

BEFORE THE  
NORTH CAROLINA UTILITIES COMMISSION  
PUBLIC SERVICE COMPANY OF NORTH CAROLINA, INC.

DOCKET G-5, SUB 632  
DOCKET G-5, SUB 634

SETTLEMENT TESTIMONY  
OF  
JENNIFER E. NELSON

OCTOBER 15, 2021

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1

1 **I. INTRODUCTION AND PURPOSE**

2 Q. PLEASE STATE YOUR NAME, AFFILIATION, AND BUSINESS  
3 ADDRESS.

4 A. My name is Jennifer E. Nelson. I am an Assistant Vice President at Concentric  
5 Energy Advisors. My business address is 293 Boston Post Road West, Suite  
6 500, Marlborough, Massachusetts 01742.

7 Q. ARE YOU THE SAME JENNIFER E. NELSON WHO SUBMITTED  
8 DIRECT AND REBUTTAL TESTIMONIES IN THIS PROCEEDING?

9 A. Yes, I am. I filed direct testimony (“Direct Testimony”) and rebuttal testimony  
10 (“Rebuttal Testimony”) on behalf of Public Service Company of North  
11 Carolina, Inc. (“PSNC” or the “Company”), in which I recommended a Return  
12 on Equity (“ROE”) of 10.25 percent, within a range of 9.60 percent to 10.75  
13 percent.<sup>1</sup>

14 Q. WHAT IS THE PURPOSE OF YOUR SETTLEMENT TESTIMONY IN  
15 THIS PROCEEDING?

16 A. The purpose of my testimony is to explain my support for the Stipulation of  
17 Settlement, dated October 15, 2021 (the “Stipulation”) among the Company  
18 and the Public Staff – North Carolina Utilities Commission, Carolina Utility  
19 Customers Association, Inc., and Evergreen Packaging, LLC (collectively, the  
20 “Settling Parties”). My testimony addresses the agreed-upon ROE  
21 (“Stipulated ROE”), capital structure (“Stipulated Capital Structure”), and

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<sup>1</sup> Direct Testimony of Jennifer E. Nelson, at 3; Rebuttal Testimony of Jennifer E. Nelson, at 75-76.

1 overall rate of return (“Stipulated ROR”) contained in the Stipulation.

2 Q. HAVE YOU PREPARED ANY EXHIBITS IN CONJUNCTION WITH  
3 YOUR SETTLEMENT TESTIMONY?

4 A. Yes, Nelson Settlement Exhibit 1 and Nelson Settlement Exhibit 2 were  
5 prepared by me or under my direction.

6 **II. STIPULATED ROE, CAPITAL STRUCTURE, AND ROR**

7 Q. ARE YOU FAMILIAR WITH THE TERMS OF THE STIPULATION AS IT  
8 RELATES TO THE COMPANY’S ROE, CAPITAL STRUCTURE, AND  
9 ROR?

10 A. Yes. I understand the Settling Parties have agreed to the Stipulated ROR of 7.07  
11 percent based on the capital structure and cost rates shown in Table 1 below.

12 **Table 1: Stipulated Rate of Return<sup>2</sup>**

	<b>Capital Ratio</b>	<b>Cost</b>	<b>Weighted Cost</b>
Long-Term Debt	47.06%	4.48%	2.108%
Short-Term Debt	1.34%	0.25%	0.003%
Common Equity	51.60%	9.60%	4.954%
Total	100.00%		7.065%

13 Q. IN GENERAL, DO YOU SUPPORT THE COMPANY’S DECISION TO  
14 AGREE TO THE STIPULATED ROE, CAPITAL STRUCTURE, AND ROR?

15 A. Yes, I do. As discussed throughout my Direct and Rebuttal Testimonies, the  
16 models used to estimate the ROE produce a wide range of estimates.<sup>3</sup> It is my  
17 position that in a fully litigated proceeding, an ROE between 9.60 percent and

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<sup>2</sup> See, Docket No. G-5, Sub 632, Stipulation of Settlement, October 15, 2021.

<sup>3</sup> See, e.g., Direct Testimony of Jennifer E. Nelson, at 17.

1 10.75 percent represents the range of returns required by equity investors for  
2 PSNC based on recent market data. The Stipulated ROE of 9.60 percent is at  
3 the low end of that range. Further, I recognize the benefits associated with the  
4 decision to enter into the comprehensive settlement of all issues. Therefore, in  
5 my opinion, the 9.60 percent Stipulated ROE is a reasonable resolution of an  
6 otherwise contentious issue. Lastly, I understand the Company has determined  
7 that the terms of the Stipulation, including the Stipulated ROE, Stipulated  
8 Capital Structure, and Stipulated ROR would be viewed by the rating agencies  
9 as constructive and equitable. I understand and respect that determination.

10 Q. HAVE YOU REVIEWED THE STIPULATED ROE AND STIPULATED  
11 ROR IN THE CONTEXT OF RETURNS AUTHORIZED FOR OTHER  
12 NATURAL GAS DISTRIBUTION UTILITIES?

13 A. Yes, I have. Since the Commission's order in the Company's last rate case, the  
14 average and median ROE authorized for natural gas distribution utilities in rate  
15 cases reported by Regulatory Research Associates ("RRA") were each 9.60  
16 percent.<sup>4</sup> Additionally, 88 of the 160 (*i.e.*, 55.00 percent) natural gas  
17 distribution rate cases covered by RRA since the Company's last rate case  
18 authorized an ROE of 9.60 percent or higher (*see* Nelson Settlement Exhibit  
19 1).<sup>5</sup>

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<sup>4</sup> *See* Nelson Settlement Exhibit 1.

