage Three Growth | 2120 | 3.80% | 138.87 | 3.80% | 38.20 | 3.80% | 31.17 | 3.80% | 353.16 | 3.80% | 241.28 |
| Stage Three Growth | 2121 | 3.80% | 144.15 | 3.80% | 39.65 | 3.80% | 32.35 | 3.80% | 366.58 | 3.80% | 250.45 |
| Stage Three Growth | 2122 | 3.80% | 149.62 | 3.80% | 41.16 | 3.80% | 33.58 | 3.80% | 380.52 | 3.80% | 259.97 |
| Stage Three Growth | 2123 | 3.80% | 155.31 | 3.80% | 42.72 | 3.80% | 34.86 | 3.80% | 394.97 | 3.80% | 269.85 |
| Stage Three Growth | 2124 | 3.80% | 161.21 | 3.80% | 44.34 | 3.80% | 36.18 | 3.80% | 409.98 | 3.80% | 280.10 |
| Stage Three Growth | 2125 | 3.80% | 167.34 | 3.80% | 46.03 | 3.80% | 37.56 | 3.80% | 425.56 | 3.80% | 290.74 |
| Stage Three Growth | 2126 | 3.80% | 173.70 | 3.80% | 47.78 | 3.80% | 38.99 | 3.80% | 441.73 | 3.80% | 301.79 |
| Stage Three Growth | 2127 | 3.80% | 180.30 | 3.80% | 49.59 | 3.80% | 40.47 | 3.80% | 458.52 | 3.80% | 313.26 |
| Stage Three Growth | 2128 | 3.80% | 187.15 | 3.80% | 51.48 | 3.80% | 42.01 | 3.80% | 475.94 | 3.80% | 325.16 |
| Stage Three Growth | 2129 | 3.80% | 194.26 | 3.80% | 53.43 | 3.80% | 43.60 | 3.80% | 494.03 | 3.80% | 337.52 |
| Stage Three Growth | 2130 | 3.80% | 201.64 | 3.80% | 55.46 | 3.80% | 45.26 | 3.80% | 512.80 | 3.80% | 350.35 |
| Stage Three Growth | 2131 | 3.80% | 209.31 | 3.80% | 57.57 | 3.80% | 46.98 | 3.80% | 532.29 | 3.80% | 363.66 |
| Stage Three Growth | 2132 | 3.80% | 217.26 | 3.80% | 59.76 | 3.80% | 48.76 | 3.80% | 552.52 | 3.80% | 377.48 |
| Stage Three Growth | 2133 | 3.80% | 225.51 | 3.80% | 62.03 | 3.80% | 50.62 | 3.80% | 573.51 | 3.80% | 391.82 |
| Stage Three Growth | 2134 | 3.80% | 234.08 | 3.80% | 64.39 | 3.80% | 52.54 | 3.80% | 595.31 | 3.80% | 406.71 |
| Stage Three Growth | 2135 | 3.80% | 242.98 | 3.80% | 66.83 | 3.80% | 54.54 | 3.80% | 617.93 | 3.80% | 422.17 |
| Stage Three Growth | 2136 | 3.80% | 252.21 | 3.80% | 69.37 | 3.80% | 56.61 | 3.80% | 641.41 | 3.80% | 438.21 |
| Stage Three Growth | 2137 | 3.80% | 261.80 | 3.80% | 72.01 | 3.80% | 58.76 | 3.80% | 665.78 | 3.80% | 454.86 |
| Stage Three Growth | 2138 | 3.80% | 271.74 | 3.80% | 74.75 | 3.80% | 60.99 | 3.80% | 691.08 | 3.80% | 472.15 |
| Stage Three Growth | 2139 | 3.80% | 282.07 | 3.80% | 77.59 | 3.80% | 63.31 | 3.80% | 717.34 | 3.80% | 490.09 |
| Stage Three Growth | 2140 | 3.80% | 292.79 | 3.80% | 80.53 | 3.80% | 65.72 | 3.80% | 744.60 | 3.80% | 508.71 |
| Stage Three Growth | 2141 | 3.80% | 303.92 | 3.80% | 83.59 | 3.80% | 68.21 | 3.80% | 772.90 | 3.80% | 528.04 |
| Implied Cost of Equity | | | 7.62% | | 4.81% | | 6.05% | | 7.04% | | 6.69% |

Mean 6.44%
Median 6.69%

| | | | |
|--|--|--|--------------|
| | | Selected Three-Stage DGM Cost of Equity | 6.57% |
|--|--|--|--------------|

Equity Component of the Direct Rate

| Company | Value Line P/E Ratio |
|--|----------------------|
| Canadian National Railway Co. | 17.1 |
| Canadian Pacific Kansas City Ltd. | 19.4 |
| CSX Corp. | 19.1 |
| Norfolk Southern Corp. | 22.0 |
| Union Pacific Corp. | 18.4 |
| Mean | 19.21 |
| Median | 19.06 |
| Selected Price to Earnings (P/E) Ratio | 19.21 |
| Indicated Equity Component of the Direct Rate | 5.21% |

We placed the most reliance on the mean price to earnings ratio.

Notes:

The Price/Earnings Ratio was downloaded from Zack's.

Beta Analysis

| Company | Beta |
|--|-------------|
| Canadian National Railway Co. | 0.95 |
| Canadian Pacific Kansas City Ltd. | 0.95 |
| CSX Corp. | 1.00 |
| Norfolk Southern Corp. | 1.00 |
| Union Pacific Corp. | 0.95 |
| Beta Mean | 0.97 |
| Beta Median | 0.95 |
| Unlevered Relevered Beta Mean [^] | 0.97 |
| Indicated Beta | 0.96 |

We considered the mean, median, and unlevered/relevered mean. We placed equal reliance on the mean, median and the unlevered Relevered beata mean when selecting the indicated beta.

Notes:

[^]See the Unlevering Relevering Beta page for the calculation

Unlevering/Relevering Betas

| Unlevering of Betas | | | | | |
|---------------------------------|---|---|---|---|------------------------------|
| Company | Value Line Actual Income Tax Rate | From Capital Structure Page Actual Debt in Capital Structure | From Capital Structure Page Actual Equity in Capital Structure | Value Line Levered Beta (Published) | Formula Unlevered Beta |
| Canadian National Railway Co. | 25.00% | 19.36% | 80.64% | 0.95 | 0.81 |
| Canadian Pacific Kansas City Lt | 24.00% | 18.58% | 81.42% | 0.95 | 0.81 |
| CSX Corp. | 23.00% | 20.43% | 79.57% | 1.00 | 0.83 |
| Norfolk Southern Corp. | 24.00% | 19.66% | 80.34% | 1.00 | 0.84 |
| Union Pacific Corp. | 24.00% | 16.18% | 83.82% | 0.95 | 0.83 |
| Average | | | | 0.97 | |

| Relevering of Betas | | | | |
|---------------------------------|--|---|---|-------------------------|
| Company | Formula Composite Income Tax Rate | From Capital Structure Page Industry Debt in Capital Structure | From Capital Structure Page Industry Equity in Capital Structure | Formula Levered Beta |
| Canadian National Railway Co. | 24.00% | 19.00% | 81.00% | 0.95 |
| Canadian Pacific Kansas City Lt | 24.00% | 19.00% | 81.00% | 0.95 |
| CSX Corp. | 24.00% | 19.00% | 81.00% | 0.98 |
| Norfolk Southern Corp. | 24.00% | 19.00% | 81.00% | 0.99 |
| Union Pacific Corp. | 24.00% | 19.00% | 81.00% | 0.98 |
| Average | | | | 0.97 |

Notes:

Uses the Hamada Formula

Unlevered Beta = Levered Beta / [1 + (1 - Tax Rate) x (Debt/Equity)], using company-specific components
Using company-specific components

Relevered Beta = Unlevered Beta [1 + (1 - Tax Rate) x (Debt/Equity)]
Using industry components for Tax Rate, Debt, and Equity

Calculation of Market to Book Ratios for the Railroad Market Segment

- December 31, 2025 calendar year information for the January 2, 2026 Assessment
- A market to book ratio over one would be an indication of no obsolescence.
- Market value of common equity equals share price as of January 2, 2026 multiplied by common shares outstanding from companies' 2025 10-K

Market to Book Ratio for Equity

| Company | Market Value of Common Equity | Book Value of Common Equity from 10-K | Market to Book Ratio | Source |
|-----------------------------------|-------------------------------|---------------------------------------|----------------------|---|
| Canadian National Railway Co. | 61,513,990,000 | 15,736,012,800 | 3.91 | Canadian National Railway. 2024 Annual Report, p. 39* |
| Canadian Pacific Kansas City Ltd. | 66,328,204,790 | 34,163,520,000 | 1.94 | CPKC. 2025 10-K, p. 66* |
| CSX Corp. | 67,408,933,964 | 13,160,000,000 | 5.12 | CSX Corporation. 2025 10-K, p. 55 |
| Norfolk Southern Corp. | 64,838,435,058 | 15,547,000,000 | 4.17 | Norfolk Southern. 2025 10-K, p. K51 |
| Union Pacific Corp. | 137,263,312,527 | 18,467,000,000 | 7.43 | Union Pacific Corporation. 2025 10-K, p. 47 |
| Average | | | 4.51 | |

Market to Book Ratio for Debt

| Company | Market Value of Long-Term Debt from 10-K | Book Value of Long-Term Debt from 10-K | Market to Book Ratio | Source |
|-----------------------------------|--|--|----------------------|---|
| Canadian National Railway Co. | 14,771,481,600 | 15,468,249,600 | 0.95 | Canadian National Railway. 2024 Annual Report, p. 51* |
| Canadian Pacific Kansas City Ltd. | 15,131,904,000 | 16,067,980,800 | 0.94 | CPKC. 2025 10-K, p. 89* |
| CSX Corp. | 17,305,000,000 | 18,873,000,000 | 0.92 | CSX Corporation. 2025 10-K, p. 106 |
| Norfolk Southern Corp. | 15,865,000,000 | 17,087,000,000 | 0.93 | Norfolk Southern. 2025 10-K, p. K63 |
| Union Pacific Corp. | 26,500,000,000 | 31,814,000,000 | 0.83 | Union Pacific Corporation. 2025 10-K, p. 69 |
| Average | | | 0.91 | |

Application of Capital Structure as determined in the Capitalization Rate Study

| | Capital Structure | Market to Book | Composite |
|----------------|-------------------|----------------|-------------|
| Common Equity | 81.00% | 4.51 | 3.65 |
| Long-term Debt | 19.00% | 0.91 | 0.17 |
| Average | | | 3.82 |

Note:

* Converted CAD to USD in instances where company's annual report is reported in CAD. Using CAD to USD exchange rate of 0.7296 as of December 31, 2025, per Bank of Canada.

Appendix F - Three Stage Ex Ante Calculation

Three Stage Ex Ante Equity Risk Premium Calculation

| | | | |
|-----------------------------|-------|----|-------|
| Implied Market Rate Range = | 7.52% | to | 7.79% |
|-----------------------------|-------|----|-------|

| | | |
|-------------------------|--------------|---|
| Mean | 7.65% | |
| Median | 7.65% | |
| Market Rate Used | 7.79% | |
| (Less) Risk-Free Rate | 4.81% | Yield on 20-Year US Treasury Security as of January 2, 2026 |

Equals Equity Risk Premium **2.98%**

Assumptions:

| Stages | Years | | Growth | Model 1 | | | | Model 2 | | | |
|-----------|----------------------|---------------|--------------------|---------------|----|-------|----|------------|----|-------|------------------------------------|
| 1st Stage | 1-5 years | | Constant @: | 15.40% | | | * | 17.37% | | | * |
| 2nd Stage | 6-15 years | | Linear from: | 14.45% | to | 4.94% | OR | 16.16% | to | 4.03% | Linear from 1st Stage to 3rd Stage |
| | | | | Real Growth** | | | | Inflation^ | | | |
| 3rd Stage | 15 years -perpetuity | GDP Growth: | Real and Inflation | 1.78% | to | 2.52% | + | 2.25% | to | 2.42% | |
| | | GDP Growth^^: | Real + Inflation | 4.94% | | | TO | 4.03% | | | |

| | Model 1 | Model 2 |
|-----------------------|---------|---------|
| Implied Market Return | 7.79% | 7.52% |

| Year | Model 1 | | | Model 2 | | |
|------|-------------------|----------------------|---------------|----------------------|---------------|----------|
| | Starting Industry | S & P 500 | | Starting Industry | S & P 500 | |
| 2025 | 1 | Start Price† | \$ (6,858.47) | Start Price† | \$ (6,858.47) | |
| 2026 | 2 | Expected Dividends†† | \$ 82.32 | Expected Dividends†† | \$ 82.32 | |
| 2027 | 3 | 15.40% | \$ 95.00 | 1st Stage | 17.37% | \$ 96.62 |
| 2028 | 4 | 15.40% | \$ 109.63 | 17.37% | \$ 113.40 | |
| 2029 | 5 | 15.40% | \$ 126.51 | 17.37% | \$ 133.10 | |
| 2030 | 6 | 15.40% | \$ 145.99 | 17.37% | \$ 156.22 | |
| 2031 | 7 | 15.40% | \$ 168.47 | 17.37% | \$ 183.35 | |
| 2032 | 8 | 14.45% | \$ 192.82 | 16.16% | \$ 212.98 | |
| 2033 | 9 | 13.50% | \$ 218.84 | 14.94% | \$ 244.81 | |
| 2034 | 10 | 12.55% | \$ 246.30 | 13.73% | \$ 278.42 | |
| 2035 | 11 | 11.60% | \$ 274.87 | 12.52% | \$ 313.28 | |
| 2036 | 12 | 10.65% | \$ 304.13 | 11.31% | \$ 348.70 | |
| 2037 | 13 | 9.69% | \$ 333.61 | 10.09% | \$ 383.90 | |
| 2038 | 14 | 8.74% | \$ 362.78 | 8.88% | \$ 417.99 | |
| 2039 | 15 | 7.79% | \$ 391.05 | 7.67% | \$ 450.04 | |
| 2040 | 16 | 6.84% | \$ 417.81 | 6.46% | \$ 479.10 | |
| 2041 | 17 | 5.89% | \$ 442.42 | 5.24% | \$ 504.21 | |
| 2042 | 18 | 4.94% | \$ 468.48 | 4.03% | \$ 530.65 | |
| 2043 | 19 | 4.94% | \$ 491.62 | 4.03% | \$ 552.03 | |
| 2044 | 20 | 4.94% | \$ 515.91 | 4.03% | \$ 574.28 | |
| 2045 | 21 | 4.94% | \$ 541.40 | 4.03% | \$ 597.42 | |
| 2046 | 22 | 4.94% | \$ 568.14 | 4.03% | \$ 621.50 | |
| 2047 | 23 | 4.94% | \$ 596.21 | 4.03% | \$ 646.55 | |
| 2048 | 24 | 4.94% | \$ 625.66 | 4.03% | \$ 672.60 | |
| 2049 | 25 | 4.94% | \$ 656.57 | 4.03% | \$ 699.71 | |
| 2050 | 26 | 4.94% | \$ 689.00 | 4.03% | \$ 727.91 | |
| 2051 | 27 | 4.94% | \$ 723.04 | 4.03% | \$ 757.24 | |
| 2052 | 28 | 4.94% | \$ 758.76 | 4.03% | \$ 787.76 | |
| 2053 | 29 | 4.94% | \$ 796.24 | 4.03% | \$ 819.51 | |
| 2054 | 30 | 4.94% | \$ 835.57 | 4.03% | \$ 852.53 | |
| 2055 | 31 | 4.94% | \$ 876.85 | 4.03% | \$ 886.89 | |
| 2056 | 32 | 4.94% | \$ 920.17 | 4.03% | \$ 922.63 | |
| 2057 | 33 | 4.94% | \$ 965.62 | 4.03% | \$ 959.81 | |
| 2058 | 34 | 4.94% | \$ 1,013.32 | 4.03% | \$ 998.49 | |
| 2059 | 35 | 4.94% | \$ 1,063.38 | 4.03% | \$ 1,038.73 | |
| 2060 | 36 | 4.94% | \$ 1,115.91 | 4.03% | \$ 1,080.59 | |
| 2061 | 37 | 4.94% | \$ 1,171.04 | 4.03% | \$ 1,124.14 | |
| 2062 | 38 | 4.94% | \$ 1,228.89 | 4.03% | \$ 1,169.44 | |
| 2063 | 39 | 4.94% | \$ 1,289.60 | 4.03% | \$ 1,216.57 | |
| 2064 | 40 | 4.94% | \$ 1,353.30 | 4.03% | \$ 1,265.60 | |
| 2065 | 41 | 4.94% | \$ 1,420.15 | 4.03% | \$ 1,316.60 | |
| 2066 | 42 | 4.94% | \$ 1,490.31 | 4.03% | \$ 1,369.66 | |
| 2067 | 43 | 4.94% | \$ 1,563.93 | 4.03% | \$ 1,424.86 | |
| 2068 | 44 | 4.94% | \$ 1,641.19 | 4.03% | \$ 1,482.28 | |
| 2069 | 45 | 4.94% | \$ 1,722.26 | 4.03% | \$ 1,542.02 | |
| 2070 | 46 | 4.94% | \$ 1,807.34 | 4.03% | \$ 1,604.16 | |
| 2071 | 47 | 4.94% | \$ 1,896.63 | 4.03% | \$ 1,668.81 | |
| 2072 | 48 | 4.94% | \$ 1,990.32 | 4.03% | \$ 1,736.06 | |
| 2073 | 49 | 4.94% | \$ 2,088.64 | 4.03% | \$ 1,806.03 | |
| 2074 | 50 | 4.94% | \$ 2,191.82 | 4.03% | \$ 1,878.81 | |
| 2075 | 51 | 4.94% | \$ 2,300.10 | 4.03% | \$ 1,954.52 | |
| 2076 | 52 | 4.94% | \$ 2,413.72 | 4.03% | \$ 2,033.29 | |

| | | | | | | | | | |
|------|-----|--------------|------------------------------|----|--------------|--------|------------------------------|----|--------------|
| 2077 | 53 | | 4.94% | \$ | 2,532.96 | | 4.03% | \$ | 2,115.23 |
| 2078 | 54 | | 4.94% | \$ | 2,658.09 | | 4.03% | \$ | 2,200.48 |
| 2079 | 55 | | 4.94% | \$ | 2,789.40 | | 4.03% | \$ | 2,289.16 |
| 2080 | 56 | | 4.94% | \$ | 2,927.19 | | 4.03% | \$ | 2,381.41 |
| 2081 | 57 | | 4.94% | \$ | 3,071.80 | | 4.03% | \$ | 2,477.38 |
| 2082 | 58 | | 4.94% | \$ | 3,223.54 | | 4.03% | \$ | 2,577.22 |
| 2083 | 59 | | 4.94% | \$ | 3,382.79 | | 4.03% | \$ | 2,681.08 |
| 2084 | 60 | | 4.94% | \$ | 3,549.90 | | 4.03% | \$ | 2,789.13 |
| 2085 | 61 | | 4.94% | \$ | 3,725.26 | | 4.03% | \$ | 2,901.53 |
| 2086 | 62 | | 4.94% | \$ | 3,909.29 | | 4.03% | \$ | 3,018.46 |
| 2087 | 63 | | 4.94% | \$ | 4,102.41 | | 4.03% | \$ | 3,140.11 |
| 2088 | 64 | | 4.94% | \$ | 4,305.07 | | 4.03% | \$ | 3,266.65 |
| 2089 | 65 | | 4.94% | \$ | 4,517.74 | | 4.03% | \$ | 3,398.30 |
| 2090 | 66 | | 4.94% | \$ | 4,740.91 | 3rd | 4.03% | \$ | 3,535.25 |
| 2091 | 67 | 3rd Stage | 4.94% | \$ | 4,975.12 | Stage | 4.03% | \$ | 3,677.72 |
| 2092 | 68 | Growth Rates | 4.94% | \$ | 5,220.89 | Growth | 4.03% | \$ | 3,825.93 |
| 2093 | 69 | | 4.94% | \$ | 5,478.80 | Rates | 4.03% | \$ | 3,980.12 |
| 2094 | 70 | | 4.94% | \$ | 5,749.45 | | 4.03% | \$ | 4,140.52 |
| 2095 | 71 | | 4.94% | \$ | 6,033.47 | | 4.03% | \$ | 4,307.38 |
| 2096 | 72 | | 4.94% | \$ | 6,331.53 | | 4.03% | \$ | 4,480.97 |
| 2097 | 73 | | 4.94% | \$ | 6,644.30 | | 4.03% | \$ | 4,661.55 |
| 2098 | 74 | | 4.94% | \$ | 6,972.53 | | 4.03% | \$ | 4,849.41 |
| 2099 | 75 | | 4.94% | \$ | 7,316.98 | | 4.03% | \$ | 5,044.84 |
| 2100 | 76 | | 4.94% | \$ | 7,678.43 | | 4.03% | \$ | 5,248.15 |
| 2101 | 77 | | 4.94% | \$ | 8,057.75 | | 4.03% | \$ | 5,459.65 |
| 2102 | 78 | | 4.94% | \$ | 8,455.80 | | 4.03% | \$ | 5,679.67 |
| 2103 | 79 | | 4.94% | \$ | 8,873.52 | | 4.03% | \$ | 5,908.56 |
| 2104 | 80 | | 4.94% | \$ | 9,311.87 | | 4.03% | \$ | 6,146.68 |
| 2105 | 81 | | 4.94% | \$ | 9,771.88 | | 4.03% | \$ | 6,394.39 |
| 2106 | 82 | | 4.94% | \$ | 10,254.61 | | 4.03% | \$ | 6,652.08 |
| 2107 | 83 | | 4.94% | \$ | 10,761.19 | | 4.03% | \$ | 6,920.16 |
| 2108 | 84 | | 4.94% | \$ | 11,292.79 | | 4.03% | \$ | 7,199.04 |
| 2109 | 85 | | 4.94% | \$ | 11,850.65 | | 4.03% | \$ | 7,489.16 |
| 2110 | 86 | | 4.94% | \$ | 12,436.07 | | 4.03% | \$ | 7,790.98 |
| 2111 | 87 | | 4.94% | \$ | 13,050.42 | | 4.03% | \$ | 8,104.95 |
| 2112 | 88 | | 4.94% | \$ | 13,695.11 | | 4.03% | \$ | 8,431.58 |
| 2113 | 89 | | 4.94% | \$ | 14,371.64 | | 4.03% | \$ | 8,771.38 |
| 2114 | 90 | | 4.94% | \$ | 15,081.60 | | 4.03% | \$ | 9,124.86 |
| 2115 | 91 | | 4.94% | \$ | 15,826.64 | | 4.03% | \$ | 9,492.60 |
| 2116 | 92 | | 4.94% | \$ | 16,608.47 | | 4.03% | \$ | 9,875.15 |
| 2117 | 93 | | 4.94% | \$ | 17,428.93 | | 4.03% | \$ | 10,273.12 |
| 2118 | 94 | | 4.94% | \$ | 18,289.92 | | 4.03% | \$ | 10,687.12 |
| 2119 | 95 | | 4.94% | \$ | 19,193.44 | | 4.03% | \$ | 11,117.81 |
| 2120 | 96 | | 4.94% | \$ | 20,141.60 | | 4.03% | \$ | 11,565.86 |
| 2121 | 97 | | 4.94% | \$ | 21,136.59 | | 4.03% | \$ | 12,031.97 |
| 2122 | 98 | | 4.94% | \$ | 22,180.74 | | 4.03% | \$ | 12,516.85 |
| 2123 | 99 | | 4.94% | \$ | 23,276.47 | | 4.03% | \$ | 13,021.28 |
| 2124 | 100 | | 4.94% | \$ | 24,426.32 | | 4.03% | \$ | 13,546.04 |
| 2125 | 101 | | 4.94% | \$ | 25,632.99 | | 4.03% | \$ | 14,091.95 |
| 2126 | 102 | | 4.94% | \$ | 26,899.25 | | 4.03% | \$ | 14,659.85 |
| 2127 | 103 | | 4.94% | \$ | 28,228.08 | | 4.03% | \$ | 15,250.64 |
| 2128 | 104 | | 4.94% | \$ | 29,622.55 | | 4.03% | \$ | 15,865.24 |
| 2129 | 105 | | 4.94% | \$ | 31,085.90 | | 4.03% | \$ | 16,504.61 |
| 2130 | 106 | | 4.94% | \$ | 32,621.54 | | 4.03% | \$ | 17,169.75 |
| 2131 | 107 | | 4.94% | \$ | 34,233.05 | | 4.03% | \$ | 17,861.69 |
| 2132 | 108 | | 4.94% | \$ | 35,924.16 | | 4.03% | \$ | 18,581.52 |
| 2133 | 109 | | 4.94% | \$ | 37,698.81 | | 4.03% | \$ | 19,330.35 |
| 2134 | 110 | | 4.94% | \$ | 39,561.13 | | 4.03% | \$ | 20,109.36 |
| 2135 | 111 | | 4.94% | \$ | 41,515.45 | | 4.03% | \$ | 20,919.77 |
| 2136 | 112 | | 4.94% | \$ | 43,566.32 | | 4.03% | \$ | 21,762.84 |
| 2137 | 113 | | 4.94% | \$ | 45,718.49 | | 4.03% | \$ | 22,639.88 |
| 2138 | 114 | | 4.94% | \$ | 47,976.99 | | 4.03% | \$ | 23,552.27 |
| 2139 | 115 | | 4.94% | \$ | 50,347.05 | | 4.03% | \$ | 24,501.43 |
| 2140 | 116 | | 4.94% | \$ | 52,834.19 | | 4.03% | \$ | 25,488.83 |
| | | | Reversion`` | \$ | 2,446,442.76 | | Reversion`` | \$ | 756,754.05 |
| | | | Implied Market Return | | 7.79% | | Implied Market Return | | 7.52% |

*S&P 500 Earnings and Estimate Report dated 1/16/2026, <https://www.spglobal.com/spdji/en/indices/equity/sp-500/#overview>

**First Quarter 2025 Survey of Professional Forecasters - Philadelphia Federal Reserve Release Date 3/6/2026

^Inflation Range = Federal Reserve, Treasuries Inflation - Indexed

^^GDP Growth = Real growth + Inflation

† Start Price is the S&P 500 Index adjusted close on 1/2/2026, downloaded from Yahoo! Finance

††Expected Dividends downloaded from <http://www.cmegroup.com/trading/equity-index/us-index/sp-500-quarterly-dividend-index.html>, 2/2/2026

``Reversion Calculation:

| | | |
|--|--------------|------------|
| A. Last period's expected dividends, growth applied | 55,444.20 | 26,516.03 |
| B. Implied Market Risk Premium Less Long-Term Growth | 2.27% | 3.50% |
| C. A / B | 2,446,442.76 | 756,754.05 |

Appendix G – Guideline Company Selection

Section Contents

| | |
|--|-----------|
| Market Segment: Electric | 2 |
| Companies Included in the Electric Market Segment..... | 2 |
| Companies Not Included in the Electric Market Segment..... | 11 |
| Market Segment: Gas Distribution | 29 |
| Companies Included in the Gas Distribution Market Segment..... | 29 |
| Companies Not Included in the Gas Distribution Market Segments | 36 |
| Market Segment: Gas Transmission Pipeline | 41 |
| Companies Included in the Gas Transmission Pipeline Market Segment | 41 |
| Companies Not Included in the Gas Transmission Pipeline Market Segment | 46 |
| Market Segment: Fluid Transportation Pipeline | 51 |
| Companies Included in the Fluid Transportation Pipeline Market Segment | 51 |
| Companies Not Included in the Fluid Transportation Pipeline Market Segment | 53 |
| Market Segment: Railroads | 64 |
| Companies Included in the Railroad Market Segment | 64 |
| Companies Not Included in the Railroad Market Segment | 67 |

Note: This information is verbatim from Value Line and the company’s website.

