



Interstate Natural Gas Pipeline Cost Recovery Analysis

This report is the Natural Gas Supply Association's (NGSA) 24th annual evaluation of earnings by major interstate natural gas pipelines. Each year, NGSA analyzes a selection of major interstate natural gas pipelines to assess the rate of return on equity (ROE) earned by these pipelines over the most recent five-year period. Our pipeline study this year includes the same 20 pipelines we used last year.

Summary of Results for 2023

- As shown on the summary tables following this introduction, average earned ROE for 15 of the 20 pipelines in the study met or exceeded a 12% benchmark over the last five years (2019-2023), with an average earned ROE over that period of 16.2%.
- Our analysis shows a slight decrease in the average earned ROE from 2022 to 2023 (16.0% to 15.7%), as well as a decrease from 2019 to 2023 (17.2% to 15.7%).
- The highest earning pipeline in our study over the five-year period was Natural Gas Pipeline Company of America (NGPL), with a five-year average earned ROE of 35.0%. The only other pipeline with an earned ROE above 30% for the five-year period was Trailblazer (32.5%). NGPL was also the highest earner for the current year, at 38.7%.
- The total (net) cost over-recovery in 2023 for the 20 pipelines in our study was \$1.0 billion. Over the five-year study period, the total over-recovery for these 20 pipelines was \$5.4 billion. This over-recovery amount is net of the cost under-recoveries by the five pipelines whose earned ROEs are below 12%.

Major Developments and Policy Change Impacts

NGSA supports healthy returns for interstate pipelines to ensure that there is an adequate incentive to make necessary investments in infrastructure. However, NGSA, like other pipeline shipper groups, has an interest in ensuring that the Federal Energy Regulatory Commission (FERC) takes action to review pipeline rates when there is evidence that a pipeline has substantially exceeded a reasonable level of earned ROE over a sustained period or when there are major policy, regulatory or commercial changes that necessitate revised rates.

While there were no new major policy changes or regulatory developments this year that would have impacted earned ROE for the whole pipeline industry, there are two updates worth noting. First, we reported last year that the ROEs for several pipelines had decreased from the year before due primarily to infrastructure investments that had been made but had not yet been included in rates for a full year. Of these four pipelines (ANR, Columbia Gas, Northern Natural

and Texas Eastern) all but Columbia Gas showed significantly higher earned ROEs this year, as expected.

Secondly, we believe the higher returns calculated this year for several pipelines may well be due to the revenue boost created by bundling of high-value capacity offerings with low- or no-value capacity offerings. Six of the top eight earners in our study this year are pipelines that have been identified by the NGSA as having captured the greatest amount of excess revenues from these "junk and jewel" transactions in 2023.¹ Five of these six pipelines showed significant increases in earned ROE from 2022 to 2023. Northern Border, the pipeline with the highest junk and jewel excess revenue in 2023 (\$45.8 million) would have had an earned ROE of just under 20% without these revenues, rather than the 28% earned ROE calculated in this report.

Methodology

NGSA conducts its cost recovery analysis by comparing annual revenues for each pipeline to an estimate of its regulated cost of service for the same year, using the methodology that would be applied by the FERC in a traditional NGA Section 4 rate proceeding. Most of the cost and revenue data used in our model is taken from each pipeline's FERC Form No. 2 for the year. In those instances where interpretation of Form 2 amounts is required, NGSA uses a conservative approach to determine what to include. The resulting over or under-recovery of costs calculated by this method is then translated into an earned ROE.

Last year we implemented a change to our methodology which does not impact the earned ROE calculation but does impact the dollar cost over-recovery calculation. Prior to last year, our dollar cost recovery calculation was based on the ROE reported in each pipeline's Form 2. Because these rates vary widely from pipeline to pipeline, we are now using the benchmark ROE (12.0%) for the cost over-recovery calculation. This change removes any distortion caused by individual pipelines reporting higher or lower ROEs in their Form 2 data and produces a cost over-recovery amount that is measured against the benchmark 12% ROE.

Below is a summary of the steps used to develop the three elements needed to determine the return on equity for each pipeline.

- 1. *Rate Base*. Rate base includes gas plant in service, accumulated depreciation, gas stored-noncurrent, ADIT, working capital and regulatory assets and liabilities.
- 2. Revenues. Net revenues are generally calculated as total operating revenues less revenues from sales of gas reported in Account Nos. 480-484.
- 3. Cost of Service. Each pipeline's total cost of service is calculated by adding the annual allowed return on rate base, federal and state income taxes, other taxes, depreciation expense, and operation and maintenance (O&M) costs.
 - a. Return on rate base is calculated using the capitalization ratios reported in the Form 2 as long as those ratios are within a range FERC has historically approved. When outside this range, the study uses a deemed capital structure consistent with current FERC policy (65% equity for pipelines showing higher equity ratios).