<sup>5</sup> Source: Regulatory Research Associates. Natural gas distribution utility rate cases reported between November 1, 2016 and October 13, 2021. *See also* Nelson Settlement Exhibit 1.

1           During the same period, the average and median authorized rate of  
2           return were 7.14 percent and 7.15 percent, respectively; 88 of 149 natural gas  
3           distribution rate cases (*i.e.*, 59.06 percent) authorized an overall rate of return  
4           of 7.07 percent and higher.<sup>6</sup> From that perspective, the Stipulated ROE and  
5           Stipulated ROR are consistent with, if not somewhat conservative relative to  
6           returns recently authorized for natural gas distribution utilities.

7           In my Rebuttal Testimony, I reviewed the current authorized equity  
8           ratios for the operating companies within the proxy group companies  
9           considered by the ROE witnesses.<sup>7</sup> For a similar perspective, I gathered the  
10          current authorized ROEs for the proxy group companies in each jurisdiction in  
11          which they operate, and calculated average and median current authorized ROE  
12          statistics from two perspectives (*see* Nelson Settlement Exhibit 2). Under the  
13          first perspective, if the current authorized ROE in each individual operating  
14          subsidiary is given equal weight, the average and median current authorized  
15          ROE is 9.73 percent and 9.75 percent respectively, with 31 of 48 operating  
16          subsidiaries (*i.e.*, 64.58 percent) having a current authorized ROE of 9.60  
17          percent or higher.<sup>8</sup> Under the second perspective, if the current authorized ROE

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<sup>6</sup> Source: Regulatory Research Associates. Natural gas distribution utility rate cases reported between November 1, 2016 and October 13, 2021. Excludes rate cases in jurisdictions that include non-investor supplied capital in the ratemaking capital structure (*i.e.*, Arkansas, Florida, Indiana, and Michigan). *See also* Nelson Settlement Exhibit 1.

<sup>7</sup> Rebuttal Testimony of Jennifer E. Nelson, at 23-25.

<sup>8</sup> Sources: Regulatory Research Associates; individual company 2020 10-Ks. *See* Nelson Exhibit 2. This approach gives equal weight to the current authorized ROE of each individual operating subsidiary. Under this approach, the current authorized ROE for a proxy company with more operating subsidiaries would account for a greater share of the average than a proxy company with fewer operating subsidiaries.

1 for each proxy company reflects the average of its operating subsidiaries, the  
2 average current authorized ROE for the proxy group is 9.67 percent and the  
3 median is 9.60 percent.<sup>9</sup>

4 Q. ARE THERE OTHER DISTINCTIONS THAT ARE IMPORTANT TO  
5 CONSIDER WHEN REVIEWING AUTHORIZED RETURNS?

6 A. Yes, there are. As explained in my Direct Testimony, the regulatory  
7 environment is a key driver of investors' risk assessment for utilities.<sup>10</sup> For  
8 example, 50.00 percent of the factors that Moody's considers in its credit ratings  
9 determination are related to the nature of regulation.<sup>11</sup> Given PSNC's ongoing  
10 need to access external capital and the weight rating agencies and investors  
11 place on the nature of the regulatory environment, it is reasonable to assess the  
12 Stipulated ROE and Stipulated ROR with those available to natural gas  
13 distribution utilities in jurisdictions viewed as having constructive regulatory  
14 environments.

15 Q. IN GENERAL, IS NORTH CAROLINA CONSIDERED TO HAVE A  
16 CONSTRUCTIVE REGULATORY ENVIRONMENT?

17 A. Yes. RRA is a widely referenced source of rate case data that assesses the extent  
18 to which regulatory jurisdictions are constructive from investors'

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<sup>9</sup> This approach gives equal weight to each proxy company that reflects the average of its operating subsidiaries. Under this approach, the current authorized ROE for a single operating subsidiary would account for a greater share of a proxy company average with fewer operating subsidiaries than for a proxy company with more operating subsidiaries.

<sup>10</sup> Direct Testimony of Jennifer E. Nelson, at 15.

<sup>11</sup> Direct Testimony of Jennifer E. Nelson, at 15-16.

1 perspectives.<sup>12</sup> In my Rebuttal Testimony filed on October 7, 2021, I noted that  
2 North Carolina was ranked “Average/1” according to RRA.<sup>13</sup> On October 13,  
3 2021, RRA raised its ranking for North Carolina from “Average/1” to “Above  
4 Average/3,” noting recent legislation that improved the constructiveness of the  
5 state’s regulatory environment, combined with authorized returns that have  
6 been slightly above the national average at the time established.<sup>14</sup>

7 Q. HOW HAVE YOU CONSIDERED THOSE DISTINCTIONS IN YOUR  
8 REVIEW OF THE STIPULATED ROR?

9 A. In my Rebuttal Testimony, I discussed the distinction in authorized ROEs for  
10 natural gas distribution utilities in more constructive regulatory jurisdictions  
11 relative to less constructive jurisdictions.<sup>15</sup> I performed a similar review of the  
12 Stipulated ROR relative to the overall rate of return authorized for natural gas  
13 distribution utilities in more constructive jurisdictions. As shown in Table 2  
14 below and in Nelson Settlement Exhibit 1, the average and median authorized  
15 rate of return for natural gas utilities in jurisdictions rated “Above Average/3”  
16 and higher (that is, as constructive or better than North Carolina) since the  
17 Company’s last rate case is 7.35 percent and 7.30 percent respectively.<sup>16</sup> The

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<sup>12</sup> Rebuttal Testimony of Jennifer E. Nelson, at 10.