Market Segment: Electric

Companies Included in the Electric Market Segment

Alliant Energy Corporation

Company Summary from Value Line:

Alliant Energy Corporation is the parent company of Interstate Power and Light Company (IPL) and Wisconsin Power and Light Company (WPL). Together, the utility subsidiaries serve approximately one million electric and 430,000 natural gas customers in Wisconsin and Iowa. Electric revenue: residential, 37%; commercial, 24%; industrial, 28%; wholesale, 8%; other, 3%. Generating sources: coal, 18%; gas, 41%; wind, 16%; other, 1%; purchased, 24%. Fuel costs: 19% of revenues. '24 reported depreciation rates: 2.9%-6.1%. Has 2,998 employees.

Additional Company Information from Website:

Alliant Energy Corporation (NASDAQ: LNT) provides regulated energy service to approximately 1 million electric and 430,000 natural gas retail customers across Iowa and Wisconsin. We have two public energy companies that are principally engaged in the generation and distribution of electricity to retail electric customers, along with the distribution and transportation of natural gas to customers in primarily rural communities. Interstate Power and Light Company (IPL): Provides electricity to approximately 500,000 retail electric customers in Iowa. Transports natural gas to approximately 230,000 customers in Iowa. Regulated by the Iowa Utilities Commission (IUC). Provides utility services to incorporated communities and utilize nonexclusive franchises that cover the use of public rights-of-way for utility facilities in incorporated communities for a maximum term of 25 years. Sells electricity to wholesale customers in Minnesota, Illinois and Iowa. Wisconsin Power and Light Company (WPL): Provides electricity to approximately 500,000 electric retail customers in Wisconsin. Transports natural gas to about 200,000 natural gas retail customers in Wisconsin. Regulated by the Public Service Commission of Wisconsin (PSC). Operates in municipalities pursuant to permits of indefinite duration and state statutes authorizing utility operation in areas annexed by a municipality. Sells electricity to wholesale customers in Wisconsin.¹

Why was the company included?

Alliant Energy Corporation supplies electricity, gas, and other services to customers. Electric customers represent 70% of customers and gas customers represent 30% of customers. This company is similar to (and is one of) the electric companies that we are responsible for valuing. The company engages in providing energy in the upper Midwest.

Ameren Corporation

Company Summary from Value Line:

Ameren Corporation is a holding company formed through the merger of Union Electric and CIPSCO. Has 1.2 million electric and 127,000 gas customers in Missouri; 1.2 million electric and 813,000 gas

¹ <https://www.alliantenergy.com/aboutus/whoweare/whoweare>, accessed 1/21/2026

customers in Illinois. Discontinued nonregulated power-generation operation in '13. Electric revenue breakdown: residential, 36%; commercial, 26%; industrial, 6%; other, 32%. Generating sources: coal, 68%; nuclear, 14%; hydro & other, 9%; purchased, 9%. Fuel costs: 25% of revenues. Has approximately 9,250 employees.

Additional Company Information from Website

Ameren Corporation is a Fortune 500 company that trades on the New York Stock Exchange under the symbol AEE. It is the parent company of Ameren Illinois, based in Collinsville, Ill., and Ameren Missouri in St. Louis. Ameren Transmission Company, also based in St. Louis, designs and builds regional transmission projects. Ameren was created by the combination of three Illinois utilities (CIPSCO Incorporated, CILCO Inc. and Illinois Power Company) and Union Electric Company of St. Louis. The name comes from combining the words American and Energy. Employing more than 9,000 personnel, Ameren powers the quality of life for 2.5 million electric customers and more than 900,000 natural gas customers across a 64,000-square-mile area. Ameren Missouri ranks as the largest electric power provider in Missouri, and Ameren Illinois ranks as Illinois' third largest natural gas distribution operation in total number of customers. Ameren companies generate a net capacity of approximately 9,300 megawatts of electricity and own over 8,000 transmission miles across its operating companies and a variety of energy markets. Ameren's rates are some of the lowest in the nation.²

Why was the company included?

Ameren Corporation provides electric and gas to customers. Electric customers represent 72% of customers and gas customers represent 28% of customers. This company is similar to the electric companies that we are responsible for valuing. The company engages in providing energy in the Midwest.

American Electric Power Company Inc.

Company Summary from Value Line:

American Electric Power Company Inc. (AEP), through 10 operating utilities, serves 5.5 million customers in Arkansas, Kentucky, Indiana, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia, & West Virginia. Has a transmission subsidiary. Electric revenue breakdown: residential, 43%; commercial, 23%; industrial, 18%; wholesale, 10%; other, 6%. Sold commercial barge operation in '15. Generating sources not available. Fuel costs: 33% of revenues. '24 reported depreciation rates (utility): 2.6%-12.5%. Has approximately 16,330 employees.

Additional Company Information from Website:

At AEP, we understand and appreciate the vital role we play in delivering power to people across the country every day. Our vision and core principles are not just words; they serve as the guideposts for our company as we strive to meet our customers' expectations. We're one of the largest electric companies in the country, powering millions of homes and businesses daily. Our customers depend on us to provide reliable energy, and we're committed to going above and beyond their expectations to create an energy future we can all be proud of. We're passionate about our customers and

² <https://www.ameren.com/company/about-ameren>, accessed 1/21/2026

communities, and to doing everything in our power to develop innovative and clean energy solutions for a changing world. We serve nearly 5.6 million customers in our regulated service territory, spanning more than 200,000 square miles in 11 states. Maintaining the nation's largest electricity transmission system and more than 225,000 miles of distribution lines, we deliver safe, reliable power to customers in Arkansas, Indiana, Kentucky, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia and West Virginia, doing everything in our power to develop innovative and clean energy solutions for a changing world.³

Annual Information Update:

American Electric Power Company Inc. closed on a transmission investment partnership that will support their Ohio and Indiana Michigan transmission companies in June of 2025.⁴

Why was the company included?

American Electric Power Company Inc. provides electricity to customers. This company is similar to the electric companies that we are responsible for valuing. The company engages in providing energy in the Midwest.

CenterPoint Energy Inc.

Company Summary from Value Line:

CenterPoint Energy Inc. is a holding company for Houston Electric, which serves over 2.81 million customers in Houston and environs. Indiana Electric, which serves approximately 153,000 customers, and gas utilities with 4.31 million customers in Texas, Minnesota, Louisiana, Mississippi, Indiana, and Ohio. Acquired Vectren 2/19. Sold nonutility operations in '20. Sold its stake in Energy Transfer LP in '22 and '23. Electric revenue breakdown not available. Fuel costs: 20% of total revenues. Has 8,872 employees.

Additional Company Information from Website:

Our vision to lead the nation in delivering energy, service and value drives our strategy and performance. We have an unwavering commitment to safely and reliably deliver electricity and natural gas to millions of people.

Natural Gas

We sell and deliver natural gas to approximately 7 million homes and businesses in four states: Indiana, Minnesota (including Minneapolis), Ohio and Texas (including greater Houston area). We are investing in modernizing our natural gas infrastructure and are committed to eliminating cast-iron pipe in all our territories.

Electric Transmission and Distribution and Power Generation

We maintain the wires, poles and electric infrastructure serving more than 2.9 million metered customers in the greater Houston area and in southwestern Indiana.

³ <https://www.aep.com/about/>, accessed 1/21/2026

⁴ <https://www.prnewswire.com/news-releases/aep-closes-on-transmission-investment-strategic-partnership-with-kr-and-psp-investments-302474559.html> accessed 02/04/2026

We also own and operate nearly 1,300 megawatts of electric generation capacity in Indiana. We are committed to the reliable delivery of electricity generated from power plants and renewable energy resources to homes and businesses.⁵

Annual Information Updates:

In 2025, CenterPoint Energy Inc. completed the sale of its Louisiana and Mississippi natural gas distribution businesses⁶ and announced the sale of its Ohio natural gas business distribution sector.⁷

Why was the company included?

CenterPoint Energy Inc. provides both electric and natural gas service to customers. Electric customers represent greater than 40% of customers and gas customers represent approximately 60% of customers. This company has been included in both the electric and gas distribution market segments because it is consistent with the electric and gas distribution companies we are valuing.

CMS Energy Corporation

Company Summary from Value Line:

CMS Energy Corporation is a holding company for Consumers Energy, which supplies electricity and gas to lower Michigan (excluding Detroit). Has 1.9 million electric, 1.8 million gas customers. Has 2,016 megawatts of nonregulated generating capacity. Sold EnerBank in '21. Electric revenue breakdown: residential, 46%; commercial, 33%; industrial, 13%; other, 8%. Generating sources: coal, 22%; gas, 42%; renewables, 7%; purchased, 29%. Fuel costs: 37% of revenues. '24 depreciation rates: 3.8% electric, 2.8% gas, 7.8% other. Has 8,324 full-time employees.

Additional Company Information from Website:

CMS Energy's primary business is Consumers Energy, providing natural gas and electricity to 6.8 million of the state's 10 million residents in all 68 Lower Peninsula counties. Consumers Energy is committed to serving our customers, and making Michigan a great place to live and work.

Consumers Energy provides electric service to 1.8 million customers in 62 of Michigan's Lower Peninsula counties. Among the largest cities served are Battle Creek, Bay City, Cadillac, Flint, Grand Rapids, Jackson, Kalamazoo, Midland, Muskegon and Saginaw.

In 2019, we launched our Clean Energy Plan, a 20-year strategy to safeguard Michigan's environment while supplying more clean energy to our homes and businesses. We plan to achieve net zero carbon emissions, end coal use and dramatically increase clean energy resources by 2040.

Consumers Energy provides natural gas service for heating and other uses to nearly 1.8 million customers in 54 of the 68 counties in Michigan's Lower Peninsula. It serves an area that spans 13,000

⁵ <https://www.centerpointenergy.com/en-us/corporate/about-us/company-overview>, accessed on 1/27/2026

⁶ <https://investors.centerpointenergy.com/news-releases/news-release-details/centerpoint-energy-completes-sale-its-louisiana-and-mississippi>, accessed 02/04/2026

⁷ <https://investors.centerpointenergy.com/news-releases/news-release-details/centerpoint-energy-announces-sale-its-ohio-natural-gas-business>, accessed 02/04/2026

square miles and includes 215 cities and villages. Among the largest areas served are Bay City, Flint, Jackson, Kalamazoo, Lansing, Macomb, Midland, Royal Oak, Saginaw and Livonia. More than one-half of the utility's gas customers are in metro Detroit.

The company has one of the largest underground natural gas storage capacities in the country. This allows the company to economically purchase and store gas during warm months, for eventual use in the winter heating season.⁸

Why was the company included?

CMS Energy Corporation provides both electric and natural gas service to customers. Electric customers comprise approximately 51% of its customer base and natural gas customers represent roughly 49% with the service territory for these operations in the Midwest. CMS Energy Corporation has been included in both the electric and gas distribution segments because it is consistent with the electric and gas distribution companies we are valuing.

DTE Energy Company

Company Summary from Value Line:

DTE Energy Company is a holding company for DTE Electric (formerly Detroit Edison), which supplies electricity in Detroit and a 7,600-square-mile area in southeastern Michigan, and DTE Gas (formerly Michigan Consolidated Gas). Customers: 2.2 mill. electric, 1.3 mill. gas. Has various nonutility operations. Electric revenue breakdown: residential, 50%; commercial, 33%; industrial, 11%; other, 6%. Generating sources: coal, 67%; nuclear, 17%; gas, 1%; purchased, 15%. Fuel costs: 62% of revenues. '24 reported deprec. rates: 4.2% electric, 2.9% gas. Has 10,600 employees.

Additional Company Information from Website:

DTE Energy (NYSE: DTE) is a Detroit-based diversified energy company involved in the development and management of energy-related businesses and services nationwide. Its operating units include an electric company serving 2.3 million customers in Southeast Michigan and a natural gas company serving 1.3 million customers in Michigan. The DTE portfolio also includes non-utility businesses focused on industrial energy services, renewable natural gas, and energy marketing and trading. As one of Michigan's leading corporate citizens, DTE Energy is a force for growth and prosperity in the 450 Michigan communities it serves in a variety of ways, including philanthropy, volunteerism and economic progress. Information about DTE Energy is available on the DTE Energy home page, X account and Facebook page. DTE Energy has more than 10,000 employees in utility and non-utility subsidiaries involved in a wide range of energy-related businesses. The company's growing non-utility businesses are built around the strengths, skills and assets of DTE Energy's electric and gas utilities. DTE Electric generates, transmits and distributes electricity to 2.3 million customers in southeastern Michigan. With an 11,084 megawatt system capacity, the company uses coal, nuclear fuel, natural gas, hydroelectric pumped storage and renewable sources to generate its electrical output. Founded in 1903, DTE Electric is the largest electric utility in Michigan and one of the largest in the nation. At 1.1 million kilowatts, the company's Fermi 2 nuclear power plant represents 30% of Michigan's total nuclear generation capacity. This single plant is capable of producing enough electricity to serve a city

⁸ <https://www.cmsenergy.com/about-cms-energy/default.aspx>, accessed 1/27/2026

of about one million people. Fermi 2 has been providing reliable, cost-effective power to DTE Electric customers for more than 20 years. The plant also has been designated as one of the nation's best-performing nuclear facilities. DTE Gas is engaged in the purchase, storage, transmission, distribution and sale of natural gas to approximately 1.3 million customers in Michigan. The company owns and operates 278 storage wells representing approximately 34 percent of the underground working capacity in Michigan. There is more gas storage capacity in Michigan than in any other state. Founded in 1849, DTE Gas is one of the nation's largest natural gas utilities.⁹

Why was the company included?

DTE Energy Company provides electricity and gas to customers. Electric customers represent almost 63% of customers and gas customers represent 37% of customers. This company is similar to the electric companies that we are responsible for valuing. The company serves an electric service territory in the Midwest.

Evergy Inc.

Company Summary from Value Line:

Evergy Inc. was formed through the merger of Great Plains Energy and Westar Energy in June of 2018. Through its subsidiaries (now doing business under the Evergy name), provides electric service to 1.6 million customers in Kansas and Missouri, including the greater Kansas City area. Electric revenue breakdown: residential, 32%; commercial, 27%; industrial, 15%; wholesale, 13%; other, 13%. Generating sources: coal, 54%; nuclear, 17%; purchased, 29%. Fuel costs: 28% of revenues. '24 reported deprec. rate: 3%. Has 4,900 employees.

Additional Company Information from Website:

Evergy Inc. (NASDAQ: EVRG), through its operating subsidiaries Evergy Kansas Central, Evergy Metro, and Evergy Missouri West, provides clean, safe and reliable energy to 1.7 million customers in Kansas and Missouri. By combining Great Plains Energy and Westar Energy in 2018, a leading energy company was created that provides value to shareholders and a stronger company for customers. As a combined company, our mission is to empower a better future. Today, half of the power supplied by Evergy comes from clean sources, creating more reliable energy with less impact to the environment. And as the industry evolves, we will continue to innovate and adopt new technologies that give our customers better ways to manage their energy use.¹⁰

Why was the company included?

Evergy Inc. was created through the merger of Great Plains Energy Incorporated and Westar Energy Inc. in 2018. This company is in the Electric Utility (Central) Value Line Industry. This company is similar to the electric companies that we are responsible for valuing. The company serves an electric service territory in the Midwest.

MGE Energy Inc.

Company Summary from Value Line:

⁹ <https://newlook.dteenergy.com/wps/wcm/connect/dte-web/home/about-dte/common/about-dte/about-dte>, accessed 1/27/2026

¹⁰ <https://investors.evergy.com/about-evergy/company-information>, accessed 1/27/2026

MGE Energy Inc. is a holding company for Madison Gas and Electric Company (MGE), which provides electric service to 167,000 customers in Dane County and gas service to 178,000 customers in seven counties in Wisconsin. Electric revenue breakdown: residential, 35%; commercial, 51%; industrial, 3%; other, 11%. Generating sources: coal, 40%; gas, 17%; renewables, 21%; purchased power, 13%. Fuel costs: 12% of revenues. '24 reported depreciation rates: electric, 12%; gas, 2.4%; nonregulated, 1.1%. Has about 710 employees.

Additional Company Information from Website:

Madison Gas and Electric (MGE) generates and distributes electricity to 167,000 customers in Dane County and purchases and distributes natural gas to 178,000 customers in seven south-central and western Wisconsin counties. MGE's roots in the Madison area date back more than 150 years.¹¹

Why was the company included?

MGE Energy Inc. provides both electric and natural gas service to customers. Electric customers comprise approximately 48% of its customer base and natural gas customers represent roughly 52% with the service territory for these operations in the Midwest. MGE Energy Inc. has been included in both the electric and gas distribution segments because it is consistent with the electric and gas distribution companies we are valuing.

OGE Energy Corporation

Company Summary from Value Line:

OGE Energy Corp. is a holding company for Oklahoma Gas and Electric Company (OG&E), which supplies electricity to 879,000 customers in Oklahoma (84% of electric revenues) and western Arkansas (8%); wholesale is (8%). Owns 3% of Energy Transfer's limited partnership units. Electric revenue breakdown: residential, 44%; commercial, 25%; industrial, 11%; oilfield, 10%; other, 10%. Generating sources: gas, 25%; coal, 21%; wind, 6%; purchased, 48%. Fuel costs: 58% of revenues. '24 reported depreciation rate (utility): 2.6%. Has 2,200 employees.

Additional Company Information from Website:

We not only serve nearly 900,000 electric customers, we also power communities in other ways. We're the largest ad valorem taxpayer in Oklahoma, contributing approximately \$90 million annually, which funds public education, libraries and career techs. Our employees also generously give their time and money to support their communities. With about 7,116 megawatts of capacity, our generation portfolio represents a balanced approach to generating electricity through a diversity of fuel types—67 percent natural gas, 22 percent coal and 7 percent renewable energy (solar and wind). This fuel diversity allows us to maintain system reliability and affordable rates for the people we serve. We continuously seek opportunities to bring value to our customers and investors through the use of new technology. We were the first public utility in our area to install a Smart Grid, so all customers can participate in the management of their energy use and costs.¹²

Why was the company included?

¹¹ <https://www.mgeenergy.com/en/about/about-mge-energy/>, accessed 1/27/2026

¹² https://www.oge.com/web/portal/label_ord/who-we-are/what-we-do/overview, accessed 1/27/2026

OGE Energy Corporation provides electricity to customers. This company is similar to the electric companies that we are responsible for valuing. The company serves an electric service territory in Oklahoma and Arkansas.

Otter Tail Corporation*Company Summary from Value Line:*

Otter Tail Corporation is the parent of Otter Tail Power Company, which supplies electricity to 133,000 customers in Minnesota (52% of retail electric revenues), North Dakota (38%), and South Dakota (10%). Electric rev. breakdown: residential, 32%; commercial & farms, 36%; industrial, 30%; other, 2%. Generating sources: coal, 38%; wind & other, 18%; purchased, 44%. Fuel costs: 10% of revenues. Also has operations in manufacturing and plastics (61% of '24 operating income). '24 deprec. rate: 3.0%. Has 2,500 employees.

Additional Company Information from Website:

Otter Tail Corporation employs a diversified business model with a regulated electric utility at its core, completed by manufacturing and plastic pipe businesses. Our mission is to deliver value to our shareholders, customers and employees by building strong electric and manufacturing platforms.

Our electric platform provides predictable earnings through consistent rate base growth while our manufacturing platform regularly produces accretive returns and incremental cash. This strategic mix of businesses has enabled us to produce a utility industry leading return on equity over the long term.

Our diversified business model continues to serve us and our shareholders well – it allows us to fund our electric platform's significant, customer-focused capital investment plan without the need for external equity.¹³

Why was the company included?

Otter Tail Corporation provides electricity to customers. This company is similar to (and is one of) the electric companies that we are responsible for valuing. The company serves an electric service territory in the Midwest.

WEC Energy Group Inc.*Company Summary from Value Line:*

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. Electric revenue breakdown: residential, 39%; small commercial & industrial, 32%; large commercial & industrial, 21%; other, 8%. Generating sources: coal, 36%; gas, 28%; renewables, 5%; purchased, 31%. Fuel costs: 40% of revenues. '24 reported deprec. rates: 2.4%-3.1%. Has 7,017 employees.

Additional Company Information from Website:

We are one of the nation's largest electric generation and distribution and natural gas delivery

¹³ <https://www.ottertail.com/investors/corporate-profile/default.aspx>, accessed 1/27/2026

holding companies, with the operational expertise and financial resources to serve the Midwest's energy needs safely, reliably and responsibly. Our subsidiaries focus on reliable service, customer satisfaction and shareholder value. Together, we provide energy services to 4.7 million customers in Wisconsin, Illinois, Michigan and Minnesota. Our combined assets allow operating efficiencies across 72,000 miles of electric distribution lines, 46,400 miles of natural gas distribution and transmission lines, and 8,300 megawatts of reliable power capacity. Our family of companies is committed to delivering world-class reliability and the very best customer care anywhere. Customers are the heart of our business, and we work every day to help grow and support communities where we provide vital energy services. As a Fortune 500 company, we value and develop our employees who are making a difference in a mission that matters. Principal energy companies. We Energies delivers electricity and natural gas to more than 2.3 million customers in Wisconsin. Wisconsin Public Service delivers electricity and natural gas to more than 809,000 customers in Wisconsin. Peoples Gas delivers natural gas to approximately 891,000 customers in the city of Chicago. North Shore Gas delivers natural gas to approximately 165,000 customers in Chicago's northern suburbs. Minnesota Energy Resources delivers natural gas to approximately 251,000 customers in Minnesota. Michigan Gas Utilities delivers natural gas to approximately 185,000 customers in Michigan. Upper Michigan Energy Resources delivers electricity and natural gas to more than 42,000 customers in Michigan's Upper Peninsula. Bluewater Gas Storage provides natural gas storage and hub services to 1.5 million natural gas customers of We Energies and Wisconsin Public Service.¹⁴

Why was the company included?