¹ See comments of AGA, APGA, PGC and NGSA in Docket No. RM22-17 at page 7. Pipelines are NGPL, Northern Border, Transco, Tennessee, Southern and GTN,

- b. To calculate the federal income taxes, the total allowed return on rate base is multiplied by the ratio of the weighted return on equity to the total weighted return on rate base and then multiplied by the grossed-up federal income tax factor pursuant to FERC regulations. For pipelines still owned by an MLP (Enable Gas and Transwestern), no income tax allowance is included.
- c. State income tax rates are calculated as a percentage of federal income tax rates using information from each pipeline's most recent Section 4 rate case, if available. If not, state income tax rates are estimated using statutory state tax rate information from the pipeline's Form 2.
- d. In order to appropriately determine a pipeline's non-gas cost of service and properly align costs with reported revenues, compressor and other fuel costs are removed from O&M expenses.

Each pipeline's over- or under-recovery of costs is calculated by subtracting the total cost of service from net revenues. Because the study's total cost of service calculation already includes a return on rate base, the over or under-recovery of costs is added to the return on equity included in the cost of service to determine the earned ROE for the pipeline. The formula to calculate actual earned rate of return on equity is as follows:

$$ROE = \frac{\left[\left(CR - \left(CR * \left(\frac{FGIT}{(1 + FGIT)}\right)\right) - \left(CR * \left(SIT * FGIT\right)\right)\right) + \left(AR * \left(\frac{ER}{TR}\right)\right)\right]}{RB * EC}$$

Where:

ROE = Actual Earned Rate on Equity
CR = Cost Over- or Under- Recovery

FGIT = Federal Grossed-Up Income Tax Rate

SIT = State Income Tax Rate as a Percentage of FIT

AR = Calculated Return on Rate Base

ER = Weighted Equity Rate of Return on Rate Base TR = Weighted Total Rate of Return on Rate Base

RB = Total Rate Base

EC = Equity Capitalization Ratio

For those pipelines that do not have a fuel tracking and true-up mechanism in place (EGTS and NGPL), NGSA uses the revenues reported by these pipelines for sales of gas and sales of excess fuel retained from shippers to calculate total revenue and earned ROE inclusive of profit from retained fuel amounts in excess of what was actually used.

Betsy Crowe Foresite Energy Services, LLC July, 2024

Natural Gas Supply Association Earned Pipeline Rate of Return on Equity

NGSA Analysis - 20 Pipelines

| Pipeline Name | Notes | Year Ended 2019 | Year Ended 2020 | Year Ended 2021 | Year Ended 2022 | Year Ended 2023 | Five-year average |
|---|-------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------|
| Natural Gas Pipeline Company of America LLC | | 32.3% | 31.4% | 33.8% | 38.7% | 38.7% | 35.0% |
| Trailblazer Pipeline Company LLC | | 38.9% | 47.0% | 34.2% | 22.5% | 19.6% | 32.5% |
| Northern Border Pipeline Company | | 19.9% | 19.6% | 20.0% | 23.9% | 27.8% | 22.2% |
| El Paso Natural Gas Company, LLC | | 24.4% | 21.0% | 20.3% | 17.1% | 24.4% | 21.5% |
| Tennessee Gas Pipeline Company, LLC | | 19.1% | 18.2% | 19.6% | 20.0% | 18.8% | 19.1% |
| Transcontinental Gas Pipe Line Company, LLC | | 15.6% | 16.2% | 18.1% | 19.5% | 18.1% | 17.5% |
| Gas Transmission Northwest LLC | | 25.0% | 20.8% | 11.5% | 12.9% | 14.3% | 16.9% |
| Southern Natural Gas Company, L.L.C. | | 15.7% | 16.6% | 16.2% | 18.9% | 15.9% | 16.7% |
| Northwest Pipeline LLC | | 16.0% | 17.6% | 16.7% | 15.9% | 14.4% | 16.1% |
| Kern River Gas Transmission Co. | | 14.2% | 15.2% | 17.3% | 16.6% | 13.2% | 15.3% |
| Northern Natural Gas Company | | 15.5% | 14.3% | 16.6% | 13.6% | 14.0% | 14.8% |
| Enable Gas Transmission, LLC | | 18.1% | 8.9% | 13.6% | 16.7% | 12.3% | 13.9% |
| Texas Eastern Transmission, LP | | 14.6% | 13.9% | 10.1% | 12.9% | 13.5% | 13.0% |
| Transwestern Pipeline Company, LLC | | 9.6% | 11.9% | 12.7% | 14.5% | 12.7% | 12.3% |
| ANR Pipeline Company | | 13.8% | 13.4% | 11.5% | 9.7% | 12.3% | 12.1% |
| Columbia Gas Transmission, LLC | | 11.2% | 12.4% | 11.2% | 10.8% | 9.6% | 11.0% |
| Dominion Energy / Eastern Gas Transmission | | 12.9% | 11.4% | 7.0% | 10.7% | 10.7% | 10.5% |
| Texas Gas Transmission, LLC | | 12.0% | 10.9% | 7.6% | 8.9% | 7.4% | 9.4% |
| Rockies Express Pipeline LLC | | 9.2% | 4.9% | 7.4% | 9.9% | 9.0% | 8.1% |
| Gulf South Pipeline Co., LP | | 6.6% | 5.3% | 6.2% | 6.5% | 8.2% | 6.6% |
| Average earned ROE | | 17.2% | 16.5% | 15.6% | 16.0% | 15.7% | 16.2% |