<sup>13</sup> Rebuttal Testimony of Jennifer E. Nelson, at 10.

<sup>14</sup> RRA Regulatory Focus, “Recent events signal shift in regulatory risk for NC, Ariz. Utilities,” October 13, 2021.

<sup>15</sup> Rebuttal Testimony of Jennifer E. Nelson, at 10-11.

<sup>16</sup> Excludes rate cases in jurisdictions that include non-investor supplied capital in the ratemaking capital structure (*i.e.*, Arkansas, Florida, Indiana, and Michigan).



1 Stipulated ROR of 7.07 percent is approximately 28 and 23 basis points below  
2 those benchmarks, respectively.

3 **Table 2: Authorized Rate of Return by RRA Ranking<sup>17</sup>**

	RRA Ranking: Above Average/3 and Higher	RRA Ranking: Average/1 and Lower
Average	7.35%	7.11%
Median	7.30%	7.13%
High	7.88%	8.59%
Low	6.85%	5.75%

4 As demonstrated from the data above, the Stipulated ROR is low  
5 relative to the overall rates of return authorized in other jurisdictions. The low  
6 overall rate of return contained in the Stipulation is brought about by the  
7 Company's rather low cost of debt. That low cost of debt is supported by  
8 reasonable regulatory outcomes, including constructive decisions regarding the  
9 ROE and capital structure. In my opinion, the settlement maintains that support,  
10 and produces the overall rate of return on which customer rates would be set.  
11 From that important perspective, the Stipulated ROR strikes the necessary  
12 balance between customer and investor interests.

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<sup>17</sup> Source: Regulatory Research Associates for natural gas distribution rate cases completed between November 1, 2016 and October 13, 2021. Excludes rate cases in jurisdictions that include non-investor supplied capital in the ratemaking capital structure (*i.e.*, Arkansas, Florida, Indiana, and Michigan).

1 Q. HOW DOES THE STIPULATED CAPITAL STRUCTURE COMPARE TO  
2 EQUITY RATIOS AUTHORIZED RECENTLY FOR NATURAL GAS  
3 DISTRIBUTION UTILITIES?

4 A. In my Rebuttal Testimony, I performed several analyses relating to the capital  
5 structures recently authorized for natural gas utilities. In particular, the 51.60  
6 percent equity ratio included in the Stipulated Capital Structure is somewhat  
7 below the average and median authorized equity ratio for natural gas utilities in  
8 jurisdictions ranked “Average/1” and higher between 2019-2021 (*i.e.*, 52.60  
9 percent and 52.02 percent, respectively).<sup>18</sup> Additionally, since PSNC’s last rate  
10 case, the average and median authorized equity ratio for natural gas distribution  
11 utilities was 51.66 percent and 51.81 percent, respectively.<sup>19</sup>

12 Given RRA’s upgrade of the regulatory environment in North Carolina  
13 since the filing of my Rebuttal Testimony, I also reviewed the average and  
14 median authorized equity ratio for natural gas utilities in jurisdictions ranked  
15 “Above Average/3” and higher since the Company’s last rate case. As shown  
16 in Table 3 below, the 51.60 percent equity ratio included in the Stipulated  
17 Capital Structure falls between the average and median authorized equity ratios  
18 for natural gas distribution utilities in jurisdictions ranked “Above Average/3”  
19 and higher, and those authorized in jurisdictions ranked “Average/1” and lower.

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<sup>18</sup> Rebuttal Testimony of Jennifer E. Nelson, at 22, Table 4.

<sup>19</sup> See Nelson Settlement Testimony 1. Source: Regulatory Research Associates for natural gas distribution rate cases completed between November 1, 2016 and October 13, 2021. Excludes rate cases in jurisdictions that include non-investor supplied capital in the ratemaking capital structure (*i.e.*, Arkansas, Florida, Indiana, and Michigan).

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**Table 3: Authorized Equity Ratio by RRA Ranking<sup>20</sup>**

	RRA Ranking: Above Average/3 and Higher	RRA Ranking: Average/1 and Lower
Average	53.28%	51.37%
Median	52.52%	51.38%
High	59.64%	60.18%
Low	49.23%	42.90%

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Based on my review of the data presented above, the 51.60 percent equity ratio contained in the Stipulated Capital Structure is a reasonable resolution to an otherwise contentious issue.

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Q. BASED ON YOUR ANALYSES PRESENTED ABOVE DO YOU BELIEVE THE STIPULATION IS REASONABLE?

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A. Yes. Based on the data shown above, I conclude the Stipulated ROE, Stipulated Capital Structure, and Stipulated ROR, as components of the comprehensive settlement reached by the parties, contribute to a reasonable resolution of all issues in this proceeding.

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Q. LASTLY, DOES YOUR TESTIMONY CONSIDER THE ECONOMIC CONDITIONS IN NORTH CAROLINA?

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A. Yes, it does. I understand and appreciate the Commission's need to balance the interests of investors and customers, as well as its requirement to consider economic conditions in North Carolina as it sets rates. As explained in both my Direct and Rebuttal Testimonies, I recognize that economic conditions are

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<sup>20</sup> Source: Regulatory Research Associates. Natural gas distribution utility rate cases reported between November 1, 2016 and October 13, 2021. Excludes rate cases in jurisdictions that include non-investor supplied capital in the ratemaking capital structure (*i.e.*, Arkansas, Florida, Indiana, and Michigan). See Nelson Settlement Exhibit 1.