WEC Energy Group Inc. provides both electric and natural gas service to customers. Electric customers comprise approximately 36% of its customer base and natural gas customers represent roughly 64% with the service territory for these operations in the Midwest. WEC Energy Group Inc. has been included in both the electric and gas distribution segments because it is consistent with the electric and gas distribution companies we are valuing.

Xcel Energy Inc.

Company Summary from Value Line:

Xcel Energy Inc. is the parent of: Northern States Power Company (NSP), which supplies electricity to MN, WI, ND, SD & MI & gas to MN, WI, ND & MI; Public Service Company of Colorado (PSCo), which supplies electricity & gas to CO; & Southwestern Public Service Company (SPS), which supplies electricity to TX and NM. Customers: 3.9 mill. electric, 2.2 mill. gas. Electric revenues: resid'l, 32%; comm'l & ind'l, 49%; other, 19%. Purchases 35% of power, owns 65%. Total electric mix: wind, 33%; gas, 33%; coal, 15%, nuclear, 10%, solar/other, 9%. Fuel cost: 35% of revenues. '24 deprec. rate: 3.8%. Employs 11,380.

Additional Company Information from Website:

Xcel Energy is a major U.S. electricity and natural gas company, with operations in 8 Western and Midwestern states. Xcel Energy provides a comprehensive portfolio of energy-related products and services to millions of electricity and natural gas customers through its regulated operating companies. Northern States Power Company - Minnesota (NSPM) Electric and natural gas utility serving Minnesota,

¹⁴ <https://www.wecenergygroup.com/about/aboutus.htm>, accessed 1/27/2026

North Dakota, and South Dakota. Northern States Power Company - Wisconsin (NSPW) Electric and natural gas utility serving Wisconsin and Michigan. Public Service Company of Colorado (PSCo) Electric and natural gas utility serving Colorado. Southwestern Public Service Company (SPS) Electric utility serving Texas and New Mexico.¹⁵

Why was the company included?

Xcel Energy Inc. provides electricity and gas to customers. Electric customers represent 64% of customers and gas customers represent 36% of customers. This company is similar to (and is one of) the electric companies that we are responsible for valuing. The company serves an electric service territory in the Midwest.

Companies Not Included in the Electric Market Segment

Avista Corporation

Company Summary from Value Line:

Avista Corporation (formerly The Washington Water Power Company) supplies electricity & gas in eastern Washington & northern Idaho. Supplies electricity to part of Alaska & gas to part of Oregon. Customers: 422,000 electric, 383,000 gas. Acq'd Alaska Electric Light and Power 7/14. Sold Ecova energy-management sub. 6/14. Electric revenue: residential, 36%; commercial, 29%; industrial, 9%; wholesale, 21%; other, 5%. Generating sources: gas & coal, 43%; hydro, 44%; purch., 42%. Fuel costs: 35% of rev. '24 depr. rate (Avista Utilities): 3.5%. Has 1,950 employees.

Additional Company Information from Website:

We are an energy company involved in the production, transmission and distribution of energy as well as other energy-related businesses. Avista Utilities is our operating division, providing electricity to nearly 418,000 customers and natural gas to about 382,000 customers across 30,000 square miles and four northwestern states. Alaska Energy and Resources Company, an Avista subsidiary, provides retail electric service in the city and borough of Juneau through its subsidiary Alaska Electric Light and Power Company. Avista's history of innovations is rooted in the renewable energy we've generated since our founding in 1889.¹⁶

¹⁵ <https://investors.xcelenergy.com/corporate-information/corporate-profile/default.aspx>, accessed 1/27/2026

¹⁶ <https://investor.avistacorp.com/>, accessed 1/27/2026

Why was the company not included?

Avista is in the Electric Utility (West) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

Black Hills Corporation*Company Summary from Value Line:*

Black Hills Corporation is a holding company for Black Hills Energy, which serves 222,340 electric customers in CO, SD, WY and MT, and 1.12 million gas customers in NE, IA, KS, CO, WY, and AR. Has coal mining sub. Acq'd utility ops. from Aquila 7/08; SourceGas 2/16. Discontinued gas marketing in '11; gas & oil E&P in '17. '24 Elec. rev. breakdown: residential, 34%; commercial, 38%; industrial, 23%; other, 5%. Generating sources: coal, 35%; gas, 26%; wind, 9%; purchased, 30%. Fuel costs: 34% of revs. '24 deprec. rate: 2.9%-3.5%. Has 2,874 employees.

Additional Company Information from Website:

Black Hills Corp. (NYSE: BKH) is a customer focused, growth-oriented utility company with a tradition of exemplary service and a vision to be the energy partner of choice. Based in Rapid City, South Dakota, we serve over 1.3 million natural gas and electric utility customers in eight states: Arkansas, Colorado, Iowa, Kansas, Montana, Nebraska, South Dakota and Wyoming.¹⁷

Annual Information Update:

On August 18, 2025, Black Hills Corp. and NorthWestern Energy Group Inc. approved a definitive agreement to combine in an all-stock merger. The transaction is anticipated to close within 12 months, subject to each company's shareholder, and regulatory approvals.¹⁸

Why was the company not included?

Black Hills Corporation provides electric and gas to customers. Electric customers represent approximately 17% of customers and gas customers represent 83% of customers. This company is similar to the electric companies that we are responsible for valuing. The company engages in providing energy in the Midwest. It was determined that the pending merger with NorthWestern Energy Group Inc., was significant enough that we removed Black Hills Corp. as a guideline company for the 2026 study.

Consolidated Edison Inc.*Company Summary from Value Line:*

Consolidated Edison Inc. (ConEd) is a holding company for Consolidated Edison Company of New York (CECONY), which sells electricity, gas, and steam in most of NY city and Westchester County. ConEd also owns Orange and Rockland utilities (O&R), which operates in southeastern NY and northern NJ.

¹⁷ <https://www.blackhillscorp.com/about>, accessed 1/27/2026

¹⁸ <https://ir.blackhillscorp.com/news-releases/news-release-details/black-hills-corp-and-northwestern-energy-combine-all-stock>, accessed 02/04/2026

ConEd has 4.0 mill. electric and 1.2 mill. gas customers. Sold its portfolio of renewable power generation for \$6.8 billion (3/23). Entered into midstream gas joint venture 6/16; sold it 7/21. Purchases most of its power. Fuel costs: 21.6% of revenues. '24 depreciation rate for CECONY: 3.6%. Employs about 15,100.

Additional Company Information from Website:

We operate one of the world's largest energy delivery systems. Founded in 1823 as the New York Gas Light company, our electric, gas, and steam service now provides energy for the 10 million people who live in New York City and Westchester County. We're constantly looking toward the future and exploring ways to innovate and take advantage of developing technology. But, more than anything, we're listening to you and working hard to give you cleaner, more efficient energy choices, and more control over when and how you use your power.¹⁹

Why was the company not included?

Consolidated Edison is in the Electric Utility (East) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

Dominion Energy Inc.

Company Summary from Value Line:

Dominion Energy Inc. is a holding company for Virginia Power, North Carolina Electric, and South Carolina Electric & Gas. It provides regulated electricity service to 3.6 million homes and businesses in VA, NC, & SC, and regulated natural gas service to 500,000 customers in SC. Acquired SCANA 1/19. Sold East Ohio Gas, PSNC, and Questar in 2024 for \$14 bill. Electric rev. breakdown: resid'l, 45%; commercial, 39%; ind'l, 7%; other, 9%. Generating sources: gas, 40%; nuclear, 26%; coal, 5%; renewable, 7%; purchased, 22%. Power/fuel costs: 27% of rev. Deprec. rates: 2.3%-4.0%. Employs 14,700.

Additional Company Information from Website:

Dominion Energy (NYSE: D), headquartered in Richmond, Va., provides regulated electricity service to 3.6 million homes and businesses in Virginia, North Carolina, and South Carolina, and regulated natural gas service to 500,000 customers in South Carolina. The company is one of the nation's leading developers and operators of regulated offshore wind and solar power and the largest producer of carbon-free electricity in New England. The company's mission is to provide the reliable, affordable, and increasingly clean energy that powers its customers every day.²⁰

Why was the company not included?

Dominion Energy is in the Electric Utility (East) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

¹⁹ <https://www.coned.com/en/about-us/company-information>, accessed 1/2/2026

²⁰ <https://investors.dominionenergy.com/home/default.aspx>, accessed 1/27/2026

Duke Energy Corporation*Company Summary from Value Line:*

Duke Energy Corporation is a holding company for utilities with 8.4 mill. elec. customers in NC, FL, IN, SC, OH, and KY, and 1.7 mill. gas customers in OH, KY, NC, SC, and TN. Owns independent power plants & has 17.5% stake in National Methanol in Saudi Arabia. Acq'd Progress Energy 7/12; Piedmont Natural Gas 10/16; discontinued most int'l ops. in '16. Electric revenue breakdown: residential, 34%; commercial, 31%; industrial, 18%; other, 17%. Generating sources: gas, 35%; nuclear, 27%; coal, 14%; other, 2%; purchased, 22%. Fuel costs: 32% of revs. '24 reported deprec. rate: 3.0%. Has 26,400 employees.

Additional Company Information from Website:

Duke Energy (NYSE: DUK), a Fortune 150 company headquartered in Charlotte, N.C., is one of America's largest energy holding companies. The company's electric utilities serve 8.4 million customers in North Carolina, South Carolina, Florida, Indiana, Ohio and Kentucky, and collectively own approximately 54,800 megawatts of energy capacity. Its natural gas utilities serve 1.7 million customers in North Carolina, South Carolina, Tennessee, Ohio and Kentucky.²¹

Why was the company not included?

Duke Energy is in the Electric Utility (East) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

Edison International (Formerly SCE Corp.)*Company Summary from Value Line:*

Edison International is a holding company for Southern California Edison Company (SoCal Edison), which supplies electricity to 5.28 mill. customers in a 50,000 sq. mi. area in central, coastal, & southern CA (excl. Los Angeles & San Diego). Edison Energy is an energy svcs. co. Disc. Edison Mission Energy (independent power producer) in '12. Elec. rev. breakdown: residential, 40%; commercial, 43%; industrial, 3%; other, 14%. Generating sources: nuclear, 9%; gas, 5%; hydroelectric, 6%; purchased, 80%. Power costs: 34% of revs. '24 reported depr. rate: 4.1%. Employs 13,500.

Additional Company Information from Website:

At Edison International, our vision is to lead the transformation of the electric power industry toward a clean energy future. Through our subsidiaries, we generate and distribute electric power, as well as provide energy services and technologies, including renewable energy. With 136 years of innovation in our history, our company is well-positioned and prepared for the work that lies ahead as we focus on opportunities in clean energy, efficient electrification, the grid of the future, and customer choice to strengthen and grow our business.²²

²¹ <https://www.duke-energy.com/our-company/about-us>, accessed 1/27/2026

²² <https://www.edison.com/about-us>, accessed 1/27/2024

Why was the company not included?

Edison International is in the Electric Utility (West) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

Entergy Corporation*Company Summary from Value Line:*

Entergy Corporation supplies electricity to 3 million customers through subsidiaries in Arkansas, Louisiana, Mississippi, Texas, and New Orleans (regulated separately from Louisiana). Distributes gas to 206,000 customers in Louisiana. Is selling its last nonutility nuclear unit (shut down 5/22). Electric revenue breakdown: residential, 37%; commercial, 24%; industrial, 27%; other, 12%. Generating sources: gas, 68%; nuclear, 22%; coal, 9%; hydro and solar, 1%. Fuel costs: 32% of revenues. '24 reported depreciation rate: 2.8%. Has 11,707 employees.

Additional Company Information from Website:

Entergy is a Fortune 500 company that powers life for 3 million customers through our operating companies in Arkansas, Louisiana, Mississippi and Texas. We're investing in the reliability and resilience of the energy system while helping our region transition to cleaner, more efficient energy solutions. With roots in our communities for more than 100 years, Entergy is a nationally recognized leader in sustainability and corporate citizenship. Since 2018, we have delivered more than \$100 million in economic benefits each year to local communities through philanthropy, volunteerism and advocacy. Entergy is headquartered in New Orleans, Louisiana, and has approximately 12,000 employees.²³

Why was the company not included?

Entergy Corporation serves an electric service territory in Arkansas, Louisiana, Mississippi, New Orleans, and Texas. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

Eversource Energy*Company Summary from Value Line:*

Eversource Energy (formerly Northeast Utilities) is the parent of 12 regulated utilities with about 4.5 million electric, natural gas, and water customers. Supplies power to most of Connecticut and gas to part of CT; 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.: residential, 56%; commercial/indus'l/other, 44%. Fuel costs: 31.4% of revs. '24 reported depr. rate: 3.2%. Employs about 10,680.

Additional Company Information from Website:

At Eversource, Energy Brings Us Together. We live in the neighborhoods we serve, working for a better

²³ <https://www.entergy.com/about>, accessed 1/27/2026

tomorrow. We're nearly 10,000 people committed to providing safe, reliable and sustainable electric, gas and water service in Massachusetts, Connecticut and New Hampshire. Our operations trace their roots back to the middle of the 19th century. Through the decades, many companies have come together to form Eversource, New England's largest energy delivery company. Today, we're proud to serve 4.4 million customers. Like our predecessor companies, we're focused on supporting every one of our communities, to power the possible for New England.²⁴

Why was the company not included?

Eversource Energy is in the Electric Utility (East) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

Exelon Corporation

Company Summary from Value Line:

Exelon Corporation is a holding company for Commonwealth Edison (ComEd), PECO Energy, Baltimore Gas and Electric (BGE), Pepco, Delmarva Power (DPL), & Atlantic City Electric (ACE). Has 9.1 mill. elec., 1.3 mill. gas customers. Spun off Constellation Energy (nonregulated generating & energy-marketing ops.) 2/22. Acq'd Constellation Energy 3/12; Pepco Holdings 3/16. Elec. rev. breakdown: residntl., 54%; small commercl. & indstrl., 16%; large commercl. & indstrl., 17%; other, 13%. Fuel costs: 48%of revs. '24 deprec. rates: 2.8%-8.7% elec., 2.1% gas. Has 18,700 empls.

Additional Company Information from Website:

Exelon is recognized as an industry leader with best-in-class operations, with utilities achieving top quartile or better performance in customer satisfaction, reduced outage frequency, and faster service restoration. This strong record of reliability and customer satisfaction is reinforced by substantial infrastructure investments across the fleet. Exelon (Nasdaq: EXC) is a Fortune 200 company and the nation's largest utility company, serving more than 10.5 million customers through six fully regulated transmission and distribution utilities — Atlantic City Electric, BGE, ComEd, Delmarva Power, PECO, and Pepco. Exelon's 20,000 employees dedicate their time and expertise to supporting our communities through reliable, affordable and efficient energy delivery, workforce development, equity, economic development and volunteerism.²⁵

Why was the company not included?

Exelon is in the Electric Utility (East) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

FirstEnergy Corporation

Company Summary from Value Line:

FirstEnergy Corp. is a holding company for Ohio Edison, Pennsylvania Power, Cleveland Electric, Toledo Edison, Metropolitan Edison, Penelec, Jersey Central Power & Light, West Penn Power, Potomac Edison,

²⁴ <https://www.eversource.com/content/general/about/about-us/about-us/welcome-to-eversource>, accessed 1/27/2026

²⁵ <http://www.exeloncorp.com/company/about-exelon>, accessed 1/27/2026

& Mon Power. Provides electric service to about 6.3 million customers in OH, PA, NJ, WV, MD, & NY. Acq'd Allegheny Energy 2/11. Electric revenue breakdown: residential, 60%; commercial, industrial & other, 40%. Purchases most of its power. Power costs: 32.5% of revenues. 2024 reported depreciation rate: 2.9%. Employs about 12,300.

Additional Company Information from Website:

FirstEnergy is dedicated to integrity, safety, reliability and operational excellence. Its electric distribution companies form one of the nation's largest investor-owned electric systems, serving more than 6 million customers in Ohio, Pennsylvania, New Jersey, West Virginia, Maryland and New York. The company's transmission subsidiaries operate approximately 24,000 miles of transmission lines that connect the Midwest and Mid-Atlantic regions. FirstEnergy's regulated distribution companies form one of the nation's largest investor-owned electric systems, based on serving 6 million customers in the Midwest and Mid-Atlantic regions. Stretching from the Ohio-Indiana border to the New Jersey shore, the companies operate a vast infrastructure of more than 269,000 miles of distribution lines and are dedicated to providing customers with safe, reliable and responsive service. FirstEnergy's transmission operations include approximately 24,000 miles of lines and two regional transmission operation centers. The company's successful, 10-year Energizing the Future transmission investment initiative resulted in reliability improvements, operating flexibility, enhanced performance and system security while building a highly successful and valued transmission business that helped position FirstEnergy for success. As the needs of our customers evolve, critical investments to continue strengthening and modernizing the transmission system will continue through our Energize365 program, launched in 2024. FirstEnergy controls approximately 3,599 megawatts from regulated scrubbed coal, solar and hydro facilities in West Virginia and Virginia.²⁶

Why was the company not included?

FirstEnergy is in the Electric Utility (East) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

Fortis Inc.

Company Summary from Value Line:

Fortis Inc.'s main focus is electricity, hydroelectric, and gas utility operations (both regulated and nonregulated) in the United States, Canada, and the Caribbean. Has 2 mill. electric, 1.3 mill. gas customers. Owns UNS Energy (Arizona), Central Hudson (New York), FortisBC Energy (British Columbia), FortisAlberta (Central Alberta), and Eastern Canada (Newfoundland). Sold commercial real estate and hotel property assets in 2015. Acquired ITC Holdings 10/16. Fuel costs: 31% of revs. '24 reported deprec. rate: 2.6%. Has 9,100 employees.

Additional Company Information from Website:

Fortis has nine regulated electric and gas utilities in Canada, the U.S., and the Caribbean. Our 9,600 employees serve 3.5 million electricity and natural gas customers. We're united by our shared purpose

²⁶ <https://www.firstenergycorp.com/about.html>, accessed 1/24/2026

to deliver a cleaner energy future and driven by values that focus on our customers, communities, and employees. Fortis has increased annual dividends paid to our shareholders for 52 consecutive years. Ninety-four per cent of our assets are dedicated to the transmission and distribution of safe and reliable electricity and natural gas to our customers. We prioritize emissions reductions and expect ninety-nine per cent of our assets to be focused on energy delivery and renewable generation by 2035.²⁷

Why was the company not included?

Although Fortis is similar to the electric companies that we are responsible for valuing, and it is in the Electric Utility (Central) Value Line Industry, they trade on the Toronto and New York Stock Exchanges. All data provided by Value Line is in Canadian Dollars, making conversion to U.S. dollars necessary. Since there are enough comparable companies, we will not use this company. This also limits the number of additional calculations that can decrease the reliability of the data.

Hawaiian Electric Industries Inc.

Company Summary from Value Line:

Hawaiian Electric Industries (HEI) is the parent company of Hawaiian Electric Company Inc. (HECO), American Savings Bank (ASB), and Pacific Current. HECO & its subs., Maui Electric Co. (MECO) & Hawaii Electric Light Co. (HELCO), supply electricity to 472,536 customers on Oahu, Maui, Molokai, Lanai, & Hawaii. Operating companies' systems are not interconnected. Elec. rev. breakdown: residential, 32%; commercial, 36%; industrial, 32%; other, less than 1%. Generating sources: oil, 79%; biofuel, 3%; purchased, 18%. Fuel costs: 55% of revs. '24 reported deprec. rate:3.2%. Employees about 2,600.

Additional Company Information from Website:

Inspired by an enlightened king more than a century ago, Hawaii was an early adopter of electricity to light homes and power industry. The ingenuity in creating and delivering power on these isolated islands is a unique story of innovation, connectivity and progressive thinking that continues today.

Hawaiian Electric serves 95 percent of Hawaii's 1.4 million residents on the islands of Oahu, Maui, Hawaii, Lanai and Molokai. Established in 1891, Hawaiian Electric is committed to empowering its customers and communities with safe, reliable, resilient, affordable, clean energy.²⁸

Why was the company not included?

Hawaiian Electric is in the Electric Utility (West) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

Hydro One Limited

Company Summary from Value Line:

Hydro One Limited is a transmission and distribution utility serving nearly all of Ontario, Canada.

²⁷ <https://www.fortisinc.com/about-us/about-us#profile>, accessed 1/27/2026

²⁸ <https://www.hei.com/company-profile/about-hawaiian-electric/default.aspx>, accessed 1/27/2026

Operates through subsidiaries Hydro One Networks (transmissions & distribution) and Hydro One Remote Communities. Serves 1.5 million electricity customers/ Spun off from Ontario government via IPO in 2015. Acquired Orillia Power in 2020; Avista deal terminated 2019. Transmission rates regulated by Ontario Energy Board (OEB). 2024 depreciation rates: 2.5%-5.6% across asset classes, rev. Has 9,700 employees.

Additional Company Information from Website:

Hydro One is Ontario's largest electricity transmission and distribution service provider. We distribute electricity across Ontario to nearly 1.5 million predominantly rural customers, or approximately 26% of the total number of customers in Ontario. In November 2015, we became a publicly traded company on the Toronto Stock Exchange (H).²⁹

Why was the company not included?

Hydro One Limited is part of Value Line's Electric Utility (East) industry, but it is similar to the electric companies that we are responsible for valuing. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

IDACORP Inc.

Company Summary from Value Line:

IDACORP Inc. is a holding company for Idaho Power Company, a regulated electric utility that serves 649,000 customers throughout a 24,000-square-mile area in southern Idaho and eastern Oregon (population: 1.4 million). Most of the company's revenues are derived from the Idaho portion of its service area. Revenue breakdown: residential, 38%; commercial, 22%; industrial, 15%; irrigation, 11%; other, 14%. Generating sources: hydro, 54%; steam fired, 18%; gas, 28%; purchased, 33%. Fuel costs: 14% of revenues. '24 depreciation rate: 12.2%. Has 2,141 employees.

Additional Company Information from Website:

Boise, Idaho-based IDACORP is a holding company comprised of Idaho Power Company, a regulated electric utility; IDACORP Financial, a holder of affordable housing projects and other real estate investments; and Ida-West Energy, an operator of small hydroelectric generation projects that satisfy the requirements of the Public Utility Regulatory Policies Act of 1978. IDACORP was formed Oct. 1, 1998, following approval by Idaho Power shareholders, the Federal Energy Regulatory Commission and the public utility commissions of Idaho, Oregon, Nevada and Wyoming (states where IDACORP has conducted business or has holdings). Under the holding company structure, Idaho Power Company is the primary subsidiary. This regulated utility, headquartered in vibrant and fast-growing Boise, Idaho, has been a locally operated energy company since 1916. Today, it serves a 24,000-square-mile service area in Idaho and Oregon. Idaho Power's goal to provide 100% clean energy by 2045 builds on its long history as a clean-energy leader that provides reliable service at affordable prices. With 17 low-cost hydropower projects at the core of its diverse energy mix, Idaho Power's residential, business, and agricultural customers pay among the nation's lowest prices for electricity. It's 2,100 employees proudly

²⁹ <https://www.hydroone.com/about>, accessed 2/6/2026

serve more than 640,000 customers with a culture of safety first, integrity always, and respect for all.³⁰

Why was the company not included?

IDACORP is part of Value Line's Electric Utility (West) industry, but it is similar to the electric companies that we are responsible for valuing. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

NextEra Energy Inc.

Company Summary from Value Line:

NextEra Energy Inc. is a holding company for Florida Power & Light Co. (FPL), which provides electricity to more than six million customer accounts in eastern, southern, & northwestern Florida. NextEra Energy Resources is a nonregulated power generator with nuclear, gas, & renewables. Has 51.4% stake in Next-Era Energy Partners. Acquired Gulf Power 1/19; Florida City Gas 7/18. Revenue: residential, about 55%; commercial/industrial/other, 45%. Generating sources: gas, 72%; nuclear, 19%; solar, 9%. Fuel costs: 20.3% of revenues. '24 depreciation rate: 3.5%. Employs about 16,800.

Additional Company Information from Website:

NextEra Energy Inc. (NYSE: NEE) is one of the largest electric power and energy infrastructure companies in North America and is a leading provider of electricity to American homes and businesses. Headquartered in Juno Beach, Florida, NextEra Energy is a Fortune 200 company that owns Florida Power & Light Company, America's largest electric utility, which provides reliable electricity to approximately 12 million people across Florida. NextEra Energy also owns one of the largest energy infrastructure development companies in the U.S., NextEra Energy Resources LLC. NextEra Energy and its affiliated entities are meeting America's growing energy needs with a diverse mix of energy sources, including natural gas, nuclear, renewable energy and battery storage.³¹

Why was the company not included?

