Natural Gas Supply Association

# 2023 PIPELINE COST RECOVERY REPORT

20 MAJOR PIPELINES
2018-2022

Based on FERC Form No. 2 Data

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This report is the Natural Gas Supply Association's (NGSA) 23rd 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. This year we have expanded our pipeline study from 12 to 20 pipelines, making our study results much more representative of the full major natural gas pipeline industry in the U.S.[1]

## Summary of Results for 2022

- As shown on the summary tables following this introduction, average earned ROE for 14 of the 20 pipelines in the study met or exceeded a 12% benchmark over the last five years (2018-2022), with an average earned ROE over that period of 16.6%.
- Our analysis shows a slight increase in the average earned ROE from 2021 to 2022 (15.6% to 16.0%), as well as a modest decrease from 2018 to 2022 (17.5% to 16.0%).
- The highest earning pipeline in our study over the five-year period was Trailblazer, with a five-year average earned ROE of 35.8%. Natural Gas Pipeline Company of America (NGPL) was a close second, with an average earned ROE of 33.8%. NGPL was also the highest earning pipeline in 2022, with an earned ROE of 38.7%.
- The total (net) cost over-recovery in 2022 for the 20 pipelines in our study was $1.3 billion. Over the five-year study period, the total over-recovery for these pipelines was $5.1 billion. These amounts are net of any under-recoveries by any of the pipelines in the group.[2]

## 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.

[1] The eight new pipelines are highlighted in blue on the summary table following this introduction.
[2] This year's report reflects a slight change in methodology for calculating cost over-recovery (see explanation in Methodology section below).

While there were no new major policy changes or regulatory developments this year that would have impacted earned ROE for the whole pipeline industry, the ongoing need for significant infrastructure repair and replacement on the part of older pipeline systems continues to have the most direct impact on the earned ROEs for these companies. For the pipelines included in this study, these expenses appear to be most directly affecting ANR, Columbia Gas, Northern Natural and Texas Eastern. Each of these pipelines, however, has had a recent rate case settlement, which suggests that their returns may show some increase over the next year or two.

## 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.

This year we have 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 this 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. The impact of this change for the current five-year period was to increase the cost over-recovery by about $300 million. This means that, on average, pipelines were using figures higher than 12.0% in their capitalization data (page 218).

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 relies on information obtained in the pipeline's most recent Section 4 rate case or uses a deemed capital structure consistent with current FERC policy (65% equity for pipelines showing higher equity ratios).
    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:

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

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.

**Natural Gas Supply Association**
**Earned Pipeline Rate of Return on Equity**

**NGSA Analysis - 20 Pipelines**

| | Pipeline Name | Notes | Year Ended 2018 | Year Ended 2019 | Year Ended 2020 | Year Ended 2021 | Year Ended 2022 | Five-year average |
|---|---|---|---|---|---|---|---|---|
| | Trailblazer Pipeline Company LLC | | 36.2% | 38.9% | 47.0% | 34.2% | 22.5% | 35.8% |
| ● | Natural Gas Pipeline Company of America LLC | | 32.6% | 32.3% | 31.4% | 33.8% | 38.7% | 33.8% |
| | Northern Border Pipeline Company | | 22.2% | 19.9% | 19.6% | 20.0% | 23.9% | 21.1% |
| | El Paso Natural Gas Company, LLC | | 21.6% | 24.4% | 21.0% | 20.3% | 17.1% | 20.9% |
| | Gas Transmission Northwest LLC | | 26.9% | 25.0% | 20.8% | 11.5% | 12.9% | 19.4% |
| | Tennessee Gas Pipeline Company, LLC | | 16.8% | 19.1% | 18.2% | 19.6% | 20.0% | 18.7% |
| | Northwest Pipeline LLC | | 17.2% | 16.0% | 17.6% | 16.7% | 15.9% | 16.7% |
| | Southern Natural Gas Company, L.L.C. | | 15.9% | 15.7% | 16.6% | 16.2% | 18.9% | 16.7% |
| | Northern Natural Gas Company | | 21.4% | 15.5% | 14.3% | 16.6% | 13.6% | 16.3% |
| | Transcontinental Gas Pipe Line Company, LLC | | 11.6% | 15.6% | 16.2% | 18.1% | 19.5% | 16.2% |
| | Kern River Gas Transmission Co. | | 16.9% | 14.2% | 15.2% | 17.3% | 16.6% | 16.0% |
| | Enable Gas Transmission, LLC | | 19.9% | 18.1% | 8.9% | 13.6% | 16.9% | 15.5% |
| | Texas Eastern Transmission, LP | | 15.6% | 14.6% | 13.9% | 10.1% | 12.9% | 13.4% |
| | ANR Pipeline Company | | 16.1% | 13.8% | 13.4% | 11.5% | 9.7% | 12.9% |
| ● | Dominion Energy / Eastern Gas Transmission | | 15.4% | 12.9% | 11.4% | 7.0% | 10.7% | 11.5% |
| | Transwestern Pipeline Company, LLC | | 7.7% | 9.6% | 11.9% | 12.7% | 14.5% | 11.3% |
| | Columbia Gas Transmission, LLC | | 10.9% | 11.2% | 12.4% | 11.2% | 10.8% | 11.3% |
| | Texas Gas Transmission, LLC | | 13.2% | 12.0% | 10.9% | 7.6% | 8.9% | 10.5% |
| | Rockies Express Pipeline LLC | | 9.6% | 9.2% | 4.9% | 7.4% | 9.9% | 8.2% |
| | Gulf South Pipeline Co., LP | | 2.6% | 6.6% | 5.3% | 6.2% | 6.5% | 5.5% |
| | **Average earned ROE** | | 17.5% | 17.2% | 16.5% | 15.6% | 16.0% | 16.6% |
| | **Net Cost Over-Recovery (including fuel)** | | 820,852,788 | 1,268,219,655 | 925,370,217 | 777,354,590 | 1,281,865,394 | 1,014,732,529 |

● 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.

**Natural Gas Supply Association Pipeline Cost Recovery Report**
**Summary of Results**