1           improving in North Carolina and across the U.S.<sup>21</sup> Because North Carolina's  
2           economic conditions remain highly correlated to the economic conditions  
3           nationally,<sup>22</sup> my review of North Carolina's economic conditions does not alter  
4           my conclusion that the Stipulated ROE, Capital Structure, and ROR are  
5           reasonable resolutions to otherwise contentious issues.

6   Q.     DOES THIS CONCLUDE YOUR SETTLEMENT TESTIMONY?

7   A.     Yes, it does.

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<sup>21</sup> Direct Testimony of Jennifer E. Nelson, at 51-60; Rebuttal Testimony of Jennifer E. Nelson, at 72.

<sup>22</sup> *See*, Rebuttal Testimony of Jennifer E. Nelson, at 72.

Authorized ROE and Overall Rate of Return for Natural Gas Distribution Utilities, November 1, 2016 - October 13, 2021

State	Company	Parent Company Ticker	Docket	Rate Case Service Type	Case Type	Date of Final Order	Authorized Return on Original Cost	Authorized Return on Equity	Authorized Common Equity to Total Capital (%)	RRA Ranking	Numerical Ranking
Wisconsin	Madison Gas and Electric Co.	MGEE	D-3270-UR-121 (Gas)	Natural Gas	Distribution	11/9/2016	7.88%	9.80%	57.16%	Above Average / 2	2
Wisconsin	Wisconsin Power and Light Co	LNT	D-6680-UR-120 (Gas)	Natural Gas	Distribution	11/18/2016	7.84%	10.00%	52.20%	Above Average / 2	2
Michigan	DTE Gas Co.	DTE	C-U-17999	Natural Gas	Distribution	12/9/2016	5.76%	10.10%	38.65%	Average / 1	4
New York	Brooklyn Union Gas Co.	NG.	C-16-G-0059	Natural Gas	Distribution	12/15/2016	6.15%	9.00%	48.00%	Average / 2	5
New York	KeySpan Gas East Corp.	NG.	C-16-G-0058	Natural Gas	Distribution	12/15/2016	6.42%	9.00%	48.00%	Average / 2	5
Delaware	Chesapeake Utilities Corp.	CPK	D-15-1734	Natural Gas	Distribution	12/20/2016	7.53%	9.75%	NA	Average / 3	6
Nevada	Sierra Pacific Power Co.	BRK.A	D-16-06007	Natural Gas	Distribution	12/22/2016	5.75%	9.50%	48.03%	Average / 2	5
New York	Consolidated Edison Co. of NY	ED	C-16-G-0061	Natural Gas	Distribution	1/24/2017	6.82%	9.00%	48.00%	Average / 2	5
Georgia	Atlanta Gas Light Co.	SO	D-40828	Natural Gas	Distribution	2/21/2017	NA	10.55%	51.00%	Above Average / 3	3
District of Columbia	Washington Gas Light Co.	ALA	FC-1137	Natural Gas	Distribution	3/1/2017	7.57%	9.25%	55.70%	Below Average / 1	7
Arizona	Southwest Gas Corp.	SWX	D-G-01551A-16-0107	Natural Gas	Distribution	4/11/2017	7.42%	9.50%	51.70%	Average / 3	6
New York	Natl Fuel Gas Distribution Cor	NFG	C-16-G-0257	Natural Gas	Distribution	4/20/2017	6.92%	8.70%	42.90%	Average / 2	5
Idaho	Intermountain Gas Co.	MDU	C-INT-G-16-2	Natural Gas	Distribution	4/28/2017	7.30%	9.50%	50.00%	Average / 2	5
Texas	CenterPoint Energy Resources	CNP	D-GUD-10567	Natural Gas	Distribution	5/23/2017	8.02%	9.60%	55.15%	Average / 2	5
Delaware	Delmarva Power & Light Co.	EXC	D-16-0650	Natural Gas	Distribution	6/6/2017	NA	9.70%	NA	Average / 3	6
Kentucky	Louisville Gas & Electric Co.	PPL	C-2016-00371 (gas)	Natural Gas	Distribution	6/22/2017	NA	9.70%	NA	Average / 1	4
New Jersey	Elizabethtown Gas Co.	SJI	D-GR-16090826	Natural Gas	Distribution	6/30/2017	6.71%	9.60%	46.00%	Below Average / 2	8
Montana	NorthWestern Power Co.	NWE	D-D2016.9.68	Natural Gas	Distribution	7/20/2017	6.96%	9.55%	46.79%	Average / 3	6
Michigan	Consumers Energy Co.	CMS	C-U-18124	Natural Gas	Distribution	7/31/2017	5.97%	10.10%	41.27%	Average / 1	4