NextEra Energy is in the Electric Utility (East) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota. This company has nuclear plants in Wisconsin as well as renewable energy generators in Minnesota. However, these operations are very small considering the overall company.

NorthWestern Energy Group Inc.

Company Summary from Value Line:

NorthWestern Energy Group Inc. supplies electricity & gas in the Upper Midwest and Northwest, serving 467,700 electric customers in Montana and South Dakota and 307,600 gas customers in Montana, South Dakota, and Nebraska. Electric revenue breakdown for 2024: residential, 48%;

³⁰ <http://www.idacorpinc.com/about-us/at-a-glance>, accessed 1/27/2026

³¹ <http://www.investor.nexteraenergy.com>, accessed 1/27/2026

commercial, 46%; industrial, 4%; and other, 2%. Generating sources: coal, 24%; hydro, 26%; wind, 7%; natural gas, 25%; purchased power, 18%. Fuel costs: 29% of revenues. 2024 reported depreciation rate: 2.9%. Had 1,585 employees as of 12/31/24.

Additional Company Information from Website:

For more than 100 years, NorthWestern Energy has been committed to delivering safe, reliable and innovative energy solutions. We serve gas and electric to customers in the western two-thirds of Montana and eastern South Dakota. We also have gas service in Nebraska, and serve electricity to Yellowstone National Park. We own and operate a diverse generation fleet of wind, water, natural gas and coal-fired resources and the high-voltage electric transmission system and distribution system. We also own and operate natural gas production, transmission and distribution systems.³²

Annual Information Update:

On August 18, 2025, NorthWestern Energy Group Inc. and Black Hills Corp. approved a definitive agreement to combine in an all-stock merger. The transaction is anticipated to close within 12 months, subject to each company's shareholder, and regulatory approvals.³³

Why was the company not included?

NorthWestern Energy Group Inc. provides electricity and gas to customers. Electric customers represent 60% of customers and gas customers represent 40% of customers. This company is similar to the electric companies that we are responsible for valuing. This company operates in the Midwest. It was determined that the pending merger with Black Hills Corporation, was significant enough that we removed NorthWestern Energy Group Inc. as a guideline company for the 2026 study.

Ormat Technologies Inc.

Company Summary from Value Line:

Ormat Technologies Inc., together with its subsidiaries, provides geothermal and recovered energy power and products through two operating segments. Its electricity division, 80% of 2024 revs., develops, constructs, owns, and operates geothermal power plants that sell electricity. Under the product segment, 16% of revs., the company designs and manufactures power units for geothermal plants and power units for recovered generation and energy storage, 4%. Employs 1,512.

Additional Company Information from Website:

At Ormat Technologies Inc. (NYSE: ORA), we're always on; delivering renewable power and energy solutions to our customers around the clock and around the world.

Clean, reliable energy solutions provided from geothermal power, recovered energy, as well as energy

³² <https://www.northwesternenergy.com/about-us/our-company>, accessed 1/27/2026

³³ <https://northwesternenergy.com/investors/black-hills-corp---northwestern-energy-merger/2025/08/19/black-hills-corp.-and-northwestern-energy-to-combine-in-all-stock-merger-to-create-a-premier-regional-regulated-electric-and-natural-gas-utility-company#news-events-detail> accessed 02/04/2026

storage solutions, is our expertise, commitment and focus.

Built on ingenuity and proven experience, Ormat is recognized globally for developing state-of-the-art, environmentally sound power solutions.

We design, build and supply power generating equipment for our customers' geothermal and recovered energy power plants in over 30 countries. We understand our customers' operating challenges, because we are operators too.

As a geothermal industry leader, we've gained global expertise in exploring, developing, designing, manufacturing, building, owning and operating geothermal power plants in Kenya, Guadalupe, Guatemala, Honduras and the United States.

Our vertically integrated structure enables us to leverage our renewable energy expertise, our core capabilities, and our global experience to supply and develop geothermal, recovered energy, and energy storage solutions.³⁴

Why was the company not included?

Ormat Technologies is part of Value Line's Power industry. It has operating subsidiaries in Minnesota and therefore was considered as a guideline company. However, it was determined Ormat Technologies is not similar enough to the electric companies that we are responsible for valuing.

PG&E Corporation (Pacific Gas and Electric Company Inc.)

Company Summary from Value Line:

PG&E Corporation is a holding company for Pacific Gas and Electric Company and nonutility subsidiaries. Supplies electricity and natural gas to most of northern and central California (population 16 million). Has 5.5 million electric and 4.5 million natural gas customers. Electric revenue breakdown: residential, 40%; commercial, 37%; industrial, 12%; agricultural, 9%; other, about 2%. Power generating sources: nuclear, 40%; renewable, 24%; large hydro, 10%; fossil fuel, 26%. Power and Fuel costs: 17% of revenues. '24 reported depr. rate: 3.56% (utility). Has 23,000 employees.

Additional Company Information from Website:

Pacific Gas and Electric Company, incorporated in California in 1905, is one of the largest utility companies in the United States. Based in Oakland, the company is part of PG&E Corporation. There are approximately 23,000 employees who carry out Pacific Gas and Electric Company's primary business—the transmission and delivery of energy. The company provides natural gas and electric service to approximately 16 million people throughout a 70,000-square-mile service area in northern and central California. Pacific Gas and Electric Company and other energy companies in the state are regulated by the California Public Utilities Commission. The CPUC was created by the state Legislature in 1911. PG&E service area stretches from Eureka in the north to Bakersfield in the south, and from the Pacific Ocean in the west to the Sierra Nevada in the east. 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines. 42,141 miles of natural gas distribution pipelines and

³⁴ <https://www.ormat.com/en/company/welcome/profile/>, accessed 2/6/2026

6,438 miles of transmission pipelines. 5.5 million electric customer accounts. 4.5 million natural gas customer accounts.³⁵

Why was the company not included?

PG&E is in the Electric Utility (West) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

Pinnacle West Capital Corporation

Company Summary from Value Line:

Pinnacle West Capital Corporation is a holding company for Arizona Public Service Company (APS), which supplies electricity to 1.4 million customers in most of Arizona, except about half of the Phoenix metro area, the Tucson metro area, and Mohave County in northwestern Arizona. Discontinued SunCor real estate subsidiary in '10. Electric revenue breakdown: residential, 50%; commercial/industrial, 46%; other, 4%. Generating sources: gas, 24%; nuclear, 21%; coal, 14%; renewables, 19%; purchased, 22%. Fuel costs: 36% of revenues. '24 reported deprec. rate: 3.13%. Has 6,403 employees.

Additional Company Information from Website:

Pinnacle West Capital Corporation (NYSE: PNW) is an investor-owned electric utility holding company based in Phoenix, Ariz. We are recognized for our strong customer growth, healthy finances, principled ESG focus and innovative energy solutions to meet the changing needs of our customers. Along with our main subsidiary, Arizona Public Service (APS), we are working to meet business needs with practices that balance a healthy environment, a vibrant economy and strong communities for current and future generations. We provide our approximately 1.4 million customers with clean, reliable and affordable energy today and are committed to power Arizona's future with electricity that is 100% clean and carbon-free by 2050. APS also is the operator and co-owner of the Palo Verde Generating Station – the largest nuclear plant and the single-largest generator of carbon-free electricity in the U.S. Beyond electricity, Arizona is our home and giving back is an important part of our culture. Our employees volunteer hundreds of thousands of hours to support causes and non-profits important to them. And, our company contributes to teachers and charitable organizations, assists our communities with economic development, and provides millions of dollars in direct financial assistance to customers struggling to pay their bills.³⁶

Why was the company not included?

Pinnacle West Capital Corporation is in the Electric Utility (West) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

Portland General Electric Company

Company Summary from Value Line:

Portland General Electric Company provides electricity to 950,000 customers in 51 cities in a 4,000-

³⁵ <https://www.pge.com/en/about/company-information/company-profile.html>, accessed 1/27/2026

³⁶ <http://www.pinnaclewest.com/about-us/default.aspx>, accessed 1/27/2026

square-mile area of Oregon, including Portland and Salem (population: 1.9 million). The company is in the process of decommissioning the Trojan nuclear plant, which was closed in 1993. Electric revenue breakdown: residential, 51%; commercial, 33%; industrial, 16%; other, less than 1%. Generating sources: gas, 28%; wind, 16%; coal, 4%; hydro, 7%; purchased, 45%. Fuel costs: 41% of revenues. '24 reported depreciation rate: 3.5%. Has 2,915 full-time employees.

Additional Company Information from Website:

Portland General Electric is a fully integrated investor-owned utility that generates, transmits and distributes electricity to approximately 934,000 customers in 51 cities across the state of Oregon. We're committed to providing shareholders with easy access to information about the company. As Oregon's largest utility, PGE is expanding to keep pace with the economic growth in northwest Oregon. PGE offers a diverse mix of resources that includes hydropower, coal and gas combustion, wind and solar, as well as key transmission resources. Our power plants have a combined generating capacity of more than 3,500 megawatts.³⁷

Why was the company not included?

Portland General Electric is in the Electric Utility (West) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

PPL Corporation

Company Summary from Value Line:

PPL Corporation (formerly PP&L Resources Inc.) is a holding company for PPL Electric Utilities, which distributes electricity to 3.7 million customers in PA, KY, RI, and VA. Acquired Kentucky Utilities and Louisville Gas and Electric (1.3 mill. customers) 11/10. Acq'd Narragansett Electric (770,000 customers, renamed Rhode Island Energy) 5/22. Spun off power-generating sub. in '15. Sold electric distribution sub. in U.K. in '21. Electric rev. breakdown: res'l, 48%; comm'l, 22%; ind'l, 10%; other, 20%. Fuel costs: 29% of revs. '24 reported deprec. rate: 3.2%. Has 6,527 employees.

Additional Company Information from Website:

Our companies are investing in system enhancements and advanced technology to deliver industry-leading reliability and an exceptional customer experience. Our operating philosophy is aimed at maximizing customer and shareowner value by optimizing our assets and leveraging data and technology. We are replicating our proven, scalable utility playbook across all of the regions we serve. A powerful network. Louisville Gas and Electric and Kentucky Utilities. As fully integrated regulated utility companies, Louisville Gas and Electric Company and Kentucky Utilities Company serve more than 1.3 million customers and have consistently ranked among the best companies for customer service in the United States. LG&E serves 335,000 natural gas and 436,000 electric customers in Louisville and 16 surrounding counties. KU serves 545,000 customers in 77 Kentucky counties and five counties in Virginia. They also operate about 7,500 MW of regulated generating capacity. PPL Electric Utilities. A pure electric transmission and distribution company, PPL Electric Utilities delivers safe, reliable and

³⁷ <https://investors.portlandgeneral.com/>, accessed 1/27/2026

affordable electricity to more than 1.4 million homes and businesses in central and eastern Pennsylvania. PPL Electric regularly ranks among the country's best utility companies for reliability and customer satisfaction and has developed one of the most advanced electric grids in the country. Rhode Island Energy provides essential energy services to over 770,000 customers across Rhode Island through the delivery of electricity or natural gas. Our team is dedicated to helping Rhode Island customers and communities thrive, while supporting the transition to a cleaner energy future. As part of PPL's family of companies, RIE is addressing energy challenges head-on by building smarter, more resilient and more dynamic power grids and advancing sustainable energy solutions.³⁸

Why was the company not included?

PPL Corporation is in the Electric Utility (East) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

Public Service Enterprise Group Inc.

Company Summary from Value Line:

Public Service Enterprise Group Inc. (PSEG) is a holding company for Public Service Electric and Gas Company (PSE&G), which serves 2.4 million electric and 1.9 million gas customers in NJ, and PSEG Power LLC, a nonregulated power generator with 5 nuclear plants in the Northeast (sold fossil-fuel generation, 2/22). Divested offshore wind assets (5/23). Percentage of electric sales: Commercial (57%); Residential (34%); Industrial (9%). Fuel costs: 33.0% of revenues. '24 reported depreciation rates (utility): 1.84%-2.51%. Employs approximately 13,050.

Additional Company Information from Website:

Public Service Enterprise Group Inc. (PSEG) is a predominately regulated energy company headquartered in Newark, N.J. Established in 1903, the company has long had a key role in fueling New Jersey's economy and supporting the state's quality of life. Public Service Electric and Gas Co. (PSE&G) is New Jersey's largest provider of electric and natural gas service. As of February 2025, PSE&G serves 2.4 million electric customers and 1.9 million gas customers. PSEG Long Island operates the electric transmission and distribution system of the Long Island Power Authority, with 1.1 million customers. PSEG Power is an energy supply company that integrates the operations of its nuclear generating assets with its fuel supply functions. PSEG is a Fortune 500 company included in the S&P 500 Index and has been named to the Dow Jones Sustainability Index for North America for 17 consecutive years. PSEG has approximately 13,000 employees, who are carrying forward a proud tradition of dedicated service that has continued over more than 120 years.³⁹

Why was the company not included?

Public Service Enterprise Group is in the Electric Utility (East) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

³⁸ <https://www.pplelectric.com/site/More/About-Us/Our-Company>, accessed 1/27/2026

³⁹ <https://corporate.pseg.com/aboutpseg/companyinformation/thepsegfamilyofcompanies> accessed 1/27/2026

Sempra (Formerly Sempra Energy)*Company Summary from Value Line:*

Sempra is a holding company for San Diego Gas & Electric (SDG&E), which sells electricity & gas mainly in San Diego County, and Southern California Gas (SoCalGas), which distributes gas to most of Southern CA. Owns 80% of Oncor (acquired 3/18), which distributes electricity in TX. Serves nearly 40 mill. consumers, mainly in CA, TX, and Mexico. Elctrc. rev. breakdown: N/A. Purchases about 3/4ths of its power; rest is mainly gas. Sempra Infrastrucure (SI) subsidiary is active in LNG exportation and other energy endeavors. Sold S.A. utilities in '20. Power costs: 25% of revenue. '24 reported deprec. rates: 2.6%-7.1%. Employs 20,000.

Additional Company Information from Website:

Sempra is an energy infrastructure company focused on connecting millions through the power of people, ideas and innovation. Our 20,000 employees pride themselves on being part of a leader in the energy industry, serving approximately 40 million consumers worldwide. From our San Diego, CA headquarters to our operations in key markets in North America, we are making great strides in developing forward-thinking energy solutions and positively impacting the communities we serve by delivering energy with purpose. With \$87 billion in total assets at the end of 2023, combined with informed and impactful strategies and an inspiring mission, we strive for sustainable long-term growth.⁴⁰

Why was the company not included?

Sempra is in the Electric Utility (West) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

Southern Company*Company Summary from Value Line:*

The Southern Company, through its subsidiaries, supplies electricity to 4.4 mill. customers in GA, AL, and MS. Also has a competitive generation business. Acq'd AGL Resources (renamed Southern Company Gas, 4.4 mill. customers in GA, NJ, IL, VA, & TN) 7/16. Sold Gulf Power 1/19. Electric revenue breakdown: residential, 43%; commercial, 35%; industrial, 21%; other, 1%. Generating sources: gas, 51%; coal, 19%; nuclear, 10%; other, 11%; purchased, 9%. Fuel costs: 26% of revenues. '24 reported deprec. rates (utility): 2.7%-3.4%. Has 27,300 employees.

Additional Company Information from Website:

Our family of companies proudly delivers clean, safe, reliable, and affordable energy to more than 9 million customers across the Southeast and beyond. We are trusted to deliver energy that makes progress possible—every day. Our employees lead with a customer-focused mindset and a commitment to service excellence. That means taking action to meet the needs of our customers and communities to provide clean, safe, reliable and affordable energy solutions. We create community value through energy, social and economic progress. We operate electric utilities in three states and

⁴⁰ <https://www.sempra.com/about> accessed 1/27/2026

natural gas distribution companies in four. Our system draws on a diverse mix of energy sources to serve our regions efficiently and sustainably—including: electricity, natural gas, solar power, wind power, nuclear, battery storage and microgrids. Operate both electric and natural gas companies.⁴¹

Why was the company not included?

Southern Company is in the Electric Utility (East) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota.

TXNM Energy Inc.

Company Summary from Value Line:

TXNM Energy Inc. (formerly PNM Resources) is a holding company with two regulated electric utilities. Public Service Company of New Mexico (PNM) serves about 550,000 customers in north central New Mexico, including Albuquerque and Santa Fe. Texas-New Mexico Power Company (TNMP) transmits and distributes power to more than 270,000 homes and businesses in Texas. Electric revenue: residential, 26%; commercial, 28%; indust'l, 16%; other, 30%. Fuel costs: 32% of revenues in 2024; reported depreciation rates: 2.67%-7.64%. Has about 1,600 employees.

Additional Company Information from Website:

TXNM Energy serves electricity to approximately 800,000 homes and businesses in New Mexico and Texas through its regulated utilities, PNM and TNMP. PNM is a regulated utility in New Mexico with operations primarily engaged in the generation, transmission and distribution of electricity. It is the state's largest electricity provider. PNM serves nearly 550,000 New Mexico residential and business customers in Greater Albuquerque, Rio Rancho, Los Lunas, Belen, Santa Fe, Las Vegas, Alamogordo, Ruidoso, Silver City, Deming, Bayard, Lordsburg, and Clayton. We also serve the New Mexico tribal communities of the Tesuque, Cochiti, Santo Domingo, San Felipe, Santa Ana, Sandia, Isleta, and Laguna Pueblos (portions of the Eastern reservation area). PNM is regulated by the New Mexico Public Regulation Commission and the Federal Energy Regulatory Commission. TNMP provides transmission and distribution services in Texas under the provisions of Texas Electric Choice Act (TECA) and the Texas Public Utility Regulatory Act. TNMP's transmission and distribution activities are solely within the Electric Reliability Council of Texas (ERCOT), which is the independent system operator responsible for maintaining reliable operations for the bulk electric power supply system in most of Texas. As of December 31, 2022, TNMP owned 992 circuit miles of overhead electric transmission lines; 7,319 pole miles of overhead distribution lines; 1,433 circuit miles of underground distribution lines; and 128 substations. TNMP, along with all other entities within ERCOT who do not have their own control areas, does not calculate transmission losses. ERCOT, as the Independent System Operator and the entity who balances and manages settlement, calculates transmission losses for all transmission systems within its control area, including TNMP's transmission systems. TNMP provides transmission and distribution services to Retail Electric Providers (REPs) that provide electric service to customers in TNMP's service territories.⁴²

⁴¹ <https://www.southerncompany.com/about/our-business.html>, accessed 1/27/2026

⁴² <https://www.txnmenergy.com/about-us/our-businesses.aspx>, accessed 1/27/2026

Why was the company not included?

TXNM Energy Inc. is in the Electric Utility (West) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota. TXNM operates primarily in Texas and New Mexico.

Unitil Corp.*Company Summary from Value Line:*

Unitil Corp. engages in the distribution of electricity and natural gas in the US. The company distributes electricity in the southeastern seacoast and state capital regions of New Hampshire, and the greater Fitchburg area of north central Massachusetts; and distributes natural gas in southeastern New Hampshire, portions of southern Maine to the Lewiston-Auburn area, and in the greater Fitchburg area of north central Massachusetts. It also operates 86 underground natural gas transmission pipeline that provides interstate natural gas pipeline access and transportation services in Maine and New Hampshire. In addition, Unitil provides energy brokering and advisory services to commercial and industrial customers; and real estate management services. In October 2025, Unitil completed the purchase of Maine Natural Gas Company from Avangrid Enterprises Inc. The purchase price was \$86.0 million, plus approximately \$7.1 million for estimated working capital. Has 544 employees.

Additional Company Information from Website:

Our work helps keep homes comfortable, businesses thriving and communities connected. Unitil Corporation is an investor-owned public utility proudly serving Maine, Massachusetts and New Hampshire. We are committed to delivering energy to our customers safely and reliably.⁴³

Why was the company not included?

Unitil Corp is in the Electric Utility (East) Value Line Industry. We are limiting the guideline companies for electric to the Electric Utility (Central) Value Line Industry as well as companies located in or directly next to Minnesota. Unitil Corp operates primarily in Maine, Massachusetts and New Hampshire.

⁴³ <https://unitil.com/our-company>, accessed 1/27/2026

Market Segment: Gas Distribution

Companies Included in the Gas Distribution Market Segment

Atmos Energy Corporation

Company Summary from Value Line:

Atmos Energy Corporation is engaged primarily in the distribution and sale of natural gas to over 3.3 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 2024: 68.8%, residential; 27.1%, commercial; 2.7%, industrial; and 1.4% other.

Additional Company Information from Website:

We are the country's largest natural gas-only distributor and safely deliver reliable, affordable, efficient, and abundant natural gas to more than 3.3 million distribution customers in over 1,400 communities across eight states located primarily in the South. Our vision is for Atmos Energy to be the safest provider of natural gas services. We will be recognized for Exceptional Customer Service, for being a Great Employer and for achieving Superior Financial Results. As part of our vision, we are modernizing our business and infrastructure while continuing to invest in safety, innovation, environmental sustainability and our communities. We're investing approximately \$2 billion a year in system upgrades to provide our customers with safe and reliable natural gas service for generations to come. Atmos Energy has grown from 279,000 customers in 1983 to more than 3.3 million customers today - mainly by acquiring utility assets. The company has regulated utility operations in Colorado, Kansas, Kentucky, Louisiana, Mississippi, Tennessee, Texas and Virginia. We are the largest natural gas distributor in the states of Texas, Louisiana, and Mississippi. We work closely with our state and federal regulators to operate a safe and reliable natural gas system.⁴⁴

Why was the company included?

Atmos Energy Corporation provides gas to customers through six regulated natural gas utility operations. This company is similar to the gas distribution companies that we are responsible for valuing.

CenterPoint Energy Inc.

Company Summary from Value Line:

CenterPoint Energy Inc. is a holding company for Houston Electric, which serves over 2.81 million customers in Houston and environs. Indiana Electric, which serves approximately 153,000 customers, and gas utilities with 4.31 million customers in Texas, Minnesota, Louisiana, Mississippi, Indiana, and Ohio. Acquired Vectren 2/19. Sold nonutility operations in '20. Sold its stake in Energy Transfer LP in '22 and '23. Electric revenue breakdown not available. Fuel costs: 20% of total revenues. Has 8,872 employees.

⁴⁴ <https://www.atmosenergy.com/company/about-atmos-energy/>, accessed 1/28/2026

Guideline Company Selection

Additional Company Information from Website:

Our vision to lead the nation in delivering energy, service and value drives our strategy and performance. We have an unwavering commitment to safely and reliably deliver electricity and natural gas to millions of people.

Natural Gas

We sell and deliver natural gas to approximately 7 million homes and businesses in four states: Indiana, Minnesota (including Minneapolis), Ohio and Texas (including greater Houston area). We are investing in modernizing our natural gas infrastructure and are committed to eliminating cast-iron pipe in all our territories.

Electric Transmission and Distribution and Power Generation

We maintain the wires, poles and electric infrastructure serving more than 2.9 million metered customers in the greater Houston area and in southwestern Indiana.

We also own and operate nearly 1,300 megawatts of electric generation capacity in Indiana. We are committed to the reliable delivery of electricity generated from power plants and renewable energy resources to homes and businesses.⁴⁵

Why was the company included?

CenterPoint Energy Inc. provides both electric and natural gas service to customers. Electric customers represent greater than 40% of customers and gas customers represent approximately 60% of customers. This company has been included in both the electric and gas distribution market segments because it is consistent with the electric and gas distribution companies we are valuing.

Chesapeake Utilities Corp.

Company Summary from Value Line:

Chesapeake Utilities Corporation consists of two main units. The Regulated Energy segment distributes natural gas in Delaware, Maryland, and Florida; distributes electricity in Florida; and transmits natural gas on the Delmarva Peninsula and in Florida. The Unregulated Energy operation wholesales and distributes propane; markets natural gas; and provides other unregulated energy services, including midstream services in Ohio. Revenue breakdown for 2024: Regulated Energy, 74.1%; Unregulated Energy, 29.0%; Other, 3.1%.

Additional Company Information from Website:

Chesapeake Utilities Corporation (NYSE: CPK) is a diversified energy delivery company listed on the New York Stock Exchange. Chesapeake Utilities offers sustainable energy solutions through its natural gas transmission and distribution, electricity generation and distribution, propane gas distribution, mobile compressed natural gas utility services and solutions, and other businesses. We are committed to delivering outstanding service and generating long-term, sustainable shareholder value as proven by the Company's successful history. Our track record of superior performance is a testament to our unique

⁴⁵ <https://www.centerpointenergy.com/en-us/corporate/about-us/company-overview>, accessed on 1/27/2026

Guideline Company Selection

company culture, financial discipline and the entrepreneurial spirit of our employees.⁴⁶

Why was the company included?