Net Cost Over-Recovery (including fuel)

1,268,219,655

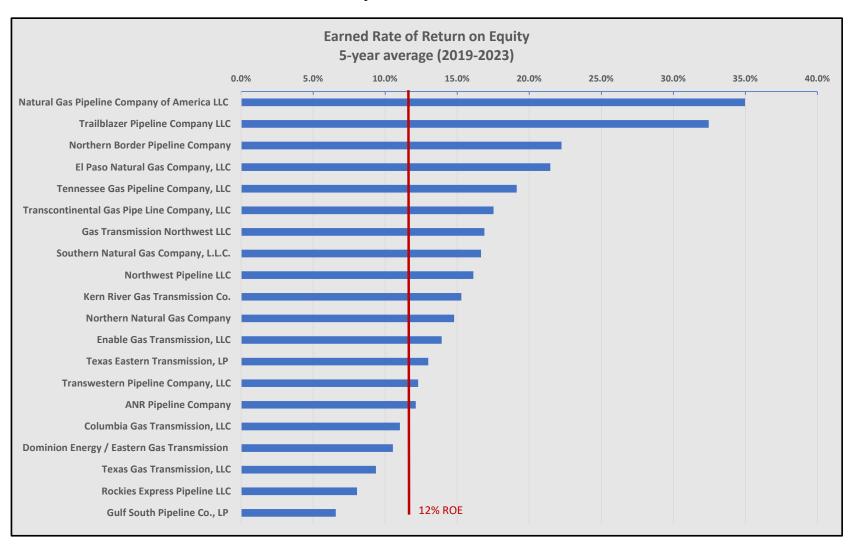
925,370,217

777,354,590 1,280,330,259 1,152,389,305 1,014,425,502

NGSA has determined these pipelines do not have a fuel tracking and true-up mechanism; fuel over(under)-recovery is included in calculation of earned ROE.

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Natural Gas Supply Association Pipeline Cost Recovery Report Summary of Results



Notes to Summary Chart (Ownership and Tax Status)

- 1/ **Natural Gas Pipeline Company of America:** NGPL is organized as an LLC but is a disregarded entity for tax purposes. All its income is included in the tax returns of NGPL Holding Co., which is a corporation.
- Northern Border Pipeline Company: Northern Border is a limited partnership owned 50% by TC Pipelines, LP and 50% by ONEOK, Inc. In 2018, Northern Border elected to eliminate all ADIT and associated regulatory assets and liabilities from their balance sheet. The partnership also now claims eligibility for an income tax allowance due to the fact that it is 50% owned by a corporation (ONEOK, Inc.) and TC Energy now owns all shares of TC Pipelines, LP.
- 3/ **El Paso Natural Gas and Tennessee Gas Pipeline:** Both pipelines are owned by Kinder Morgan Energy Partners, formerly an MLP that is now 100% owned by Kinder Morgan, Inc. (KMI). Their Form 2s state that all "activities" of the pipelines are included in the tax returns of KMI.
- 4/ **Northwest Pipeline:** Northwest was formerly owned by Williams Partners, an MLP which was acquired in full by Williams Companies, a corporation. Northwest's income is included in Williams' federal tax returns.
- 5/ **Enable Gas Transmission:** Enable is now wholly owned by Energy Transfer LP, which acquired Enable Midstream Partners in December 2021. Enable has eliminated its ADIT balances from its Form 2 report as of 2020. Because Energy Transfer LP is an MLP, we have also continued to exclude an income tax allowance for Enable its the cost of service.
- 6/ Kern River Gas Transmission and Dominion Energy / Eastern Gas Transmission:
 Both pipelines are owned by Berkshire Hathaway, Inc. (Dominion was acquired by Berkshire Hathaway in 2020, which changed its name to Eastern Gas Transmission & Storage, Inc.). Both pipelines have retained their ADIT and regulatory asset/liability balances and are eligible for an income tax allowance in our analysis.
- 7/ **ANR Pipeline:** ANR is a wholly-owned indirect subsidiary of TC Energy. Its income is included on the tax returns of TransCanada PipeLine USA Ltd.
- 8/ **Texas Eastern Transmission:** Texas Eastern is a wholly-owned subsidiary of Enbridge, Inc., which acquired all outstanding units of its former owner, Spectra Energy Partners, in 2018. Enbridge has requested authorization from the Chief Accountant to retain all the ADIT and associated regulatory liabilities of Texas Eastern, even though the pipeline is now indirectly owned by a corporation. Texas Eastern has elected to continue reporting these balances on its Form 2. While we include an income tax allowance given Texas Eastern's ownership by Enbridge, we also include a calculation of earned ROE with all ADIT and associated regulatory liability balances removed from rate base.
- 9/ **Texas Gas Transmission and Gulf South Pipeline:** Both pipelines are owned by Boardwalk Pipeline Partners, a former MLP now owned by Loews Corporation. Both pipelines have retained their ADIT and regulatory asset and liability balances. Thus, we continue to include an income tax allowance for these pipelines.