Oregon	Avista Corp.	AVA	D-UG 325	Natural Gas	Distribution	9/13/2017	7.35%	9.40%	50.00%	Average / 2	5
Maryland	Columbia Gas of Maryland Inc	NI	C-9447	Natural Gas	Distribution	9/19/2017	7.35%	9.70%	NA	Below Average / 3	9
Alaska	ENSTAR Natural Gas Co.	ALA	D-U-16-066	Natural Gas	Distribution	9/22/2017	8.59%	11.88%	51.81%	Below Average / 1	7
South Carolina	Piedmont Natural Gas Co.	DUK	D-2017-7-G	Natural Gas	Distribution	9/27/2017	7.60%	10.20%	53.00%	Average / 1	4
New Jersey	South Jersey Gas Co.	SJI	D-GR-17010071	Natural Gas	Distribution	10/20/2017	6.80%	9.80%	52.50%	Below Average / 2	8
California	San Diego Gas & Electric Co.	SRE	Advice No. 2611-G	Natural Gas	Distribution	10/26/2017	7.55%	10.20%	52.00%	Above Average / 3	3
California	Southern California Gas Co.	SRE	Advice No. 5192	Natural Gas	Distribution	10/30/2017	7.34%	10.05%	52.00%	Above Average / 3	3
Washington	Puget Sound Energy Inc.	XEL	D-UG-170034	Natural Gas	Distribution	12/5/2017	7.60%	9.50%	48.50%	Average / 3	6
Wisconsin	Northern States Power Co.	D	D-4220-UR-123 (Gas)	Natural Gas	Distribution	12/7/2017	7.56%	9.80%	51.45%	Above Average / 2	2
Connecticut	The Sitem CT Gas Co	IBE	D-17-05-42	Natural Gas	Distribution	12/13/2017	7.42%	9.25%	52.19%	Below Average / 2	8
Idaho	Avista Corp.	AVA	C-AVU-G-17-01	Natural Gas	Distribution	12/28/2017	7.61%	9.50%	50.00%	Average / 2	5
Illinois	Northern Illinois Gas Co.	SO	D-17-0124	Natural Gas	Distribution	1/31/2018	7.26%	9.80%	52.00%	Average / 2	5
Missouri	Missouri Gas Energy	SR	C-GR-2017-0216	Natural Gas	Distribution	2/21/2018	7.20%	9.80%	54.16%	Below Average / 1	7
Missouri	Spire Missouri Inc.	SR	C-GR-2017-0215	Natural Gas	Distribution	2/21/2018	7.20%	9.80%	54.16%	Below Average / 1	7
Maine	Northern Utilities Inc.	UTL	D-2017-00065	Natural Gas	Distribution	2/28/2018	7.53%	9.50%	50.00%	Average / 2	5
New York	Niagara Mohawk Power Corp.	NG.	C-17-G-0239	Natural Gas	Distribution	3/15/2018	6.53%	9.00%	48.00%	Average / 1	4
Florida	Pivotal Utility Holdings Inc.	NEE	20170179-GU	Natural Gas	Distribution	3/26/2018	NA	10.19%	48.00%	Above Average / 2	2
Washington	Avista Corp.	AVA	D-UG-170486	Natural Gas	Distribution	4/26/2018	7.50%	9.50%	48.50%	Average / 3	6
New Hampshire	Liberty Utilities EnergyNorth	AQN	D-DG-17-048	Natural Gas	Distribution	4/27/2018	6.80%	9.30%	49.21%	Average / 3	6
New Hampshire	Northern Utilities Inc.	UTL	D-DG-17-070	Natural Gas	Distribution	5/2/2018	7.59%	9.50%	51.70%	Average / 3	6
Kentucky	Atmos Energy Corp.	ATO	C-2017-00349	Natural Gas	Distribution	5/3/2018	7.41%	9.70%	52.57%	Average / 1	4
Montana	MDU Resources Group	MDU	D2017.9.79	Natural Gas	Distribution	5/29/2018	7.21%	9.40%	51.62%	Below Average / 1	7
Missouri	Liberty Utilities (Midstates)	AQN	C-GR-2018-0013	Natural Gas	Distribution	6/6/2018	NA	9.80%	NA	Average / 3	6
New York	Central Hudson Gas & Electric	FTS	C-17-G-0460	Natural Gas	Distribution	6/14/2018	6.44%	8.80%	48.00%	Average / 1	4
Wyoming	Black Hills Northwest Wyoming	BKH	D-30011-97-GR-17	Natural Gas	Distribution	7/16/2018	7.75%	9.60%	54.00%	Average / 3	6
Washington	Cascade Natural Gas Corp.	MDU	D-UG-170929	Natural Gas	Distribution	7/20/2018	7.31%	9.40%	49.00%	Average / 3	6
Rhode Island	Narragansett Electric Co.	NG.	D-4770 (gas)	Natural Gas	Distribution	8/24/2018	7.15%	9.28%	50.95%	Average / 2	5
Michigan	Consumers Energy Co.	CMS	C-U-18424	Natural Gas	Distribution	8/28/2018	5.86%	10.00%	40.91%	Above Average / 3	3