Chesapeake Utilities Corporation operates much like the utilities we value in Minnesota. Following the acquisition of Florida City gas in December 2023, regulated utility operations account for 87% of its operations which include natural gas transmission and distribution in Delaware, Maryland, and Florida. The company also generates and distributes electricity in Florida.

CMS Energy Corporation

Company Summary from Value Line:

CMS Energy Corporation is a holding company for Consumers Energy, which supplies electricity and gas to lower Michigan (excluding Detroit). Has 1.9 million electric, 1.8 million gas customers. Has 2,016 megawatts of nonregulated generating capacity. Sold EnerBank in '21. Electric revenue breakdown: residential, 46%; commercial, 33%; industrial, 13%; other, 8%. Generating sources: coal, 22%; gas, 42%; renewables, 7%; purchased, 29%. Fuel costs: 37% of revenues. '24 depreciation rates: 3.8% electric, 2.8% gas, 7.8% other. Has 8,324 full-time employees.

Additional Company Information from Website:

CMS Energy's primary business is Consumers Energy, providing natural gas and electricity to 6.8 million of the state's 10 million residents in all 68 Lower Peninsula counties. Consumers Energy is committed to serving our customers, and making Michigan a great place to live and work.

Consumers Energy provides electric service to 1.8 million customers in 62 of Michigan's Lower Peninsula counties. Among the largest cities served are Battle Creek, Bay City, Cadillac, Flint, Grand Rapids, Jackson, Kalamazoo, Midland, Muskegon and Saginaw.

In 2019, we launched our Clean Energy Plan, a 20-year strategy to safeguard Michigan's environment while supplying more clean energy to our homes and businesses. We plan to achieve net zero carbon emissions, end coal use and dramatically increase clean energy resources by 2040.

Consumers Energy provides natural gas service for heating and other uses to nearly 1.8 million customers in 54 of the 68 counties in Michigan's Lower Peninsula. It serves an area that spans 13,000 square miles and includes 215 cities and villages. Among the largest areas served are Bay City, Flint, Jackson, Kalamazoo, Lansing, Macomb, Midland, Royal Oak, Saginaw and Livonia. More than one-half of the utility's gas customers are in metro Detroit.

The company has one of the largest underground natural gas storage capacities in the country. This allows the company to economically purchase and store gas during warm months, for eventual use in the winter heating season.⁴⁷

Why was the company included?

CMS Energy Corporation provides both electric and natural gas service to customers. Electric customers comprise approximately 51% of its customer base and natural gas customers represent roughly 49% with

⁴⁶ <https://www.chpk.com/investors/>, accessed 1/28/2026

⁴⁷ <https://www.cmsenergy.com/about-cms-energy/default.aspx>, accessed 1/27/2026

Guideline Company Selection

the service territory for these operations in the Midwest. CMS Energy Corporation has been included in both the electric and gas distribution segments because it is consistent with the electric and gas distribution companies we are valuing.

MGE Energy Inc.

Company Summary from Value Line:

MGE Energy Inc. is a holding company for Madison Gas and Electric Company (MGE), which provides electric service to 167,000 customers in Dane County and gas service to 178,000 customers in seven counties in Wisconsin. Electric revenue breakdown: residential, 35%; commercial, 51%; industrial, 3%; other, 11%. Generating sources: coal, 40%; gas, 17%; renewables, 21%; purchased power, 13%. Fuel costs: 12% of revenues. '24 reported depreciation rates: electric, 12%; gas, 2.4%; nonregulated, 1.1%. Has about 710 employees.

Additional Company Information from Website:

Madison Gas and Electric (MGE) generates and distributes electricity to 167,000 customers in Dane County and purchases and distributes natural gas to 178,000 customers in seven south-central and western Wisconsin counties. MGE's roots in the Madison area date back more than 150 years.⁴⁸

Why was the company included?

MGE Energy Inc. provides both electric and natural gas service to customers. Electric customers comprise approximately 48% of its customer base and natural gas customers represent roughly 52% with the service territory for these operations in the Midwest. MGE Energy Inc has been included in both the electric and gas distribution segments because it is consistent with the electric and gas distribution companies we are valuing.

New Jersey Resources Corporation

Company Summary from Value Line:

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 583,000 cust. at 9/30/24. Fiscal 2024 volume: 158 bill. cu. ft. (16% interruptible, 41% residential, commercial & firm transportation, 43% other). N.J. Natural Energy subsidiary provides unregulated retail/wholesale natural gas and related energy svcs. 2024 dep. rate: 3.2%. Has 1,370 empls.

Additional Company Information from Website:

New Jersey Resources (NJR) is a Fortune 1000 company that provides natural gas and clean energy services, including transportation, distribution, asset management, and home services. With its demonstrated leadership as a premier energy infrastructure and environmentally forward-thinking company, NJR is committed to meeting customers' expectations for safe, reliable service, delivering value for our shareowners, strengthening our communities, and supporting a transition to a clean energy future. NJR is composed of the following core business affiliates: New Jersey Natural Gas (NJNG), NJR's principal subsidiary, operates and maintains natural gas transportation and distribution infrastructure to serve approximately 582,000 customers in New Jersey's Monmouth, Ocean, Morris,

⁴⁸ <https://www.mgeenergy.com/en/about/about-mge-energy/>, accessed 1/27/2026

Guideline Company Selection

Middlesex, and Burlington counties NJR Energy Services (NJRES) manages a diversified portfolio of natural gas transportation and storage assets and provides physical natural gas services and customized energy solutions to its customers across North America. NJR Clean Energy Ventures (NJRCEV) invests in, owns, and operates solar projects with a total capacity of approximately 474 megawatts, providing residential and commercial customers with low-carbon solutions. Storage & Transportation serves customers from local distributors and producers to electric generators and wholesale marketers through its ownership of Leaf River Energy Center and the Adelpia Gateway Pipeline Project, as well as a 50 percent equity ownership in Steckman Ridge natural gas storage facility. NJR Home Services (NJRHS) provides service contracts as well as heating, central air conditioning, water heaters, standby generators, solar, and other indoor and outdoor comfort products to residential homes throughout New Jersey.

NJR and its more than 1,300 employees are committed to helping customers save energy and money by promoting conservation and encouraging efficiency through Conserve to Preserve[®] and initiatives such as SAVEGREEN[™] and The Sunlight Advantage.⁴⁹

Why was the company included?

New Jersey Resources Corporation provides energy and natural gas services to customers. This company is similar to the gas distribution companies that we are responsible for valuing.

NiSource Inc.

Company Summary from Value Line:

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: 492,690 electric in Indiana, 3.3 million gas in Indiana, Ohio, Pennsylvania, Kentucky, Virginia, Maryland, through its Columbia subsidiaries. Revenue breakdown, 2024: electrical, 34%; gas, 63%; other, 3%. Generating capacity, fossil fuels 56%; renewables, 44%. 2024 reported depreciation rates: 3.0% electric, 2.6% gas. Has 7,746 employees.

Additional Company Information from Website:

We're a leading natural gas and electric utility company. Our approximately 7,700 employees ensure Columbia Gas and NIPSCO customers have the energy they need across six states. Strategically investing in our energy infrastructure will enable us to meet our customer commitments as the future of energy evolves. It's all about our customers. By investing at record levels, we're: Improving reliability and safety for our customers and our communities. Making it easier for customers to do business with us. Providing additional access to natural gas and electric service. Reducing emissions and preserving our natural resources.⁵⁰

⁴⁹ <https://www.njresources.com/about/index.aspx>, accessed 1/28/2026

⁵⁰ <https://www.nisource.com/company>, accessed 1/28/2026

Guideline Company Selection

Why was the company included?

NiSource Inc. provides electricity and gas to customers. This company is similar to the gas distribution companies that we are responsible for valuing.

Northwest Natural Holding Co.

Company Summary from Value Line:

Northwest Natural Holding Co. distributes natural gas to more than 800,000 customers in Oregon (88% of customers) and in southwest Washington state. Principal cities served: Portland and Eugene, OR; Vancouver, WA. Company buys gas supply from Canadian and U.S. producers; has transportation rights on Northwest Pipeline system. Owns local underground storage. Gas margin breakdown: residential, 65%; commercial, 25%; industrial, 6%; other, 4%. Also operates water and wastewater services across six states. Employs 1,452.

Additional Company Information from Website:

NW Natural is a local distribution company that currently provides natural gas service to approximately two million people in more than 140 communities through 800,000 meters in Oregon and Southwest Washington with one of the most modern pipeline systems in the nation.⁵¹

Annual Information Update:

Northwest Natural Holding Co. Completed the acquisition of Hughes Gas Resources from EPCOR Usa Inc. during 2025.⁵²

Why was the company included?

Northwest Natural Holding Co. provides gas to customers. This company is similar to the gas distribution companies that we are responsible for valuing.

ONE Gas Inc.

Company Summary from Value Line:

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 149 Bcf of natural gas supply in 2024, compared to 160 Bcf in 2023. Total volumes delivered by customer (in 2024): transportation, 60.7%; residential, 28.6%; commercial & industrial, 10.1%; other, .6%. ONE Gas has around 3,900 employees.

Additional Company Information from Website:

ONE Gas Inc. (NYSE: OGS) is a 100-percent regulated natural gas utility, and trades on the New York Stock Exchange under the symbol "OGS." ONE Gas is included in the S&P MidCap 400 Index and is one of the largest natural gas utilities in the United States. ONE Gas provides natural gas distribution services to more than 2.3 million customers in Kansas, Oklahoma and Texas. ONE Gas is headquartered in Tulsa, Okla. Its divisions include Kansas Gas Service, the largest natural gas

⁵¹ <https://www.nwnatural.com/about-us/the-company/overview>, accessed 1/28/2026

⁵² <https://www.businesswire.com/news/home/20250603972017/en/NW-Natural-Holdings-Closes-Acquisition-of-Texas-Natural-Gas-Utility> accessed 02/04/2026

Guideline Company Selection

distributor in Kansas; Oklahoma Natural Gas, the largest in the state, and Texas Gas Service, the third largest in the state in terms of customers. Its largest natural gas distribution markets by customer count are Oklahoma City and Tulsa, Okla.; Kansas City, Wichita and Topeka, Kan.; and Austin and El Paso, Texas. ONE Gas serves residential, commercial, industrial, transportation and wholesale customers in all three states.⁵³

Why was the company included?

ONE Gas Inc. provides natural gas to customers. This company is similar to the gas distribution companies that we are responsible for valuing.

Southwest Gas Holdings Inc.

Company Summary from Value Line:

Southwest Gas Holdings Inc. is the parent holding company of Southwest Gas. Centuri Group spun-off in IPO 4/22/24. Southwest Gas is a regulated gas distributor serving 2.3 million customers in Arizona, Nevada, and California. 2024 revenue mix: residential 68%; small commercial, 20%; large commercial and industrial, 5%; transportation, 7%. Southwest has 2,435 employees as of 12/31/24.

Additional Company Information from Website:

Southwest Gas Corporation was founded in 1931 and is a subsidiary of Southwest Gas Holdings Inc. We provide natural gas service to Arizona, Nevada, and portions of California. Our communities, and the more than 2 million customers we serve, are the reasons why we've been heating things up for decades. So, whether you're enjoying a backyard barbeque with friends, getting cozy indoors during the winter, or preparing an epicurean delight in your new restaurant, Southwest Gas is here to support your comfort and your lifestyle.⁵⁴

Why was the company included?

Southwest Gas Holdings Inc. provides gas to customers and also has a construction services company. The gas distribution segment is similar to the gas distribution companies that we are responsible for valuing.

WEC Energy Group Inc.

Company Summary from Value Line:

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. Electric revenue breakdown: residential, 39%; small commercial & industrial, 32%; large commercial & industrial, 21%; other, 8%. Generating sources: coal, 36%; gas, 28%; renewables, 5%; purchased, 31%. Fuel costs: 40% of revenues. '24 reported deprec. rates: 2.4%-3.1%. Has 7,017 employees.

Additional Company Information from Website:

⁵³ <https://www.onegas.com/about-one-gas/default.aspx>, accessed 1/28/2026

⁵⁴ <https://www.swgas.com/en/about-us>, accessed 1/28/2026

Guideline Company Selection

We are one of the nation's largest electric generation and distribution and natural gas delivery holding companies, with the operational expertise and financial resources to serve the Midwest's energy needs safely, reliably and responsibly. Our subsidiaries focus on reliable service, customer satisfaction and shareholder value. Together, we provide energy services to 4.7 million customers in Wisconsin, Illinois, Michigan and Minnesota. Our combined assets allow operating efficiencies across 72,000 miles of electric distribution lines, 46,400 miles of natural gas distribution and transmission lines, and 8,300 megawatts of reliable power capacity. Our family of companies is committed to delivering world-class reliability and the very best customer care anywhere. Customers are the heart of our business, and we work every day to help grow and support communities where we provide vital energy services. As a Fortune 500 company, we value and develop our employees who are making a difference in a mission that matters. Principal energy companies. We Energies delivers electricity and natural gas to more than 2.3 million customers in Wisconsin. Wisconsin Public Service delivers electricity and natural gas to more than 809,000 customers in Wisconsin. Peoples Gas delivers natural gas to approximately 891,000 customers in the city of Chicago. North Shore Gas delivers natural gas to approximately 165,000 customers in Chicago's northern suburbs. Minnesota Energy Resources delivers natural gas to approximately 251,000 customers in Minnesota. Michigan Gas Utilities delivers natural gas to approximately 185,000 customers in Michigan. Upper Michigan Energy Resources delivers electricity and natural gas to more than 42,000 customers in Michigan's Upper Peninsula.

Bluewater Gas Storage provides natural gas storage and hub services to 1.5 million natural gas customers of We Energies and Wisconsin Public Service.⁵⁵

Why was the company included?

WEC Energy Group Inc. provides both electric and natural gas service to customers. Electric customers comprise approximately 36% of its customer base and natural gas customers represent roughly 64% with the service territory for these operations in the Midwest. WEC Energy Group Inc. has been included in both the electric and gas distribution segments because it is consistent with the electric and gas distribution companies we are valuing.

Companies Not Included in the Gas Distribution Market Segments

Black Hills Corporation

Company Summary from Value Line:

Black Hills Corporation is a holding company for Black Hills Energy, which serves 222,340 electric customers in CO, SD, WY and MT, and 1.12 million gas customers in NE, IA, KS, CO, WY, and AR. Has coal mining sub. Acq'd utility ops. from Aquila 7/08; SourceGas 2/16. Discontinued gas marketing in '11; gas & oil E&P in '17. '24 Elec. rev. breakdown: residential, 34%; commercial, 38%; industrial, 23%; other, 5%. Generating sources: coal, 35%; gas, 26%; wind, 9%; purchased, 30%. Fuel costs: 34% of revs. '24 deprec. rate: 2.9%-3.5%. Has 2,874 employees.

Additional Company Information from Website:

Black Hills Corp. (NYSE: BKH) is a customer focused, growth-oriented utility company with a tradition of exemplary service and a vision to be the energy partner of choice. Based in Rapid City, South Dakota, we serve

⁵⁵ <https://www.wecenergygroup.com/about/aboutus.htm>, accessed 1/27/2026

Guideline Company Selection

over 1.3 million natural gas and electric utility customers in eight states: Arkansas, Colorado, Iowa, Kansas, Montana, Nebraska, South Dakota and Wyoming.⁵⁶

Annual Information Update:

On August 18, 2025, Black Hills Corporation and NorthWestern Energy Group Inc. approved a definitive agreement to combine in an all-stock merger. The transaction is anticipated to close within 12 months, subject to each company's shareholder, and regulatory approvals.⁵⁷

Why was the company not included?

Black Hills Corporation provides electric and gas energy to customers in the Midwest. Electric customers represent approximately 17% of customers and gas customers represent 83% of customers. This company is similar to both the electric and gas distribution companies that we are responsible for valuing. It was determined that the pending merger with NorthWestern Energy Group Inc., was significant enough that we removed Black Hills Corporation as a guideline company for the 2026 study.

MDU Resources Group Inc.

Company Summary from Value Line:

MDU Resources Group Inc. is a regulated energy delivery business following the spinoff of its construction materials (5/23) and construction services (11/24) businesses. As of 12/31/2024, the company was organized into three business segments: electric (served 145,686 customers), natural gas distribution (1,064,593), and pipeline (consists of over 3,800 miles of transmission and storage lines). Has about 2,052 employees.

Additional Company Information from Website:

Our utility group, comprised of four utility companies, provides natural gas and/or electric power to approximately 1.2 million customers across eight states. From 2017 to 2022, our utility rate base grew at a compound annual rate of 8% to a combined \$4.0 billion. We expect to invest approximately \$2.3 billion from 2024-2028 to replace, expand and modernize our existing infrastructure. Cascade Natural Gas Corporation distributes natural gas in Oregon and Washington. Great Plains Natural Gas Co. distributes natural gas in western Minnesota and southeastern North Dakota. Intermountain Gas Company distributes natural gas in southern Idaho. Montana-Dakota Utilities Co. generates, transmits and distributes electricity and distributes natural gas in Montana, North Dakota, South Dakota, and Wyoming. WBI Energy provides natural gas transportation through approximately 3,800 miles of regulated pipeline systems primarily in the Rocky Mountain and northern Great Plains regions of the United States. WBI Energy's system is strategically located near five natural gas-producing basins, making natural gas readily supplies available to the company's transportation and storage customers. The system has 14 interconnecting points with other pipeline facilities, allowing for the receipt and/or delivery of natural gas to and from other regions of the country and Canada. WBI Energy owns the largest natural gas storage field in North America, which is adjacent to the Bakken play. The vast majority of our pipeline business is regulated, providing low-risk, stable returns. From 2024-2028, WBI Energy plans to invest \$405 million in its pipeline system, including organic growth projects and

⁵⁶ <https://www.blackhillscorp.com/about>, accessed 1/27/2026

⁵⁷ <https://ir.blackhillscorp.com/news-releases/news-release-details/black-hills-corp-and-northwestern-energy-combine-all-stock>, accessed 02/04/2026

Guideline Company Selection

system upgrades and replacements with a focus on being the pipeline of choice for demand customers as well as customers in the Bakken. WBI Energy also provides cathodic protection and other energy-related services.⁵⁸

Why was the company not included?

MDU Resources was reviewed as a potential guideline company because it has an operating subsidiary located in Minnesota, and has gas distribution operations. MDU Resources is in the Natural Gas Diversified Company Value Line Industry. We are not including MDU Resources in the Gas Distribution market segment as the company has a significant investment in electric, gas distribution, and gas transmission, which is a unique and more diversified mix of business than other gas distribution companies used this market segment.

RGC Resources Inc.

Company Summary from Value Line:

RGC Resources Inc. is engaged in the regulated sale and distribution of natural gas to approximately 63,700 residential, commercial, and industrial customers in Roanoke, Virginia and the surrounding localities through its Roanoke Gas Company subsidiary. The utility operations of Roanoke Gas are regulated by the Virginia State Corporation Commission (SCC), which oversees the terms, conditions, and rates charged to customers for natural gas service, safety standards, extension of service, and depreciation. Nearly all of the company's revenues, excluding equity in earnings of Mountain Valley Pipeline (MVP), are derived from the sale and delivery of natural gas to Roanoke Gas customers based on rates and fees authorized by the SCC. As a wholly owned subsidiary of Resources, RGC Midstream LLC (Midstream), is a more than 1% investor in MVP and a less than 1% investor in Mountain Valley Pipeline LLCs Southgate project (Southgate). Has 104 employees.

Additional Company Information from Website:

RGC Resources Inc. is a public utility holding Company providing energy and related products and services through its operating subsidiaries Roanoke Gas Company and RGC Midstream LLC. Roanoke Gas, which began in 1883, provides safe, reliable natural gas service to more than 64,000 customers in the greater Roanoke Valley. RGC Midstream owns less than a 1 percent interest in the Mountain Valley Pipeline, Southgate, and Boost projects.⁵⁹

Why was the company not included?

RGC Resources Inc. provides gas to customers. This company is similar to the gas distribution companies that we are responsible for valuing. However, the company has limited analysts' estimates available.

Spire Inc. (Formerly The Laclede Group)

Company Summary from Value Line:

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,

⁵⁸ <https://investor.mdu.com/why-invest/>, accessed 1/27/2026

⁵⁹ <https://www.rgcresources.com/about/>, accessed 1/28/2026

Guideline Company Selection

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 2024: 3.1 bill. Revenue mix for regulated operations: residential, 66%; commercial and industrial, 24%; transportation, 5%; other, 5%.

Additional Company Information from Website:

We serve 1.7 million homes and businesses across Alabama, Mississippi and Missouri by providing safe, reliable and cleaner natural gas to warm homes, grow businesses and advance communities. ⁶⁰

Annual Information Update:

Spire Inc. entered into an agreement to acquire the Tennessee Piedmont Natural Gas business from Duke Energy in July of 2025. ⁶¹

Why was the company not included?

Spire Inc. provides gas to customers and is similar to the gas distribution companies that we are responsible for valuing. Spire Inc. was not included due to the timing of their acquisition of Tennessee Piedmont, which is anticipated to be complete in the first quarter of 2026.

Star Group L.P. (Formerly Star Gas Partners LP)

Company Summary from Value Line:

Star Group LP is specializing in the sale of home heating products and services to residential and commercial customers to heat their homes and buildings. The company's operations are conducted through Petro Holdings Inc. and its subsidiaries. Petro is primarily a Northeast, Central, and Southeast region retail distributor of home heating oil and propane that at June 30, 2025, served approximately 413,600 full service residential and commercial home heating oil and propane customers and 66,500 customers on a delivery only basis. It also sells gasoline and diesel fuel to approximately 27,600 customers. The company installs, maintains, and repairs heating and air conditioning equipment and to a lesser extent provide these services outside its heating oil and propane customer base including approximately 19,800 service contracts. Star serves customers in the more northern and eastern states within the Northeast and Mid-Atlantic U.S. regions. Has 3039 employees.

Additional Company Information from Website:

Star Group LP is a full-service energy provider specializing in the sale of home heating and air conditioning products and services to residential and commercial customers. The Company also services and sells heating and air conditioning equipment and for certain areas, provides plumbing services. In addition, Star Group sells diesel fuel, gasoline and home heating oil on a delivery-only basis. Star Group is the nation's largest retail distributor of home heating oil, based upon sales volume, operating throughout the Northeast and Mid-Atlantic. ⁶²

⁶⁰ <https://www.spireenergy.com/about-spire>, accessed 1/28/2026

⁶¹ <https://www.prnewswire.com/news-releases/spire-to-acquire-tennessee-piedmont-natural-gas-business-from-duke-energy-302515375.html> accessed 02/04/2026

⁶² <http://www.stargrouplp.com/investor-relations>, accessed 1/28/2026

Guideline Company Selection

Why was the company not included?

Star Group's business segments include sale of home heating and air conditioning products and services to residential and commercial home heating oil and propane customers. These business segments are different than the business segments of the companies that we are responsible for valuing.

UGI Corporation

Company Summary from Value Line:

UGI Corp. operates six business segments: AmeriGas Propane (accounted for -9% of net income in 2024), UGI International (97%), Gas Utility (88%), Midstream & Marketing (88%), and Corporate & Other (-165%). UGI Utilities distributes natural gas and electricity to over 672,000 customers mainly in Pennsylvania; wholly-owned AmeriGas Partners is the largest U.S. propane marketer, serving about 1.5 million users in 50 states. Acquired Energy Transfer Partners (1/12). Vanguard Group owns 12.2% of stock; BlackRock, 13.0%; Officers/directors, less than 1% (12/24 proxy). Has 10,000 empls.

Additional Company Information from Website:

International distributor and marketer of energy products and services, including natural gas, LPG, electricity and renewable solutions, with well-developed infrastructure in key markets. By operating as a best-in-class service provider, offering a great place to work, serving our communities and delivering value to investors, we aim to positively impact the lives of our shareholders, employees, customers and communities. UGI Corporation (NYSE: UGI) is a holding company that distributes and markets energy products and services through our subsidiaries and the company's common stock is a balanced growth and income investment. UGI Corporation has paid common dividends for more than 140 consecutive years.⁶³

Why was the company not included?

UGI Corporation's non-gas utility segments accounted for most of their net income. Their gas utility segment only accounted for 19.1% of their net income. Unregulated business segments are different from the companies that we are responsible for valuing.

⁶³ <https://www.ugicorp.com/company/corporate-information/about-ugi/default.aspx>, accessed 1/28/2026

Market Segment: Gas Transmission Pipeline

Companies Included in the Gas Transmission Pipeline Market Segment

DT Midstream Inc.