Michigan	DTE Gas Co.	DTE	C-U-18999	Natural Gas	Distribution	9/13/2018	5.56%	10.00%	38.30%	Above Average / 3	3
Wisconsin	Wisconsin Power and Light Co	LNT	D-6680-UR-121 (Gas)	Natural Gas	Distribution	9/14/2018	6.97%	10.00%	52.00%	Above Average / 2	2
Indiana	Northern IN Public Svc Co.	NI	Ca-44988	Natural Gas	Distribution	9/19/2018	6.50%	9.85%	46.88%	Average / 1	4
Wisconsin	Madison Gas and Electric Co.	MGEE	D-3270-UR-122 (Gas)	Natural Gas	Distribution	9/20/2018	7.10%	9.80%	56.06%	Above Average / 2	2
North Dakota	MDU Resources Group	MDU	C-PU-17-295	Natural Gas	Distribution	9/26/2018	7.24%	9.40%	51.00%	Average / 1	4
South Carolina	Piedmont Natural Gas Co.	DUK	D-2018-7-G	Natural Gas	Distribution	9/26/2018	7.60%	10.20%	53.00%	Average / 3	6
Massachusetts	Boston Gas Co.	NG.	DPU-17-170 (Boston Gas)	Natural Gas	Distribution	9/28/2018	7.01%	9.50%	53.04%	Average / 2	5
Massachusetts	Colonial Gas Co.	NG.	DPU-17-170 (Colonial Gas)	Natural Gas	Distribution	9/28/2018	7.18%	9.50%	53.04%	Average / 2	5
Arkansas	Black Hills Energy Arkansas	BKH	D-17-071-U	Natural Gas	Distribution	10/5/2018	5.62%	9.61%	40.43%	Average / 1	4
Tennessee	Chattanooga Gas Co.	SO	D-18-00017	Natural Gas	Distribution	10/15/2018	7.12%	9.80%	49.23%	Above Average / 3	3
Oregon	Northwest Natural Gas Co.	NWN	D-UG-344	Natural Gas	Distribution	10/26/2018	7.32%	9.40%	50.00%	Average / 2	5
New Jersey	Public Service Electric Gas	PEG	D-GR18010030	Natural Gas	Distribution	10/29/2018	6.99%	9.60%	54.00%	Below Average / 1	7
Illinois	Ameren Illinois	AEE	D-18-0463	Natural Gas	Distribution	11/1/2018	7.14%	9.87%	50.00%	Average / 2	5
Delaware	Delmarva Power & Light Co.	EXC	D-17-0978	Natural Gas	Distribution	11/8/2018	6.78%	9.70%	50.52%	Average / 3	6
Minnesota	Minnesota Energy Resources	WEC	D-G-011/GR-17-563	Natural Gas	Distribution	11/8/2018	6.70%	9.70%	50.90%	Average / 2	5
Maryland	Washington Gas Light Co.	ALA	C-9481	Natural Gas	Distribution	12/11/2018	7.30%	9.70%	51.69%	Below Average / 3	9
Connecticut	Yankee Gas Services Co.	ES	D-18-05-10	Natural Gas	Distribution	12/12/2018	7.06%	9.30%	53.76%	Below Average / 1	7
Iowa	Interstate Power & Light Co.	LNT	D-RPU-2018-0002	Natural Gas	Distribution	12/13/2018	7.29%	9.60%	51.00%	Average / 1	4
Connecticut	CT Natural Gas Corp.	IBE	D-18-05-16	Natural Gas	Distribution	12/19/2018	7.32%	9.30%	55.00%	Below Average / 1	7
Colorado	Public Service Co. of CO	XEL	D-17AL-0363G	Natural Gas	Distribution	12/21/2018	7.12%	9.35%	54.60%	Average / 2	5
Nevada	Southwest Gas Corp.	SWX	D-18-05031 (Southern)	Natural Gas	Distribution	12/24/2018	6.65%	9.25%	49.66%	Average / 2	5
Nevada	Southwest Gas Corp.	SWX	D-18-05031 (Northern)	Natural Gas	Distribution	12/24/2018	6.98%	9.25%	49.66%	Average / 2	5
Maryland	Baltimore Gas and Electric Co.	EXC	C-9484	Natural Gas	Distribution	1/4/2019	7.09%	9.80%	52.85%	Below Average / 3	9
Massachusetts	The Berkshire Gas Co.	IBE	DPU 18-40	Natural Gas	Distribution	1/18/2019	8.33%	9.70%	54.00%	Average / 2	5
New York	Orange & Rockland Utts Inc.	ED	C-18-G-0068	Natural Gas	Distribution	3/14/2019	6.97%	9.00%	48.00%	Average / 1	4
Kentucky	Duke Energy Kentucky Inc.	DUK	C-2018-00261	Natural Gas	Distribution	3/27/2019	7.07%	9.70%	50.76%	Average / 1	4
Kentucky	Louisville Gas & Electric Co.	PPL	C-2018-00295 (gas)	Natural Gas	Distribution	4/30/2019	NA	9.73%	NA	Average / 1	4
Kentucky	Atmos Energy Corp.	ATO	C-2018-00281	Natural Gas	Distribution	5/7/2019	7.49%	9.65%	58.06%	Average / 1	4
Texas	Atmos Energy Corp.	ATO	D-GUD-10779 (Mid-Tex Division)	Natural Gas	Distribution	5/21/2019	7.97%	9.80%	60.18%	Average / 2	5
Wisconsin	Northern States Power Co.	XEL	D-4220-UR-124 (Gas)	Natural Gas	Distribution	9/4/2019	7.74%	10.00%	52.52%	Above Average / 2	2
Michigan	Consumers Energy Co.	CMS	C-U-20322	Natural Gas	Distribution	9/26/2019	5.84%	9.90%	41.78%	Above Average / 3	3
Illinois	Northern Illinois Gas Co.	SO	D-18-1775	Natural Gas	Distribution	10/2/2019	7.20%	9.73%	54.20%	Average / 2	5
Oregon	Avista Corp.	AVA	D-UG 366	Natural Gas	Distribution	10/6/2019	7.24%	9.40%	50.00%	Average / 2	5
Maryland	Washington Gas Light Co.	ALA	C-9605	Natural Gas	Distribution	10/15/2019	7.42%	9.70%	53.50%	Below Average / 2	8
Washington	Northwest Natural Gas Co.	NWN	D-UG-181053	Natural Gas	Distribution	10/21/2019	7.16%	9.40%	49.00%	Average / 3	6
North Carolina	Piedmont Natural Gas Co.	DUK	D-G-9, Sub 743	Natural Gas	Distribution	10/31/2019	7.14%	9.70%	52.00%	Average / 1	4
Wisconsin	Wisconsin Electric Power Co.	WEC	D-05-UR-109 (WEP-Gas)	Natural Gas	Distribution	10/31/2019	7.49%	10.00%	54.46%	Above Average / 2	2
Wisconsin	Wisconsin Public Service Corp.	WEC	D-6690-UR-126 (Gas)	Natural Gas	Distribution	10/31/2019	7.22%	10.00%	51.96%	Above Average / 2	2
Wisconsin	Wisconsin Gas LLC	WEC	D-05-UR-109	Natural Gas	Distribution	10/31/2019	7.32%	10.20%	52.02%	Above Average / 2	2
Louisiana	Entergy New Orleans LLC	ETR	D-UD-18-07 (gas)	Natural Gas	Distribution	11/7/2019	7.09%	9.35%	50.00%	Average / 2	5
New Jersey	Elizabethtown Gas Co.	SJI	D-GR19040486	Natural Gas	Distribution	11/13/2019	7.13%	9.60%	51.50%	Below Average / 1	7
New Jersey	New Jersey Natural Gas Co.	NJR	D-GR19030420	Natural Gas	Distribution	11/13/2019	6.95%	9.60%	54.00%	Below Average / 1	7
Michigan	SEMCO Energy Inc.	ALA	C-U-20479	Natural Gas	Distribution	12/6/2019	NA	9.87%	54.00%	Above Average / 3	3
Wyoming	Black Hills Gas Distribution	BKH	D-30026-2-GR-19	Natural Gas	Distribution	12/11/2019	6.98%	9.40%	50.23%	Average / 3	6
Maryland	Baltimore Gas and Electric Co.	EXC	C-9610 (GAS)	Natural Gas	Distribution	12/17/2019	6.97%	9.75%	NA	Below Average / 2	8
Iowa	Interstate Power & Light Co.	LNT	D-RPU-2019-0002	Natural Gas	Distribution	12/18/2019	7.02%	9.60%	51.00%	Average / 1	4
Maryland	Columbia Gas of Maryland Inc	NI	C-9609	Natural Gas	Distribution	12/18/2019	7.26%	9.60%	52.90%	Below Average / 2	8
California	Southern California Gas Co.	SRE	A-19-04-018	Natural Gas	Distribution	12/19/2019	7.30%	10.05%	52.00%	Average / 2	5
California	San Diego Gas & Electric Co.	SRE	A-19-04-017 (Gas)	Natural Gas	Distribution	12/19/2019	7.55%	10.20%	52.00%	Average / 2	5
Georgia	Atlanta Gas Light Co.	SO	D-42315	Natural Gas	Distribution	12/19/2019	7.72%	10.25%	56.00%	Above Average / 2	2
Virginia	Washington Gas Light Co.	ALA	C-PUR-2018-00080	Natural Gas	Distribution	12/20/2019	7.22%	9.20%	53.48%	Above Average / 3	3
West Virginia	Mountaineer Gas Co.	UGI	C-19-0316-G-42T	Natural Gas	Distribution	12/26/2019	7.24%	9.75%	NA	Below Average / 2	8
Wyoming	MDU Resources Group	MDU	D-30013-351-GR-19	Natural Gas	Distribution	1/15/2020	7.08%	9.35%	51.25%	Average / 3	6
New York	Consolidated Edison Co. of NY	ED	C-19-G-0066	Natural Gas	Distribution	1/16/2020	6.61%	8.80%	48.00%	Average / 1	4
Virginia	Roanoke Gas Co.	RGCO	C-PUR-2018-00013	Natural Gas	Distribution	1/24/2020	7.28%	9.44%	59.64%	Above Average / 3	3
Washington	Cascade Natural Gas Corp.	MDU	D-UG-190210	Natural Gas	Distribution	2/3/2020	7.24%	9.40%	49.10%	Average / 3	6