Company Summary from Value Line:

DT Midstream Inc. is an owner, operator, and developer of an integrated portfolio of natural gas midstream assets. The company provides multiple, integrated natural gas services to customers through its interstate pipelines, intrastate pipelines, storage systems, lateral pipelines, and gathering systems. DT Midstream also owns joint venture interests which own and operate interstate pipelines. DT Midstream's core assets strategically connect key demand centers across the U.S. to the premium production areas of the Marcellus/Utica natural gas formation in the Appalachian and Haynesville Basins. Has 362 employees.

Additional Company Information from Website:

DT Midstream owns and operates a diverse, integrated portfolio of midstream pipeline, storage and gathering assets, allowing us to provide an extraordinarily comprehensive set of midstream services to our customers. Our company is a pure play natural gas-focused midstream C-corp. Our assets link major demand markets to supply from the Marcellus/Utica and Haynesville shale basins. We deliver to those high-quality markets via approximately 2,900 miles of transportation and lateral pipelines and more than 800 miles of gathering lines. We also own and operate 94 Bcf of natural gas storage capacity in Michigan, serving local distribution companies, power generators and other customers in regions across the Midwest, the Northeast and Canada.⁶⁴

Why was the company included?

DT Midstream was added as a guideline company in 2025. DT Midstream was spun off from DTE Energy in 2021 and publicly traded on July 1, 2021. The company has established financials and is similar to the companies we value in Minnesota. On December 21, 2024, completed acquisition of three FERC regulated pipelines from Oneok, including Viking Gas, Guardian Pipeline and Midwestern Gas Transmission. The transaction was completed at the end of 2024 and there was no obvious impact on share prices in between the announcement in November and the completion of the Oneok acquisitions. The company continues to meet the criteria to be used as a guideline company.

Enbridge Inc.

Company Summary from Value Line:

Enbridge Inc., is a leader in energy transportation and distribution in North America and int'l. As a transporter of energy, it operates the world's longest crude oil and liquids pipeline system. The company also has international operations and a growing involvement in natural gas transmission and midstream businesses. As a distributor of energy, it owns and operates Canada's largest natural gas distribution company, and provides services in Ontario, Quebec, New Brunswick, and New York State. Owns 38.9% of Noverco. In '17, merged with Spectra Energy Corp. (SE). Employs. 13,786.

Additional Company Information from Website:

⁶⁴ <https://dtmidstream.com/company/operations>, accessed 1/28/2026

At Enbridge, our goal is to be the first-choice energy delivery company in North America and beyond—for customers, communities, investors, regulators and policymakers, and employees.

As a diversified energy company, we are uniquely positioned to help accelerate the global energy transition, and we're doing it in ways that are ethical, sustainable and socially responsible. We're advancing new low-carbon energy technologies—including hydrogen, renewable natural gas, and carbon capture and storage. We're committed to reducing the carbon footprint of the energy we deliver, and to achieving net-zero emissions from our operations by 2050.

We also recognize the importance of a secure, reliable and affordable supply of energy, which we deliver every day through our four core businesses:

- Liquids pipelines
- Natural gas pipelines
- Gas utilities and storage
- Renewable energy

The energy transition requires a practical approach. That's why we're committed to lowering emissions while meeting growing energy demand; supporting our customers today while anticipating their needs tomorrow; and developing new energy sources while keeping energy costs in check.

We move about 30% of the crude oil produced in North America, we transport nearly 20% of the natural gas consumed in the U.S., and we operate North America's largest natural gas utility by volume. Enbridge was an early investor in renewable energy, and we have a growing offshore wind portfolio.⁶⁵

Why was the company included?

Enbridge Inc. was added as a guideline company in 2026. The company's mix of business operations is similar to other companies included in the gas transmission market segment. Enbridge Inc. is the parent company of three of the pipelines we value in Minnesota.

Kinder Morgan Inc.

Company Summary from Value Line:

Kinder Morgan Inc. is one of the largest energy infrastructure companies in North America. It transports natural gas, refined petroleum products, crude oil, condensate and carbon dioxide among other products using its more than 79,000 miles of pipelines. Its 139 terminals handle various commodities, including gasoline, diesel fuel, chemicals, ethanol, metals and petroleum coke. The company employs nearly 11,000 individuals.

Additional Company Information from Website:

Kinder Morgan is one of the largest energy infrastructure companies in North America. We own an interest in or operates approximately 78,000 miles of pipelines and 136 terminals. Our pipelines transport natural gas, gasoline, crude oil, carbon dioxide (CO₂) and more. The terminals store and handle renewable fuels, petroleum products, chemicals, vegetable oils and other products.⁶⁶

⁶⁵ <https://www.enbridge.com/about-us>, accessed 1/28/2026

⁶⁶ <https://www.kindermorgan.com/>, accessed 1/29/2026

With approximately 65,000 miles of natural gas pipelines, we own an interest in or operate the largest natural gas network in North America. Our pipelines serve major consuming domestic markets and transport approximately 40 percent of the natural gas consumed in the United States. Our pipelines are also connected to every important natural gas resource play and supply area in the United States, including the Eagle Ford, Marcellus, Bakken, Utica, Uinta, Permian, Haynesville, Fayetteville and Barnett.⁶⁷

Kinder Morgan is the largest independent transporter of petroleum products in North America, transporting approximately 2.4 million barrels per day. The great majority of these products are transported through our Products Pipelines business, which moves gasoline, jet fuel, diesel, crude oil and condensate through about 9,500 miles of pipelines. We also have approximately 65 liquids terminals in this business segment that store fuels and offer blending services for ethanol and biofuels. Our Products Pipelines assets are strategically located in the West, Southeast and Midwestern United States and we have a number of exciting growth opportunities in this segment.⁶⁸

Annual Information Update:

Kinder Morgan Inc. closed on the acquisition of a natural gas gathering and processing system in North Dakota the first quarter of 2025.⁶⁹

Why was the company included?

Kinder Morgan Inc. owns an interest in or operates approximately 82,000 miles of natural gas pipelines and 140 terminals. Kinder Morgan Inc. has approximately 70,000 miles of natural gas pipelines and 9,500 miles of petroleum products pipelines. This company is similar to the gas transmission pipeline companies that we are responsible for valuing. The company is the parent company for one of the companies that we are responsible for valuing.

ONEOK Inc.

Company Summary from Value Line:

ONEOK Inc. is a leading midstream service provider. It owns premier natural gas liquids systems connecting supply in the Mid-Continent, Permian, and Rocky Mountain regions with key market centers. Has four operating segments: natural gas liquids, natural gas gathering and processing, natural gas pipelines, and refined products and crude. Has 5,177 employees.

Additional Company Information from Website:

At ONEOK (NYSE: OKE), we deliver energy products and services vital to an advancing world. We are one of the largest diversified energy infrastructure companies providing gathering, processing, fractionation, transportation and storage services. Through our more than 50,000-mile pipeline network – and access to nearly 50% of the nation’s refining capacity – we transport the natural gas, natural gas liquids (NGLs), refined products and crude oil that help meet domestic and international energy demand, contribute to energy security and provide safe, reliable and responsible energy solutions needed today and into the future. We deliver what’s important. The products we deliver help to heat homes, generate electricity and create end-use products that power healthier, safer and more

⁶⁷ <https://www.kindermorgan.com/Operations/Natural-Gas/Index>, accessed 1/29/2026

⁶⁸ <https://www.kindermorgan.com/Operations/Products/Index>, accessed 1/29/2026

⁶⁹ <https://ir.kindermorgan.com/news/news-details/2025/Kinder-Morgan-Closes-on-640-Million-Acquisition-of-a-Natural-Gas-Gathering-and-Processing-System-From-Outrigger-Energy-II/default.aspx>, accessed 02/04/2026

connected lives. We are proud of our role in providing today's essential services and believe our expertise will be important in the future energy transformation. Our primary business strategy is to maintain prudent financial strength and flexibility while growing our profits, fee-based earnings and dividends per share with a focus on safe, reliable, environmentally responsible, legally compliant and sustainable operations for our customers, employees, contractors and the public through the following: We are committed to operating in a safe, reliable, environmentally responsible and sustainable manner. Our strong business fundamentals and operating philosophies are anchored by our participation and investments in the communities where we live and work. We operate primarily fee-based businesses in each of our four reportable segments. We continue to invest in organic growth projects in markets we already serve to provide a broad range of services to producers and meet demand in end-use markets. We manage our balance sheet and seek to maintain investment-grade credit ratings.⁷⁰

Annual Information Update:

The EnLink Midstream LLC acquisition by ONEOK Inc. was completed on January 30, 2025.⁷¹

Why was the company included?

ONEOK Inc. is the parent company for one of the companies that we are responsible for valuing. ONEOK Inc. was excluded as a guideline company in 2025 due to its 3rd quarter 2024 acquisition of Global Infrastructure Partners. The acquisition has been incorporated into the financial statements over 2025, and the company is being used as a guideline company for the 2026 valuation.

Pembina Pipeline Corporation

Company Summary from Value Line:

Pembina Pipeline Corp. gathers, processes, and transports oil and natural gas in Western Canada. It owns and operates an integrated system of pipelines, gas gathering and processing facilities, and an oil and NGL infrastructure and logistics line. Its pipelines manages transportation capacity of 3.1 mmb/d. Acquired Veresen, '17; Kinder Morgan Canada, '19. 2024 net volumes (operating income): Conventional Pipelines: 77% (58%); Facilities 23% (42%). Daily 2024 liquids throughput: 2.790 billion barrels; Oil Transmission, 18%; Conventional Pipelines, 63%; Oil Sands, 19%. Has 1,539 employees.

Additional Company Information from Website:

Pembina Pipeline Corporation is a dynamic energy transportation and midstream provider, serving customers for 70 years. Chances are, we do more than you think. We own pipelines that transport hydrocarbon liquids and natural gas products produced primarily in Western Canada. We also own gas gathering and processing facilities and an oil and natural gas liquids infrastructure and logistics business. Our operations along the hydrocarbon value chain allow us to offer a full slate of midstream and marketing services to our customers in the energy industry. We're always keeping an eye out for opportunities to connect hydrocarbon production to new demand locations. These developments help ensure that hydrocarbons produced in the Western Canadian Sedimentary Basin -- and the other basins where Pembina operates -- can reach the highest value markets throughout the world. We're proud of our people and our 70 years of strong performance.⁷²

⁷⁰ <https://www.oneok.com/about-us/what-we-do> accessed 1/29/2026

⁷¹ <https://ir.oneok.com/news-and-events/press-releases/2025/01-31-2025-140247526>, accessed 02/04/2026

⁷² <https://www.pembina.com/about/>, accessed 12/30/2024

Why was the company included?

Pembina Pipeline Corporation's business segments include transporting oil and natural gas and operating an integrated system of pipelines. The company's mix of business operations is similar to other companies included in the gas transmission market segment.

TC Energy Corporation (Formerly TransCanada Corporation)*Company Summary from Value Line:*

TC Energy Corp, formerly known as TransCanada Corp., is a premier energy infrastructure company, operating an extensive natural gas pipeline system in North America. It has 58,213 miles of natural gas pipelines, and gas storage facilities (regulated and nonregulated) with 650 billion cubic feet capacity. Spun-off liquids pipelines business, 10/24. Natural gas pipelines segments comprised 93% of revenue in 2024; Power and Energy Solutions segment (7%). Had 6,668 employees at 12/31/24.

Additional Company Information from Website:

A leader in responsible energy infrastructure

With one of North America's largest energy infrastructure portfolios, no one powers day-to-day life like TC Energy. We share technical, stakeholder and operating expertise across all of our operations. Our Energy Solutions aim to leverage the size and scale of our energy network and trading platform to be the most trusted and reliable source of low carbon energy for the North American industrial and natural gas sectors. Positioned to be the most trusted and reliable resource of low carbon energy for North America's industrial and natural gas sectors. 93,300 km (57,900 miles) of pipeline and more than 653 billion cubic feet (Bcf) of natural gas storage in Canada, the U.S. and Mexico. Investments in seven power-generation facilities with a capacity of 4,300 megawatts, enough to power more than four million homes.⁷³

Why was the company included?

TC Energy Corporation's assets include 57,900 miles of natural gas pipelines. This company is similar to the gas transmission pipeline companies that we are responsible for valuing. The company is the parent company for one of the companies that we are responsible for valuing.

Williams Companies Inc.*Company Summary from Value Line:*

The Williams Companies Inc., gathers, processes, and transports natural gas throughout the United States. It also performs gas marketing services. Business segments include Transmission & Gulf of Mexico, Northeast G&P, West, and other. Acquired Access Midstream Partners, 7/14; WPX Energy, 1/12. I.P.O. for Williams Partners L.P., 8/05; Williams Pipeline Partners L.P., 1/08. Reacquired Williams Pipeline Partners L.P. 10/18. Has about 5,601 employees.

Additional Company Information from Website:

Williams (NYSE: WMB) owns and operates energy infrastructure that safely and reliably delivers the natural gas that is used every day to affordably heat our homes, cook our food and generate our electricity. As the world moves to a low-carbon future, Williams is well-positioned to leverage its natural gas-focused strategy while continuing to deliver consistently stable returns for shareholders.

⁷³ <https://www.tcenergy.com/about/>, accessed 1/29/2026

Williams is a FORTUNE 500 investment grade corporation headquartered in Tulsa, Oklahoma, with operations across the natural gas value chain spanning the United States.⁷⁴

Why was the company included?

Williams Companies Inc. handles one third of the natural gas in the United States. This company is similar to the gas transmission pipeline companies that we are responsible for valuing.

Companies Not Included in the Gas Transmission Pipeline Market Segment

Antero Midstream Corporation

Company Summary from Value Line:

Antero Midstream Corporation was created in March of 2019 when majority owner Antero Resources merged Antero Midstream Partners with AMGP, which was the General Partner and holder of the MLP's incentive distribution rights. The new entity owns and operates an integrated system of natural gas gathering pipelines, compression stations, processing and fractionation plants in the Marcellus and Utica Shales. Also owns water handling and treatment infrastructure that delivers fresh water and wastewater handling services for well completion operations.

Additional Company Information from Website:

Antero Midstream owns and operates an integrated system of gathering pipelines, compressor stations, and processing and fractionation plants in West Virginia and Ohio. In addition, we own and operate two independent water handling systems that support completions activities. Our assets primarily serve Antero Resources (NYSE: AR), the second-largest NGL producer in the U.S. Our integrated planning with Antero Resources allows us to maintain high asset utilization rates, appropriately sizing our infrastructure to match growing production, and supports consistent and repeatable development.⁷⁵

Why was the company not included?

Antero Midstream Corporation was not included as a guideline company because its operating system is unlike the companies we value in Minnesota. The companies in our valuation are transmission pipelines. Antero Midstream's business consists of gathering pipelines, compressor stations, and processing and fractionation plants. The company additionally operates two independent water handling systems that support completions activities.

Cheniere Energy Inc.

Company Summary from Value Line:

Cheniere Energy Inc. engages in the liquefied natural gas (LNG) business and related natural gas pipelines in the Gulf Coast of the U.S. It operates the Sabine Pass LNG terminal in western Louisiana on the Sabine Pass Channel, and is developing Corpus Christi LNG near Corpus Christi, Texas; and Creole Trail LNG at the Calcasieu Channel in Louisiana. It operates the Creole Trail Pipeline, consisting of 94 miles of pipeline connecting the Sabine Pass LNG terminal to various existing interstate natural gas pipelines in southwest Louisiana. Has 1,605 employees.

⁷⁴ <https://co.williams.com/our-company/>, accessed 12/30/2024

⁷⁵ <https://www.anteromidstream.com/operations>, accessed 1/29/2026

Additional Company Information from Website:

Cheniere's subsidiary, Cheniere Energy Partners LP (NYSE: CQP) (Cheniere Partners) owns the Sabine Pass LNG Terminal which has natural gas liquefaction facilities consisting of six operational Trains for a total production capacity of approximately 30 mtpa of LNG (the "SPL Project"). The Sabine Pass LNG Terminal also has operational regasification facilities that include five LNG storage tanks, vaporizers and three marine berths. Cheniere Partners also owns the Creole Trail Pipeline, a 94-mile pipeline that interconnects the Sabine Pass LNG Terminal with a number of large interstate pipelines. As of June 30, 2022, Cheniere owned 100% of the general partner interest and a 48.6% limited partner interest in Cheniere Partners.

The Corpus Christi LNG Terminal currently has three operational Trains for a total production capacity of approximately 15 mtpa of LNG, three LNG storage tanks and two marine berths. Cheniere is constructing an expansion of the Corpus Christi LNG Terminal (the "Corpus Christi Stage 3 Project") for seven midscale Trains with an expected total production capacity of over 10 mtpa of LNG. Through our wholly-owned subsidiary Cheniere Corpus Christi Pipeline LP, Cheniere also owns a 21.5-mile natural gas supply pipeline that interconnects the Corpus Christi LNG Terminal with several interstate and intrastate natural gas pipelines (the "Corpus Christi Pipeline" and together with the existing operational Trains, midscale trains, storage tanks and marine berths, the "CCL Project").

Cheniere has increased available liquefaction capacity at the SPL Project and the CCL Project as a result of debottlenecking and other optimization projects. Cheniere and its subsidiaries hold significant land positions at both the Sabine Pass LNG Terminal and the Corpus Christi LNG Terminal, which provide opportunity for further liquefaction capacity expansion. The development of these sites or other projects, including infrastructure projects in support of natural gas supply and LNG demand, will require, among other things, acceptable commercial and financing arrangements before Cheniere makes a positive FID.⁷⁶

Why was the company not included?

Cheniere Energy Inc. operates mainly natural gas supply and LNG facilities located on the Gulf Coast. Both LNG facilities and the Gulf Coast market make the company's operations different from the operations of the companies for which we are responsible for valuing.

Kinetik Holdings Inc.*Company Summary from Value Line:*

Kinetik Holdings Inc is the result of a merger between Eagle Claw and Altus Midstream. This merger was effective as of February 2nd, 2022. The company provides services such as gathering, transportation, compression, processing, and treating for businesses in the energy sector. Kinetik operates as an integrated midstream services provider and its crude oil assets consist of over 200 miles of pipeline. Its operations are primarily located in the Permian Basin, which is located in Texas and New Mexico, and serves customers in the United States. Has 200 full-time employees.

Additional Company Information from Website:

Kinetik is the premier midstream operator in the Delaware Basin. Through our gas, natural gas liquids, crude, water and transmission service offerings, we are able to provide a unique set of solutions for

⁷⁶ <https://lngir.cheniere.com/company-information>, accessed 12/31/2024

each of our customers, tailored to maximize growth and efficiency. Every day, we strive to exceed the expectations of our customers through safe and reliable operations, collaboration and transparency. We are committed partners and emphasize the importance of safety, integrity, service and teamwork. At Kinetik, we are proud to support our customers in the most exciting and robust oil and gas basin in the world, the Permian Basin.⁷⁷

Why was the company not included?

Kinetik Holdings Inc. is mainly located in the Permian Basin, which is located in Texas and New Mexico. The Permian Basin is a different market than the market of the companies we are responsible for valuing.

MDU Resources Group Inc.

Company Summary from Value Line:

MDU Resources Group Inc. is a regulated energy delivery business following the spinoff of its construction materials (5/23) and construction services (11/24) businesses. As of 12/31/2024, the company was organized into three business segments: electric (served 145,686 customers), natural gas distribution (1,064,593), and pipeline (consists of over 3,800 miles of transmission and storage lines). Has about 2,052 employees.

Additional Company Information from Website:

Our utility group, comprised of four utility companies, provides natural gas and/or electric power to approximately 1.2 million customers across eight states. From 2017 to 2022, our utility rate base grew at a compound annual rate of 8% to a combined \$4.0 billion. We expect to invest approximately \$2.3 billion from 2024-2028 to replace, expand and modernize our existing infrastructure. Cascade Natural Gas Corporation distributes natural gas in Oregon and Washington. Great Plains Natural Gas Co. distributes natural gas in western Minnesota and southeastern North Dakota. Intermountain Gas Company distributes natural gas in southern Idaho. Montana-Dakota Utilities Co. generates, transmits and distributes electricity and distributes natural gas in Montana, North Dakota, South Dakota, and Wyoming. WBI Energy provides natural gas transportation through approximately 3,800 miles of regulated pipeline systems primarily in the Rocky Mountain and northern Great Plains regions of the United States. WBI Energy's system is strategically located near five natural gas-producing basins, making natural gas readily supplies available to the company's transportation and storage customers. The system has 14 interconnecting points with other pipeline facilities, allowing for the receipt and/or delivery of natural gas to and from other regions of the country and Canada. WBI Energy owns the largest natural gas storage field in North America, which is adjacent to the Bakken play. The vast majority of our pipeline business is regulated, providing low-risk, stable returns. From 2024-2028, WBI Energy plans to invest \$405 million in its pipeline system, including organic growth projects and system upgrades and replacements with a focus on being the pipeline of choice for demand customers as well as customers in the Bakken. WBI Energy also provides cathodic protection and other energy-related services.⁷⁸

Why was the company not included?

MDU Resources Group Inc. was reviewed as a potential guideline company because it has an operating

⁷⁷ <https://www.kinetik.com/about-us/>, accessed 1/29/2026

⁷⁸ <https://investor.mdu.com/why-invest/>, accessed 1/27/2026

subsidiary located in Minnesota and has gas transmission operations and is in the Natural Gas Diversified Company Value Line Industry. We are not including MDU Resources Group Inc. in the Gas Transmission market segment because it has a significant investment in electric, gas distribution, and gas transmission, which is a more unique and diversified mix of business than other gas transmission companies used this market segment.

South Bow Corp.

Company Summary from Value Line:

Value Line Company summary not available.

Additional Company Information from Website:

Our existing oil & liquids pipeline infrastructure, approximately 4,900 km (3,045 m), connects Alberta crude oil supplies to U.S. refining markets in Illinois, Oklahoma, Texas and the U.S. Gulf Coast.

The Keystone Pipeline System, our largest liquids pipeline asset, moves crude oil safely to meet North American energy demand, every day. We have strategically located storage terminals in Canada and the U.S., including Hardisty, AB.; Cushing OK; and Houston, TX.

We remain committed to meeting the energy needs of North Americans today, while advancing our Liquids Pipelines System for the demands of the future. Connecting growing Canadian and U.S. crude oil supply to key markets, leveraging existing assets and seeking new opportunities to continue to provide our customers with access to the destinations they need.⁷⁹

Why was the company not included?

South Bow Corp. was created as a spin off from TC Energy's crude oil pipelines business in October of 2024. South Bow Corp. has similar operations to the companies we use as guidelines in the study and began trading on the NYSE in November 2025. There is not enough financial data available to include the company in the 2026 study. We will continue to evaluate using South Bow Corp. as a guideline company going forward.

Targa Resources Corporation

Company Summary from Value Line:

Targa Resources is a leading provider of midstream services. It operates a diversified portfolio of midstream energy assets. Targa is engaged in gathering, compressing, treating, processing, and selling natural gas, along with storing, fractionating, treating, transporting, and selling NGLs. Plant natural gas inlet 7,433.6 MMcf/d; Gross NGL production, 946.2 MBbl/d; Crude oil gathered 134.5 MBbl/d (as of 12/31/24). 2024 depr. rate: 4.8%. Has 3,370 employees.

Additional Company Information from Website:

Targa is a leading provider of midstream services and is one of the largest independent midstream infrastructure companies in North America. We own, operate, acquire, and develop a diversified portfolio of complementary domestic midstream infrastructure assets, allowing us to endeavor to supply natural gas and natural gas liquids (NGLs) efficiently and safely to meet the increasing domestic and global demand for cleaner, affordable fuel and feedstocks.⁸⁰

⁷⁹ <https://www.southbow.com/operations/projects-and-pipelines>, accessed 1/29/2026

⁸⁰ <https://www.targaresources.com/about-us>, accessed 1/29/2026

Why was the company not included?

Targa Resources Corporation has several other main business segments besides common carrier transportation of gas or fluids. These include, selling, gathering, compressing, treating, processing, fractionating, etc. These business segments are not similar to the main business segments of the companies we are responsible for valuing.

Venture Global Inc.*Company Summary from Value Line:*

Venture Global is a long-term, low-cost provider of liquefied natural gas (LNG) sourced from North American natural gas basins. The company has assets across the LNG supply chain, including production, transport, shipping, and regasification. At 12/31/24, had over 1,500 full-time employees.

Additional Company Information from Website:

We are a long-term, low-cost provider of American-produced liquefied natural gas. Our four Louisiana-based export projects service the global demand for North American natural gas and support the long-term development of clean and reliable North American energy supplies.⁸¹

Why was the company not included?

Venture Global Inc. engages in the development, construction, and production of natural gas liquefaction and export projects near the U.S. Gulf Coast in Louisiana. Venture Global Inc.'s LNG operations and exports are different from the companies we are responsible for valuing in Minnesota. We have not included the company as a guideline in the Gas Transmission industry.

⁸¹ <https://ventureglobal.com/>, accessed 1/29/2026

Market Segment: Fluid Transportation Pipeline

Companies Included in the Fluid Transportation Pipeline Market Segment

Energy Transfer LP (Formerly Energy Transfer Equity LP)

Company Summary from Value Line:

Energy Transfer LP (ET) is a master limited partnership that owns a diversified portfolio of energy assets in the U.S. Its core operations include complementary natural gas midstream, intrastate and interstate transportation and storage assets; crude oil, natural gas liquids and refined product transportation and terminaling assets. Energy Transfer also owns the Lake Charles LNG Company. On a consolidated basis, the ET family owns and operates approximately 89,800 miles of natural gas pipeline. Acquired Energy Transfer Partners, 10/18. Has about 11,500 employees.

Additional Company Information from Website:

Energy Transfer is one of the largest and most diversified midstream energy companies in North America with approximately 140,000 miles of pipelines and associated energy infrastructure in 44 states transporting the oil and gas products that make our lives possible. We are proud to have one of America's largest energy portfolios, with assets in 44 states and international offices in Panama City, Panama, and Beijing. Our core operations include transportation, storage and terminaling for natural gas, crude oil, NGLs, refined products and liquified natural gas.⁸²

Why was the company included?

Energy Transfer LP business segments include natural gas midstream, intrastate and interstate transportation and storage assets as well as crude oil, natural gas liquids and refined produce transportation and terminaling assets. This company is similar to the fluid transportation pipeline companies that we are responsible for valuing.

Enterprise Products Partners LP

Company Summary from Value Line:

Enterprise Products Partners LP, is a leading integrated provider of natural gas and natural gas liquids (NGLs) processing, fractionation, transportation, and storage services in the U.S. and Canada. All management and operating functions are performed by the 7,800 employees of EPCO. Assets include over 50,000 miles of pipelines, 216.7 MMBbls of storage capacity for liquids and 14 Bcf for natural gas. Four segments: NGL Pipeline (36% of 2024 rev.); Crude Oil Pipelines, (38%); Petrochemical & Refined Products, (21%); Natural Gas Pipelines, (5%).

Additional Company Information from Website:

Enterprise Products Partners LP is a publicly traded partnership listed on the New York Stock Exchange (NYSE Ticker: EPD). Our origins began with Enterprise Products Company, formed in 1968 by Dan Duncan and two partners as a wholesale marketer of natural gas liquids. Today, our integrated energy infrastructure network provides midstream energy services to producers and consumers of natural

⁸² <https://www.energytransfer.com/>, accessed 02/04/2026

gas, natural gas liquids, crude oil, refined products and petrochemicals. We link producers from some of the largest North American supply basins with domestic consumers and international markets.⁸³

Annual Information Update:

Enterprise Products Partners LP completed the acquisition of Occidental's natural gas gathering affiliate in the Permian Basin in August of 2025.⁸⁴

Why was the company included?

Enterprise Products Partners' mix of business operations is similar to other companies included in the fluid transportation market segment. Additionally, this company is similar to the fluid transportation pipeline companies we are responsible for valuing.

MPLX LP

Company Summary from Value Line:

MPLX LP is a diversified, growth-oriented master limited partnership (MLP) formed in 2012 by Marathon Petroleum Corporation to own, operate, develop and acquire midstream energy infrastructure assets. It is engaged in the gathering, processing, storage, marketing, and transportation of natural gas, crude oil, and other refined petroleum products. MPLX's assets consist of a network of common carrier crude oil and product pipelines located in the Midwest and Gulf Coast regions of the US. Has no direct employees.

Additional Company Information from Website:

MPLX is a diversified, large-cap master limited partnership formed by Marathon Petroleum Corporation (MPC) that owns and operates midstream energy infrastructure and logistics assets and provides fuels distribution services. MPLX's assets include a network of crude oil and refined product pipelines; an inland marine business; light-product terminals; storage caverns; refinery tanks, docks, loading racks, and associated piping; and crude and light-product marine terminals. The company also owns crude oil and natural gas gathering systems and pipelines as well as natural gas and natural gas liquids (NGL) processing and fractionation facilities in key U.S. supply basins.⁸⁵

Annual Information Update:

The acquisition of Northwind Delaware Holdings LLC was finalized during 2025, expanding MPLX L.P.'s services in the natural gas liquids value chains.⁸⁶

Why was the company included?

MPLX LP is similar to the fluid transportation pipeline companies that we are responsible for valuing. The company engages in the transports of refined petroleum products.

Plains All American Pipeline LP

Company Summary from Value Line:

⁸³ <http://www.enterpriseproducts.com/about-us>, accessed 02/03/2026

⁸⁴ <https://ir.enterpriseproducts.com/news-releases/news-release-details/enterprise-completes-acquisition-occidentals-natural-gas>, accessed 02/05/2026

⁸⁵ <https://www.mplx.com/Investors/>, accessed 02/03/2026

⁸⁶ <https://ir.mplx.com/CorporateProfile/press-releases/news-release/2025/MPLX-LP-Closes-Northwind-Midstream-Acquisition/default.aspx>, accessed 02/05/2026

Plains All American Pipeline LP, is a publicly traded master limited partnership which operates through various subsidiaries. It engages in the transportation, storage, terminating, and marketing of crude oil, refined products, and liquefied petroleum gas. As of December 31, 2024, the company owned or leased 18,800 miles of pipelines and gathering systems. Storage capacity 24 million barrels of natural gas liquids (NGL) storage facilities; about 72 millions barrels of crude oil storage. Also owns 1,355 trailers; 4 nat. gas processing plants, and 16 rail terminals. Employs 4,200.

Additional Company Information from Website:

Plains is a publicly-traded master limited partnership that owns and operates midstream energy infrastructure and provides logistics services for crude oil, natural gas liquids (NGL) and natural gas. We own an extensive network of pipeline transportation, terminalling, storage and gathering assets in key crude oil and NGL producing basins and transportation corridors and at major market hubs in the United States and Canada. On average, PAA handles more than 8 million barrels per day of crude oil and NGL in its Transportation segment. The company is headquartered in Houston, Texas.⁸⁷

Annual Information Update:

Plains All American Pipeline LP completed the acquisition of 100% equity interest of EPIC in 2025.⁸⁸

Why was the company included?

Plains All American Pipeline LP owns an extensive network of pipeline transportation, terminalling, storage, and gathering assets. This company is similar to the fluid transportation pipeline companies that we are responsible for valuing.

Companies Not Included in the Fluid Transportation Pipeline Market Segment

Cheniere Energy Partners LP

Company Summary from Value Line:

Cheniere Energy Partners LP, through its subsidiary, Sabine Pass Liquefaction LLC (SPL), is developing, constructing, and operating natural gas liquefaction (NGL) facilities at the Sabine Pass LNG terminal located in Cameron Parish, Louisiana. The company also owns a 94-mile pipeline that connects the Sabine Pass LNG terminal with a number of large interstate pipelines via its subsidiary, Cheniere Creole Trail Pipeline LP (CTPL). Finally, through the Sabine Pass LNG LP (SPLNG) subsidiary, Cheniere owns and operates regasification facilities at the Sabine Pass LNG terminal.

Additional Company Information from Website:

Cheniere Energy Partners LP (NYSE: CQP) (Cheniere Partners) is a publicly traded Delaware limited partnership formed by Cheniere Energy Inc. (“Cheniere”). Cheniere Partners provides clean, secure and affordable LNG to integrated energy companies, utilities and energy trading companies around the world. Cheniere Partners aspires to conduct business in a safe and responsible manner, delivering a reliable, competitive and integrated source of LNG to its global customers.

⁸⁷ <https://ir.plains.com/>, accessed 02/04/2026

⁸⁸ <https://ir.plains.com/news-releases/news-release-details/plains-all-american-reports-third-quarter-2025-results-and>, accessed 02/05/2026

Cheniere Partners owns the Sabine Pass LNG terminal located in Cameron Parish, Louisiana, which has natural gas liquefaction facilities consisting of six liquefaction Trains, with a total production capacity of approximately 30 mtpa of LNG. The Sabine Pass LNG terminal also has operational regasification facilities that include five LNG storage tanks, vaporizers, and three marine berths. Cheniere Partners also owns the Creole Trail Pipeline, which interconnects the Sabine Pass LNG terminal with a number of large interstate pipelines.⁸⁹

Why was the company not included?

Cheniere Energy Partners LP is mainly located on the Gulf Coast. The Gulf Coast is a different market than the market of the companies for which we are responsible for valuing.

CrossAmerica Partners LP (Lehigh Gas Partners LP)

Company Summary from Value Line:

CrossAmerica Partners LP is a wholesale distributor of motor fuels and owner and lessee of real estate used in the retail distribution of motor fuels. Its general partner, CrossAmerica GP LLC, is a subsidiary of CST Brands Inc., one of the largest independent retailers of motor fuels and convenience merchandise in North America. The company's wholesale segment includes the wholesale distribution of motor fuel to lessee dealers, independent dealers, commission agents, DMS, CST and company operated retail sites. The Retail segment includes the sale of convenience merchandise items, the retail sale of motor fuel at company operated retail sites and the retail sale of motor fuel at retail sites operated by commission agents. With a geographic footprint covering 34 states, the partnership has well-established relationships with several major oil brands, including ExxonMobil, BP, Shell, Chevron, Sunoco, Valero, Gulf, Citgo, Marathon and Phillips 66.

Additional Company Information from Website:

CrossAmerica Partners LP is a leading U.S. wholesale distributor of motor fuels, operator of convenience stores, and owner and lessee of real estate used in the retail distribution of motor fuels. With a geographic footprint of 34 states, CrossAmerica Partners distributes branded and unbranded petroleum for motor vehicles to approximately 1,800 locations and owns or leases approximately 1,100 sites. Our 7 convenience store brands offer food, essentials and car washes at more than 250 locations across 10 states.

Formed in 2012, the Partnership has well-established relationships with several major oil brands, including Exxon, Mobil, BP, Shell, Valero, Citgo, Marathon and Phillips 66. CrossAmerica Partners ranks as one of ExxonMobil's largest U.S. distributors by fuel volume and in the top 10 for additional brands. Our convenience stores are also paired with prominent national brands, such as Dunkin', Subway and Arby's.

Our general partner, CrossAmerica GP LLC, is indirectly owned and controlled by entities affiliated with Joseph V. Topper, Jr., the founder of CrossAmerica Partners and a member of the board of the general partner since 2012. Units of CrossAmerica Partners are traded on the New York Stock Exchange under the symbol "CAPL."

CrossAmerica Partners is headquartered in Allentown, Pennsylvania. Our downtown location plays an

⁸⁹ <https://cqipir.cheniere.com>, accessed 02/04/2026

integral part in the revitalization of the Lehigh Valley region's largest city.

Why was the company not included?

CrossAmerica Partners LP is one of the largest distributors of motor fuels. The company also owns real estate used to distribute the motor fuel, owns and operates gasoline station, and convenience stores. These business segments are not similar to the main business segments of the companies we are responsible for valuing.

Delek Logistics Partners LP

Company Summary from Value Line:

Delek Logistics Partners LP was formed by Delek US Holdings Inc. to own, operate, acquire and construct crude oil and refined products logistics and marketing assets. The assets and investments in its pipelines and transportation segment consist of pipelines, tanks, offloading facilities, trucks and ancillary assets, which provide crude oil gathering and crude oil, intermediate and refined products transportation and storage services primarily in support of Delek Holdings' refining operations in Tyler, TX, El Dorado, AR, Big Spring, TX, and the Big Spring Gathering Assets. Additionally, the assets in this segment provide crude oil transportation services to certain third parties. The assets in its wholesale marketing and terminalling segment consist of refined products terminals and pipelines in Arkansas, Tennessee, Texas, and Oklahoma. Delek owns the general partner interest as well as a majority limited partner interest in Delek Logistics, and is also a significant customer.

Additional Company Information from Website:

Delek Logistics Partners LP (NYSE: DKL) is a forward-focused, publicly traded master limited partnership (MLP), purpose-built to drive growth in the midstream energy sector. Headquartered in Plano, Texas, and formed by Delek US Holdings Inc. (NYSE: DK) in 2012, we specialize in owning, operating, acquiring, and developing high-performance logistics, marketing, and midstream assets across the energy value chain. Our diverse portfolio spans crude oil, refined products, natural gas, and water. We gather, process, transport, and store crude oil and natural gas, while also marketing, distributing, and storing finished petroleum products. Through strategic infrastructure investments, we support natural gas gathering and processing, as well as water gathering and disposal services, leveraging partnerships and expertise in regions like the Permian Basin, with capabilities aligned with our newly acquired Gravity and H2O Midstream. Our assets form the backbone of Delek's refining and marketing operations in Tyler, Texas; El Dorado, Arkansas; Big Spring, Texas; and Krotz Springs, Louisiana, while also serving an expanding base of third-party customers across the southeastern U.S. and West Texas. With a commitment to operational excellence and sustainability, Delek Logistics plays a critical role in delivering energy safely, reliably, and efficiently.⁹⁰

Why was the company not included?

Delek Logistic Partners LP is mainly located in the Texas, Arkansas, and Louisiana area. This operating area is a different market than the market of the companies we are responsible for valuing.

Genesis Energy LP

Company Summary from Value Line:

⁹⁰ <https://ir.deleklogistics.com/overview/default.aspx>, accessed 02/03/2026

Genesis Energy LP is a growth-oriented limited partnership focused on the midstream segment of the crude oil and natural gas industry. Its segments consist of: offshore pipeline transportation and processing of crude oil and natural gas in the Gulf of Mexico; sodium minerals and sulfur services involving trona and trona-based exploring, processing, and selling activities, and processing of high sulfur gas streams for refineries to remove the sulfur, and selling the related by-product, sodium hydrosulfide (NaHS); onshore facilities and transportation, which include terminalling, storing, and transporting crude oil, petroleum products, and CO₂; and marine transportation to provide waterborne transportation of petroleum products and crude oil. The company owns four onshore crude oil pipeline systems, with approximately 450 miles of pipe located primarily in Alabama, Florida, Louisiana, Mississippi and Texas that are rate regulated by the Federal Energy Regulatory Commission. Has 2075 employees.

Additional Company Information from Website:

Genesis Energy LP is a publicly traded, master limited partnership headquartered in Houston, Texas. We provide critical pipeline infrastructure supporting long-lived, world-class developments in the Gulf of America. Our business also includes a diversified suite of Jones Act compliant marine transportation equipment used to transport crude oil and intermediate refined products along the Gulf and East Coast, and major river systems, the production and marketing of other specialty chemicals with no known substitutes and an increasingly integrated portfolio of onshore crude oil pipelines and terminals along the Gulf Coast. We are steadfast in our resolution to continue to provide our stakeholders with long-term value while simultaneously operating in a safe, reliable, and environmentally friendly manner. This resolve is integrated into the very core of our culture, which transfers directly into our daily operations.⁹¹

Why was the company not included?

Genesis Energy LP's main business segments are grouped in four divisions: offshore pipeline transportation, sodium minerals and sulfur services, marine transportation, and onshore facilities and transportation. These market segments are not similar enough to the market segments of the companies we are responsible for valuing.

Global Partners LP

Company Summary from Value Line:

Global Partners LP is engaged in the purchasing, selling, and logistics of transporting petroleum and related products, including domestic and Canadian crude oil, gasoline and gasoline blendstocks (such as ethanol and naphtha), distillates (such as home heating oil, diesel, and kerosene), residual oil, renewable fuels, natural gas and propane. The company also receives revenue from convenience store sales and gasoline station rental income. Global owns, controls, or has access to one of the largest terminal networks of refined petroleum products and renewable fuels in the northeast. It owns transload and storage terminals in North Dakota and Oregon that extend its origin-to-destination capabilities from the mid-continent region of the United States and Canada to the east and west coasts. Global Partners has approximately 1,700 locations primarily in the Northeast. The company was incorporated in 2005 and is based in Waltham, Massachusetts. Has 3330 employees.

Additional Company Information from Website:

⁹¹ <https://www.genesisenergy.com/about-us>, accessed 02/03/2026

Global Partners owns and operates one of the largest terminal networks in the U.S., from Maine to Florida and into the Gulf states. As one of the largest independent owners, suppliers, and operators of liquid energy terminals, fueling locations, and retail experiences, we source petroleum products and renewable fuels and then transport them across our integrated businesses. Our unique model, built on strategic assets, strong relationships, and principled leadership, has allowed us to adapt to customers' changing needs for over 90 years.

Our story began with bold, entrepreneurial spirit and service to the community. Abraham Slifka founded Slifky's Reliable Oil Burner Service, the predecessor to Global, in 1933, which delivered heating oil in Boston neighborhoods during the Great Depression. Rooted in Abraham's integrity, generosity, and grit, we've grown into a leading player in the energy industry. While serving customers across the decades, we've undergone transformative growth, marked by key milestones – like partnerships with international energy companies, multiple acquisitions, and our public listing on the New York Stock Exchange in 2005. We've built our success with an unyielding focus on our customers' needs. With over \$3.5 billion in strategic acquisitions and a strong record of financial growth, our momentum is fueled by service and smart investment. Our approach balances short-term results with long-term value – delivering consistent returns and building trust across generations. We're still led by the Slifka family – now in its fourth generation – and driven by the values that defined our earliest days: reliability, generosity, and grit. Even as a large, publicly traded company, we stay grounded by focusing on what matters – serving our customers, caring for our guests, and growing our people. We're deeply committed to being a good neighbor, supporting the places and people where we live and work. Through our Corporate Citizenship Program and the Global for Good Foundation, we focus on initiatives that keep communities growing, moving, and thriving. You can learn more about our efforts on our Communities page.

As a Fortune 500 company with an extensive terminal network and growing retail presence, Global is prepared to serve your needs today and into the future. We're investing in lower-carbon solutions, delivering reliable service across our integrated businesses, and creating value for every stakeholder – our customers, guests, employees, investors, and communities. With an eye toward innovation and a foundation rooted in purpose, we'll be your partner every step of the way – today, tomorrow, and always.⁹²

Why was the company not included?

Global Partners LP is one of the largest distributors of gasoline, distillates, residual oil and renewable fuels to wholesalers, retailers, and commercial customers in New England and New York. This company also owns, supplies, and operates gasoline stations and convenience stores. These business segments are not similar to the main business segments of the companies we are responsible for valuing.

Hess Midstream Partners LP

Company Summary from Value Line:

Hess Midstream LP is a limited partnership that owns, operates, develops, and acquires midstream related assets in the energy industry. It is also involved in providing water handling equipment required for the fracking process. Primarily located in the Bakken and Three Forks Shale Plays in the Williston

⁹² <https://www.globalp.com/who-we-are/our-story>, accessed 02/03/2026

Basin in North Dakota. Hess Corp., now controlled by Chevron, was responsible for 100% of all revenues generated from 2019 to 2024.

Additional Company Information from Website:

Hess Midstream (NYSE: HESM) is a fee-based, growth-oriented midstream company that owns, operates and develops a diverse set of midstream assets to provide services to Hess and third-party customers. Hess Midstream, through its ownership interests in HESM, owns oil, gas and produced water handling assets that are primarily located in the Bakken and Three Forks Shale plays in the Williston Basin area of North Dakota, one of the most prolific crude oil gathering basins in North America. HESM conducts its business through three operating segments: gathering, processing and storage and terminaling and export.⁹³

Why was the company not included?

Hess Midstream Partners LP focuses on processing natural gas and fractionating natural gas (NGLs). These business segments are not similar to the main business segments of the companies we are responsible for valuing.

Martin Midstream Partners LP

Company Summary from Value Line:

Martin Midstream Partners LP provides terminalling, processing, storage, and packaging services for petroleum products and by-products primarily in the US. The company owns or operates various marine shore-based terminal facilities and specialty terminal facilities that provide storage, refining, blending, packaging, and handling services for producers and suppliers of petroleum products and by-products. It operates various trucks and tank trailers; and inland marine tank barges, inland push boats, and articulated offshore tug and barge unit to transport petroleum products and by-products, petrochemicals, and chemicals. It processes molten sulfur into prilled or pelletized sulfur, which is used in the production of fertilizers and industrial chemicals. The company stores, distributes, and transports natural gas liquids for wholesale deliveries to refineries, industrial natural gas liquid users, and propane retailers. The company was founded in 1951 and is based in Kilgore, Texas. Has 1679 employees.

Additional Company Information from Website:

Martin Midstream Partners LP is a publicly traded limited partnership with a diverse set of operations focused primarily in the United States Gulf Coast region. Our four primary business lines include:

- terminalling, processing, and storage services for petroleum products and by-products;
- land and marine transportation services for petroleum products and by-products, chemicals, and specialty products;
- sulfur and sulfur-based products processing, marketing, manufacturing, and distribution;
- marketing, distribution, and transportation services for natural gas liquids and blending and packaging services for specialty lubricants and grease.

The petroleum products and by-products we collect, transport, store, and market are produced primarily by major and independent oil and gas companies who often turn to third parties, such as us, for the transportation and disposition of these products. In addition to these major and independent oil and gas companies, our primary customers include independent refiners, large chemical companies,

⁹³ <https://hessmidstream.gcs-web.com/>, accessed 02/04/2026

fertilizer manufacturers, and other wholesale purchasers of these products. We operate primarily in the U.S. Gulf Coast region, which is a major hub for petroleum refining, natural gas gathering and processing, and support services for the exploration and production industry.⁹⁴

Why was the company not included?

Martin Midstream Partners LP is mainly located in the Gulf Coast. The Gulf Coast is a different market than the market of the companies for which we are responsible for valuing.

NGL Energy Partners LP

Company Summary from Value Line:

NGL Energy Partners LP, together with its subsidiaries, engages in the crude oil logistics, water solutions, liquids, retail propane, and refined products and renewables businesses. The company purchases crude oil from producers and transports it to refineries for resale at pipeline injection stations, storage terminals, barge loading facilities, rail facilities, refineries, and other trade hubs; and provides storage, terminaling, trucking, marine, and pipeline transportation services. It is involved in the treatment and disposal of wastewater generated from crude oil and natural gas production operations; disposal of solids, such as tank bottoms, drilling fluids, and drilling muds. It supplies natural gas liquids to retailers, wholesalers, refiners, and petrochemical plants in the United States and Canada through its 24 terminals. It sells propane, distillates, and equipment and supplies to end users consisting of residential, agricultural, commercial, and industrial customers. Has 569 employees.

Additional Company Information from Website:

We are a publicly traded Master Limited Partnership listed under the ticker symbol “NGL” on the New York Stock Exchange. NGL Energy Partners LP is a diversified midstream MLP that provides multiple services to producers and end-users, including transportation, storage, blending and marketing of crude oil, NGLs, and water solutions. Vertical integration enables NGL to be the full service provider:

- Transport crude oil from the wellhead to refiners
- Wastewater from the wellhead to treatment for recycling or disposal
- Natural Gas Liquids from fractionators / hubs to refineries and end user

NGL Energy Partners LP Business Strategy:

- Focus on building a vertically-integrated midstream MLP providing multiple services to producers
- Achieve organic growth by investing in new assets that increase volumes, enhance our operations, and generate attractive rates of return
- Deliver accretive growth through strategic acquisitions that complement our existing business model and expand our operations
- Maintain a disciplined cash distribution policy that complements our leverage, acquisition and organic growth strategies ⁹⁵

⁹⁴ <https://mmlp.com/about-us/default.aspx>, accessed 02/02/2026

⁹⁵ <http://www.nglenergypartners.com/about-ngl/>, accessed 12/31/2024

Why was the company not included?

NGL Energy Partners LP has several other business segments besides transportation, including blending and marketing of crude oil, water solutions, and settling propane, distillates, and equipment and supplies to end users. These business segments are not similar to the main business segments of the companies we are responsible for valuing.

Plains GP Holdings LP*Company Summary from Value Line:*

Plains GP Holdings LP, is a limited partnership that does not directly own any operating assets. Its principal source of cash flow is from its indirect investment in Plains All American Pipeline LP (PAA) and a 55% stake in Plains AAP LP PAA is a publicly traded master limited partnership that owns and operates midstream energy infrastructure and provides logistics services for crude oil, natural gas liquids, and natural gas. PAA owns an extensive network of pipelines, terminals, storage facilities, and gathering assets. PAA has 4,000 employees.

Additional Company Information from Website:

Plains GP Holdings (NASDAQ: PAGP) is a publicly traded entity that owns a non-economic controlling general partner interest in PAA and an indirect limited partner interest in PAA, one of the largest energy infrastructure and logistics companies in North America.⁹⁶

Why was the company not included?

This company was not included because we used Plains All American Pipeline LP as a guideline company. Plains GP Holdings LP does not own any operating assets.

Suburban Propane Partners LP*Company Summary from Value Line:*

Suburban Propane Partners LP, is a master limited partnership (MLP) that markets and distributes propane, fuel oil, and other refined fuels in the U.S., operating in Propane; Fuel Oil and Refined Fuels; Natural Gas and Electricity; and Heating, Ventilation, and Air Conditioning (HVAC). As of 9/30/24, serves about 1.0 million active propane customers through roughly 700 locations in 42 states, concentrated on the east and west coasts of the United States. Sold approximately 378 million gallons of propane and 16.9 million gallons of fuel oil in fiscal 2024. Has 3,098 employees.

Additional Company Information from Website:

A Master Limited Partnership since 1996, Suburban Propane Partners LP (NYSE: SPH) has been in the customer service business since 1928.

A value and growth-oriented company headquartered in Whippany, New Jersey, Suburban Propane is managed for long-term, consistent performance.

Suburban Propane is a nationwide marketer and distributor of a diverse array of energy-related products, specializing in propane, fuel oil and refined fuels, as well as marketing natural gas and electricity in deregulated markets. With more than 3,300 full-time employees, Suburban Propane maintains business operations in 41 states, providing dependable service to approximately 1 million

⁹⁶ <https://ir.pagp.com/>, accessed 02/04/2026

residential, commercial, industrial and agricultural customers through approximately 700 locations.⁹⁷

Why was the company not included?

Suburban Propane Partners LP specializes in marketing and distributing fuel oil and refined fuels as well as the marketing of natural gas and electricity in deregulated markets. These specializations are not the same market segments as the companies we are responsible for valuing.

Summit Midstream Corporation

Company Summary from Value Line:

Summit Midstream Corp. is focused on developing, owning and operating midstream energy infrastructure assets that are strategically located in the core producing areas of unconventional resource basins, primarily shale formations. It provides natural gas, crude oil and produced water gathering, processing and transportation services pursuant to primarily long-term, fee-based agreements with customers and counterparties in five unconventional resource basins: the Williston Basin, which includes the Bakken and Three Forks shale formations in North Dakota; the Denver-Julesburg Basin, which includes the Niobrara and Codell shale formations in Colorado and Wyoming; the Fort Worth Basin, which includes the Barnett Shale formation in Texas; the Arkoma Basin, which includes the Woodford and Caney shale formations in Oklahoma; and the Piceance Basin, which includes the Mesaverde formation, the Mancos and Niobrara shale formations in Colorado. Has 272 employees.

Additional Company Information from Website:

Headquartered in Houston, Texas, Summit Midstream Corporation (NYSE: SMC) is a value-driven corporation focused on developing, owning and operating midstream energy infrastructure assets that are strategically located in unconventional resource basins, primarily shale formations, in the continental United States.

We currently operate natural gas, crude oil and produced water gathering systems in five unconventional resource basins:

- the Williston Basin in North Dakota, which includes the Bakken and Three Forks shale formations;
- the Denver-Julesburg Basin, which includes the Niobrara and Codell shale formations in Colorado and Wyoming;
- the Fort Worth Basin in Texas, which includes the Barnett Shale formation;
- the Piceance Basin in Colorado, which includes the liquids-rich Mesaverde formation as well as the emerging Mancos and Niobrara Shale formations; and
- the Arkoma Basin in Oklahoma, which includes the Woodford and Caney Shale formations.

Our systems and the basins they serve are as follows:

- the Polar & Divide system, which serves the Williston Basin;
- the DFW Midstream system, which serves the Fort Worth Basin;
- the Grand River system, which serves the Piceance Basin
- the Niobrara G&P system, which serves the DJ Basin; and
- the Arkoma G&P system, which serves the Arkoma Basin.

⁹⁷ <https://www.suburbanpropane.com/about/>, accessed 02/02/2026

SMC has an equity investment in and operates Double E Pipeline LLC, which is natural gas transmission infrastructure that provides transportation service from multiple receipt points in the Delaware Basin to various delivery points in and around the Waha Hub in Texas.

We generate a substantial majority of our revenue under primarily long-term and fee-based gathering agreements with our customers. The majority of our gathering agreements are underpinned by areas of mutual interest (“AMIs”) and minimum volume commitments (“MVCs”). Our AMIs provide that any production drilled by our customers within the AMIs will be shipped on our gathering systems. The MVCs are designed to ensure that we will generate a minimum amount of gathering revenue over the life of each respective gathering agreement. The fee-based nature of the majority of the gathering agreements enhances the stability of our cash flows and limits our direct commodity price exposure.

Since our formation in 2009, our management team has established a track record of executing this strategy through the acquisition and subsequent development of DFW Midstream, Grand River, Polar & Divide, Niobrara G&P, and Double E Pipeline.⁹⁸

Why was the company not included?

Summit Midstream Corporation’s main business segments are natural gas gathering, treating, and compression services. These business segments are not similar to the main business segments of the companies we are responsible for valuing.

Sunoco LP

Company Summary from Value Line:

Sunoco LP is primarily engaged in energy infrastructure and distribution of motor fuels in over 40 U.S. states, Puerto Rico, Europe, and Mexico. Its midstream operations include an extensive network of over 14,000 miles of pipeline and over 100 terminals. Its fuel distribution operations serve approximately 7,400 Sunoco and partner branded locations and additional independent dealers and commercial customers. The business is comprised of three reportable segments: Fuel Distribution (accounted for more than 90% of total revenue in 2024), Pipeline Systems, and Terminals. Acquired NuStar Energy L.P. (5/24).

Additional Company Information from Website:

Sunoco has grown from its humble roots as a small oil company in Pittsburgh, PA, to one of the largest independent fuel distribution companies in the United States. Sunoco's rich, 130 plus-year heritage, legacy and reputation for innovation, and commitment to its local communities are foundational elements of this iconic American brand. Today, Sunoco distributes fuel to over 5,000 gas station locations in more than 30 states.⁹⁹

Why was the company not included?

Sunoco LP is part of Value Line’s Retail (Hardlines) industry, but has operating subsidiaries in Minnesota and therefore was considered as a guideline company. However, it was determined Sunoco P is not similar enough to the Fluid Transportation Pipelines that we are responsible for

⁹⁸ <http://www.summitmidstream.com/about>, accessed 02/02/2026

⁹⁹ <https://www.sunoco.com/about-us>, accessed 2/6/2026

valuing.

Western Midstream Partners LP (Formerly Western Gas Equity Partners LP)*Company Summary from Value Line:*

Western Midstream Partners LP (formed by the merger between Western Gas Partners and its general partner Western Gas Equity in 2/19) is a growth-oriented master limited partnership. It is engaged in the acquisition, ownership, development, and operation of midstream pipeline assets. Has 14,371 miles of pipeline located in the Rocky Mountains, Texas and New Mexico. Also owns, operates, or has equity interests in gathering systems, treating facilities, and natural gas processing plants.

Additional Company Information from Website:

Our core assets provide services for customers in the Delaware Basin in West Texas and New Mexico, and the DJ Basin in northeastern Colorado, and the Powder River Basin in Northeast Wyoming. Additional assets and investments are located in South Texas, Utah, and Southwest Wyoming. We're engaged in the business of gathering, compressing, treating, processing, and transporting natural gas; gathering, stabilizing and transporting condensate, natural gas liquids (NGLs) and crude oil; and gathering, transporting, recycling, treating and disposing of produced water for our customers. In our capacity as a natural gas processor, we also buy and sell natural gas, NGLs, and condensate on our behalf and our customers under certain gas processing contracts. Western Midstream (WES) is publicly traded on the New York Stock Exchange under the symbol, WES.¹⁰⁰

Why was the company not included?

Western Midstream Partners LP's main business segments include gathering and treating. These business segments are not similar to the main business segments of the companies we are responsible for valuing.

¹⁰⁰ <http://www.westernmidstream.com/About/>, accessed 02/02/2026

Market Segment: Railroads

Companies Included in the Railroad Market Segment

Canadian National Railway Company

Company Summary from Value Line:

Canadian National Railway operates Canada's largest railroad system with 20,000 route miles spanning East-West across Canada and North-South to the Gulf of Mexico through the U.S. Midwest. Acquired BC Rail and GLT mid-'04; EJ&E 1/09. Petroleum & Chemicals, 21% of '24 freight revenues; Metals & Minerals, 12%; Forest Products, 12%; Intermodal, 23%; Coal, 6%; Grain & Fertilizer, 21%; Automotive, 5%. 2024 labor costs: 20% of revenue. 2024 operating ratio: 63.4%. Has about 24,700 employees.

Additional Company Information from Website:

A Leading North American Transportation and Logistics Company. Essential to the economy, the CN team of approximately 23,000 railroaders transports more than C\$250 billion worth of goods annually for a wide range of business sectors, ranging from resource products to manufactured products to consumer goods, across a rail network of approximately 20,000 route-miles spanning Canada and mid-America. Spanning Canada and Mid-America as well as connecting ports on three coasts, the CN network penetrates deep into resource-rich and manufacturing-intensive regions, to move raw materials, intermediate goods and finished goods to market. Our reach extends beyond rail to offer fully integrated transportation and logistics services.¹⁰¹

Why was the company included?

Canadian National Railway is similar to (and is the parent of) the railroad companies that we are responsible for valuing. The company engages in railroad transportation services.

Canadian Pacific Kansas City

Company Summary from Value Line:

Canadian Pacific Kansas City Ltd. formed from the April, 2023 merger of Canadian Pacific and Kansas City Limited, originally founded in the 1800's, is the only transnational rail network in North America, and operates about 8,800 miles of track in the U.S., 8,400 miles in CA, and 3,100 miles in MX. Grain shipments 27% of '24 freight revenue; intermodal, 17%; coal, 11%; metals/minerals, 9%; other, 36%. Operating ratio in '24: 61.3%. Employs 19,797 as of December 2024.

Additional Company Information from Website:

CPKC is the combination of two historic railways – Canadian Pacific (CP) and Kansas City Southern (KCS). Today, we are CPKC and have created the first and only transnational rail network in North America. Drawing on our strong foundations and heritage, CPKC moves essential goods across our 20,000-mile network to support economic growth throughout Canada, the U.S. and Mexico.¹⁰²

Why was the company included?

Canadian Pacific Railway completed the \$31 billion acquisition of Kansas City Southern in 2021. Kansas

¹⁰¹ <https://www.cn.ca/en/about-cn/>, accessed 1/28/2026

¹⁰² <https://www.cpkcr.com/en/about-cpkc>, accessed 1/28/2026

City Southern shares were placed into a voting trust, ensuring independent operations between Kansas City Southern and Canadian Pacific Railway during the regulatory review process.¹⁰³ The merger was approved in 2023. The financial statements of the merged companies have been combined and we will use Canadian Pacific Kansas City as a guideline company for the 2026 Capitalization Rate Study.

CSX Corporation

Company Summary from Value Line:

CSX Corporation provides rail, intermodal transportation, and rail-to-truck transload services. Has about 20,000 route miles in 26 states and two Canadian provinces, with links to more than 240 short-line railroads. Connects the Northeast, Midwest, and Canada with the Southeast. Principal freight: coal, fertilizer, chemicals, automobiles & parts, agricultural products, and intermodal cargo. Sold CSX World Terminals 2/05. 2024 rail operating ratio: 62.1%. Has about 23,500 employees.

Additional Company Information from Website:

CSX Corporation, together with its subsidiaries based in Jacksonville, Fla., is one of the nation's leading transportation suppliers. The company's rail and intermodal businesses provide rail-based transportation services including traditional rail service and the transport of intermodal containers and trailers. Overall, the CSX Transportation network encompasses about 20,000 route miles of track in 23 states, the District of Columbia and the Canadian provinces of Ontario and Quebec. Our transportation network serves some of the largest population centers in the nation. Nearly two-thirds of Americans live within CSX's service territory. Our transportation network serves some of the largest population centers in the nation. Nearly two-thirds of Americans live within CSX's service territory. CSX serves major markets in the eastern United States and has access to over 70 ocean, river and lake port terminals along the Atlantic and Gulf Coasts, the Mississippi River, the Great Lakes and the St. Lawrence Seaway. The company also has access to Pacific ports through alliances with western railroads. CSX moves a broad portfolio of products across the country in a way that minimizes the effect on the environment, takes traffic off an already congested highway system, and minimizes fuel consumption and transportation costs.¹⁰⁴

Why was the company included?

CSX is similar to the railroad companies that we are responsible for valuing. The company engages in railroad transportation services.

Norfolk Southern Corporation

Company Summary from Value Line:

Norfolk Southern Corp. is the owner of Norfolk Southern Railway Company. It is a major domestic freight railroad and operates 19,100 route miles of track in 22 eastern, southern, and midwestern states. It also owns a 58% stake in Conrail. Freight revenue mix in 2024: merchandise, 62% (includes agriculture, wood products, chemicals, metals, aggregates, automotive); intermodal, 25%; coal, 13%. Labor costs: 23% of revenue. Operating ratio: 66.4%. Has 18,500 employees.

Additional Company Information from Website:

¹⁰³ <https://www.cpkcr.com/en/media/canadian-pacific-and-kansas-city-southern-combine-to-create-cpkc>, accessed 1/28/2026

¹⁰⁴ <https://www.csx.com/index.cfm/about-us/company-overview/>, accessed 1/28/2026

Since 1827, we've been moving the goods and materials that power the U.S. economy. Customer-centric and operations-driven, we are dedicated to advancing safety, serving communities, and driving innovation for tomorrow's rail. 19,200 + Route miles across 22 states and the District of Columbia, connecting 800 industrial sites, 175 warehouses, and 43 ports. 20,000 Talented conductors, engineers, and employees committed to safe, efficient rail transport. \$1.5 Billion In capital investments including locomotives, freight cars, tracks, and bridges in one year.¹⁰⁵

Why was the company included?

Norfolk Southern is similar to the railroad companies that we are responsible for valuing. The company engages in railroad transportation services. Union Pacific and Norfolk Southern are in the process of merging and have submitted an application to the Surface Transportation Board for substantive review. UP and NS hope to complete the merger by early 2027.¹⁰⁶ On January 16, 2026, the STB found the UP-NS application incomplete.¹⁰⁷

Union Pacific Corporation

Company Summary from Value Line:

Union Pacific Corporation owns Union Pacific Railroad, the largest railroad in the United States in both track miles and total revenues, with 32,880 route miles serving the western two-thirds of the U.S. Railroad revenue mix in 2024: Premium 31% (automobiles, intermodal); Industrial (chemicals, plastics), 37%; Bulk (grain, coal), 32%. Roughly 10% of sales are from Mexico. Railroad operating ratio in 2024: 59.9%. Has about 33,000 employees.

Additional Company Information from Website:

Union Pacific Railroad is the principal operating company of Union Pacific Corporation (NYSE: UNP). One of America's most recognized companies, Union Pacific Railroad connects 23 states in the western two-thirds of the country by rail, providing a critical link in the global supply chain. From 2013 to 2022, Union Pacific invested approximately \$34 billion in its network and operations to support America's transportation infrastructure. The railroad's diversified business mix includes its Bulk, Industrial and Premium business groups. Union Pacific serves many of the fastest-growing U.S. population centers, operates from all major West Coast and Gulf Coast ports to eastern gateways, connects with Canada's rail systems and is the only railroad serving all six major Mexico gateways. Union Pacific provides value to its roughly 10,000 customers by delivering products in a safe, reliable, fuel-efficient and environmentally responsible manner.¹⁰⁸

Why was the company included?

Union Pacific is one of the railroad companies that we are responsible for valuing. The company engages in railroad transportation services. Union Pacific and Norfolk Southern are in the process of merging and have submitted an application to the Surface Transportation Board for substantive review. UP and NS hope to complete the merger by early 2027.¹⁰⁹ On January 16, 2026, the STB found the UP-NS application incomplete.¹¹⁰

¹⁰⁵ <https://www.norfolksouthern.com/en/about-us/company-overview>, accessed 1/28/2026

¹⁰⁶ <https://www.stb.gov/news-communications/latest-news/pr-25-27/>, accessed 1/28/2026

¹⁰⁷ <https://www.stb.gov/news-communications/latest-news/pr-26-02/>, accessed 1/28/2026

¹⁰⁸ https://www.up.com/aboutup/corporate_info/uprover/index.htm, accessed 1/28/2026

¹⁰⁹ <https://www.stb.gov/news-communications/latest-news/pr-25-27/>, accessed 1/28/2026

¹¹⁰ <https://www.stb.gov/news-communications/latest-news/pr-26-02/>, accessed 1/28/2026

Companies Not Included in the Railroad Market Segment

Freightcar America

Company Summary from Value Line:

FreightCar America Inc. operates primarily in North America through its direct and indirect subsidiaries, JAC Operations Inc.; Johnstown America LLC; Freight Car Services Inc.; JAIX Leasing Company; FreightCar Roanoke LLC; FreightCar Mauritius Ltd.; FreightCar Rail Services LLC; FreightCar Short Line Inc.; and FreightCar Alabama LLC. It manufactures freight cars, supplies railcar parts, leases freight cars, and provides railcar maintenance, repairs, and management. It designs and builds coal cars, bulk commodity cars, flat cars, mill gondola cars, intermodal cars, coil steel cars, and motor vehicle carriers. The company's Manufacturing segment includes new railcar manufacturing, used railcar sales, railcar leasing and major railcar rebuilds. The Parts operating segment is not significant for reporting purposes and has been combined with corporate and other non-operating activities as Corporate and Other. Has 2030 employees.

Additional Company Information from Website:

FreightCar America designs and manufactures steel, stainless steel, aluminum and hybrid steel-aluminum freight cars that transport a wide variety of bulk commodities, containerized freight and other products. Our experienced team works closely with you to create customized railcar solutions for all your needs.¹¹¹

Why was the company not included?

FreightCar America is a designer and manufacturer of freight cars. The company is not engaged in the logistics of railroad transportation services. The company will not be included as its operations are not similar to the companies we are responsible for valuing.

GATX Corporation

Company Summary from Value Line:

GATX Corp. specializes in tank car, freight car, and locomotive leasing. At 12/24, the global lease fleet consisted of about 152,266 railcars and 661 locomotives. Specialty unit finances marine and industrial equipment. The company sold the American Steamship unit in February of 2020, which provided waterborne transportation of dry bulk commodities. Rail North America accounted for 69% of revenue in '24; Rail Int'l, 22%; Engine Leasing, 6%; Other, 3%. Has about 2,150 employees.

Additional Company Information from Website:

We are the leading global provider of railcar leasing and service to customers throughout North America, Europe, and India. Through Trifleet, we own, lease, and manage a global fleet of tank containers. Jointly with Rolls-Royce plc, we also own one of the largest aircraft spare engine leasing portfolios in the world. Across all our businesses, we provide innovative, unparalleled service that enables our customers to transport what matters safely and sustainably, while championing the well-being of our employees and communities. GATX has been headquartered in Chicago since our founding

¹¹¹ <https://freightcaramerica.com/about-us/>, accessed 1/28/2026

in 1898.¹¹²

Why was the company not included?

GATX Corporation specializes in tank car, freight car, and locomotive leasing. These business segments are not similar to the main business segments of the companies we are responsible for valuing.

Greenbrier Companies Inc.

Company Summary from Value Line:

The Greenbrier Companies Inc. is one of the largest manufacturers of railroad freight cars and related equipment in the Western hemisphere. It also has a fleet of equipment that it leases to users of railcars, and provides maintenance service and parts. The company operates in three business segments: Manufacturing (85% of 2024 revenues); Maintenance Services (8%); Leasing & Services (7%). At 8/31/24, its backlog consisted of 26,700 railcars. Has about 14,200 employees.

Additional Company Information from Website:

We operate an integrated business model in North America that combines freight car manufacturing, wheel services, railcar maintenance, component parts, leasing and fleet management services. Our model is designed to provide customers with a comprehensive set of freight car product and service solutions by utilizing our substantial engineering, mechanical and technical capabilities as well as our experienced commercial personnel. Our integrated model allows us to develop cross-selling opportunities and synergies among our reportable segments thereby enhancing our margins. We believe our integrated model is difficult to duplicate and provides greater value for our customers and investors.¹¹³

Why was the company not included?

Greenbrier Companies designs, manufactures, repairs, and markets railroad freight cars and related equipment. These business segments are not similar to the main business segments of the companies we are responsible for valuing.

Trinity Industries

Company Summary from Value Line:

Trinity Industries Inc. manufactures railcars and provides a variety of services to the freight market. Trinity has two principal operating segments: Rail Products Group (manufactures railcars and component parts), Railcar Leasing and Services Group (leasing and maintenance). Spun off the Energy Equipment, Construction Products, and Inland Barge divisions in November of 2018. Has about 7,400 employees.

Additional Company Information from Website:

Trinity Industries Inc. owns market-leading businesses that provide railcar products and services in North America under the trade name TrinityRail®. TrinityRail's unique platform provides a single source for comprehensive rail transportation solutions that optimizes our customers' ownership and usage of railcar equipment and enhances the value-proposition of the rail modal supply chain. Our purpose is to Deliver Goods for the Good of All. We remain committed to rail solutions that deliver goods—safely,

¹¹² <https://www.gatx.com/about-us/>, accessed 1/28/2026

¹¹³ Greenbrier Companies 2025 Annual Report, page 4.

efficiently, and sustainably - for the good of our customers, shareholders, and employees in all the communities we serve. Trinity reports its financial results in two principal segments: the Railcar Leasing and Management Services Group and the Rail Products Group. Our common stock is traded on the New York Stock Exchange under the symbol TRN.¹¹⁴

Why was the company not included?

Trinity Industries primary business is Railcar Manufacturing (railcars and component parts), Railcar Leasing, and Railcar Services. The company provides railcar products and services to the railroads but does not operate as a traditional railroad like the companies we are responsible for valuing.

USD Partners LP

Company Summary from Value Line:

No Value Line summary available. USD Partners L.P. liquidated and ceased operations December 31, 2025.¹¹⁵

Additional Company Information from Website:

USD Partners LP is a fee-based, growth oriented master limited partnership formed in 2014 by US Development Group LLC to acquire, develop and operate energy-related logistics assets, including rail terminals and other high-quality and complementary midstream infrastructure. In addition, we provide our customers with railcars and fleet services related to the transportation of liquid hydrocarbons and biofuels by rail. We generate substantially all of our operating cash flow from multi-year, take-or-pay contracts. Rail transportation of energy-related products provides flexible access to key demand centers on a relatively low fixed-cost basis with faster physical delivery, while preserving the specific quality of customer products over long distances.¹¹⁶

Why was the company not included?

USD Partners LP's operations include railcar loading and unloading, storage and blending in onsite tanks, inbound and outbound pipeline connectivity, truck transloading, and other logistic services. These business segments are not similar to the main business segments of the companies we are responsible for valuing.

Wabtec Corporation

Company Summary from Value Line:

Wabtec provides equipment and services to the global rail industry. Products include brakes, air compressors, heat exchangers, cooling systems, door assemblies, and event recorders. The Freight division (72% of '24 revenue) manufactures and services components used in freight trains; the Transit division (28%) makes products for passenger vehicles, e.g., subways and buses. Acquired GE transportation assets (2/19). United States accounted for 47% of '24 revenue. ~Off. and dir. own 1.1% of common stock; The Vanguard Group, 11.7%; BlackRock Inc., 9.1% (4/25 proxy). About 29,500 employees.

Additional Company Information from Website:

¹¹⁴ <https://www.trin.net/home/default.aspx>, accessed 1/28/2026

¹¹⁵ USD Partners to Liquidate, December 31, 2025, <https://www.businesswire.com/news/home/20251231167823/en/USD-Partners-to-Liquidate>, accessed 2/4/2026

¹¹⁶ <https://investor.usdpartners.com/investors/investor-center-home/default.aspx>, accessed 1/28/2026

Wabtec is a leading global provider of equipment, systems, digital solutions, and value-added services for the freight and transit rail sectors. Drawing on over 150 years of experience, we are leading the way in safety, efficiency, reliability, innovation, and productivity. Whether its freight, transit, mining, industrial or marine, our expertise, technologies, and people – together – are accelerating the future of transportation. Our people, with their extraordinary collective talent, vision and experience are our biggest asset. Our dynamic leadership team has a proven strategy to empower over 27,000 employees in over 50 countries around the world.¹¹⁷

Why was the company not included?

Wabtec Corporation provides equipment and services to the global rail industry. These business segments are not similar to the main business segments of the companies we are responsible for valuing.

¹¹⁷ <https://www.wabteccorp.com/about-wabtec>, accessed 1/28/2026