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State	Company	Parent Company Ticker	Docket	Rate Case Service Type	Case Type	Date of Final Order	Authorized Return on Original Cost Rate	Authorized Return on Equity	Authorized Common Equity to Total Capital (%)	RRA Ranking	Numerical Ranking
Kansas	Atmos Energy Corp.	ATO	D-19-ATMG-525-RTS	Natural Gas	Distribution	2/24/2020	7.03%	9.10%	56.32%	Below Average / 1	7
Utah	Qwestar Gas Co.	D	D-19-057-02	Natural Gas	Distribution	2/25/2020	7.18%	9.50%	55.00%	Average / 1	4
Massachusetts	Fitchburg Gas & Electric Light	UTL	DPU 19-131	Natural Gas	Distribution	2/28/2020	7.99%	9.70%	52.45%	Average / 2	5
Washington	Avista Corp.	AVA	D-UG-190335	Natural Gas	Distribution	3/25/2020	7.21%	9.40%	48.50%	Average / 3	6
Maine	Northern Utilities Inc.	UTL	D-2019-00092	Natural Gas	Distribution	3/26/2020	7.34%	9.48%	50.00%	Average / 3	6
Texas	Atmos Energy Corp.	ATO	D-GUD-10900	Natural Gas	Distribution	4/21/2020	7.71%	9.80%	60.12%	Average / 2	5
Colorado	Black Hills Colorado Gas Inc.	BKH	D-19AL-0075G	Natural Gas	Distribution	5/19/2020	6.76%	9.20%	50.15%	Average / 2	5
Texas	CenterPoint Energy Resources	CNP	D-GUD-10920	Natural Gas	Distribution	6/16/2020	7.38%	9.65%	56.95%	Average / 2	5
Washington	Puget Sound Energy Inc.	D	D-UG-190530	Natural Gas	Distribution	7/8/2020	7.39%	9.40%	48.50%	Average / 3	6
Texas	Texas Gas Service Co.	OGS	D-GUD-10928	Natural Gas	Distribution	8/4/2020	7.46%	9.50%	59.00%	Average / 2	5
Michigan	DTE Gas Co.	DTE	C-U-20642	Natural Gas	Distribution	8/20/2020	NA	9.90%	NA	Above Average / 3	3
Wyoming	Qwestar Gas Co.	D	D-30010-187-GR-19	Natural Gas	Distribution	8/21/2020	7.11%	9.35%	55.00%	Average / 2	5
Michigan	Consumers Energy Co.	CMS	C-U-20650	Natural Gas	Distribution	9/10/2020	NA	9.90%	NA	Above Average / 3	3
New Jersey	South Jersey Gas Co.	SJ	D-GR20030243	Natural Gas	Distribution	9/23/2020	6.90%	9.60%	54.00%	Below Average / 1	7
Nevada	Southwest Gas Corp.	SWX	D-20-02023 (Southern)	Natural Gas	Distribution	9/25/2020	6.52%	9.25%	49.26%	Average / 2	5
Nevada	Southwest Gas Corp.	SWX	D-20-02023 (Northern)	Natural Gas	Distribution	9/25/2020	6.75%	9.25%	49.26%	Average / 2	5
Massachusetts	Eversource Gas Company of MA	ES	DPU 20-59	Natural Gas	Distribution	10/7/2020	7.50%	9.70%	53.25%	Average / 2	5
Colorado	Public Service Co. of CO	XEL	D-20AL-0049G	Natural Gas	Distribution	10/12/2020	6.84%	9.20%	55.62%	Average / 2	5
Oregon	Northwest Natural Gas Co.	NWN	D-UG-388	Natural Gas	Distribution	10/16/2020	6.97%	9.40%	50.00%	Average / 2	5
Massachusetts	NSTAR Gas Co.	ES	DPU 19-120	Natural Gas	Distribution	10/30/2020	7.29%	9.90%	54.77%	Average / 2	5
Maryland	Columbia Gas of Maryland Inc	NI	C-9644	Natural Gas	Distribution	11/7/2020	7.16%	9.60%	52.63%	Below Average / 2	8
New York	NY State Electric & Gas Corp.	IBE	C-19-G-0379	Natural Gas	Distribution	11/19/2020	6.10%	8.80%	48.00%	Average / 1	4
New York	Rochester Gas & Electric Co	IBE	C-19-G-0381	Natural Gas	Distribution	11/19/2020	6.62%	8.80%	48.00%	Average / 1	4
Florida	Peoples Gas System	EMA	D-20200051	Natural Gas	Distribution	11/19/2020	5.93%	9.90%	54.70%	Above Average / 2	2
Wisconsin	Madison Gas and Electric Co.	MGE	D-3270-UR-123 (Gas)	Natural Gas	Distribution	11/24/2020	7.07%	9.80%	55.00%	Above Average / 2	2
Arizona	Southwest Gas Corp.	SWX	D-G-01551A-19-0055	Natural Gas	Distribution	12/9/2020	7.02%	9.10%	51.10%	Average / 3	6
Oregon	Avista Corp.	AVA	D-UG 389	Natural Gas	Distribution	12/10/2020	7.24%	9.40%	50.00%	Average / 2	5
New Mexico	New Mexico Gas Co.	EMA	C-19-00317-UT	Natural Gas	Distribution	12/16/2020	6.65%	9.38%	52.00%	Below Average / 2	8
Maryland	Baltimore Gas and Electric Co.	EXC	C-9645 (Gas)	Natural Gas	Distribution	12/16/2020	6.83%	9.65%	52.00%	Below Average / 2	8
Wisconsin	Wisconsin Power and Light Co	LNT	D-6680-UR-122 (Gas)	Natural Gas	Distribution	12/23/2020	7.14%	10.00%	52.53%	Above Average / 2	2
Oregon	Cascade Natural Gas Corp.	MDU	D-UG 390	Natural Gas	Distribution	1/6/2021	7.07%	9.40%	50.00%	Average / 2	5
Delaware	Delmarva Power & Light Co.	EXC	D-20-0150	Natural Gas	Distribution	1/6/2021	6.80%	9.60%	50.37%	Average / 3	6
Illinois	Ameren Illinois	AEE	D-20-0308	Natural Gas	Distribution	1/13/2021	7.14%	9.67%	52.00%	Average / 2	5
Nebraska	Black Hills/NE Gas Utility Co	BKH	D-NG-109	Natural Gas	Distribution	1/26/2021	6.71%	9.50%	50.00%	Average / 1	4
Tennessee	Piedmont Natural Gas Co.	DUK	D-20-00086	Natural Gas	Distribution	2/16/2021	6.85%	9.80%	50.50%	Above Average / 3	3
Pennsylvania	Columbia Gas of Pennsylvania	NI	D-R-2020-3018835	Natural Gas	Distribution	2/19/2021	7.41%	9.86%	54.19%	Above Average / 2	2
District of Columbia	Washington Gas Light Co.	ALA	FC-1162	Natural Gas	Distribution	2/24/2021	7.05%	9.25%	52.10%	Below Average / 3	9
California	Southwest Gas Corp.	SWX	A-19-08-015 (SoCal)	Natural Gas	Distribution	3/25/2021	7.11%	10.00%	52.00%	Average / 2	5
California	Southwest Gas Corp.	SWX	A-19-08-015 (NoCal)	Natural Gas	Distribution	3/25/2021	7.44%	10.00%	52.00%	Average / 2	5
California	Southwest Gas Corp.	SWX	A-19-08-015 (LkTah)	Natural Gas	Distribution	3/25/2021	7.44%	10.00%	52.00%	Average / 2	5
Maryland	Washington Gas Light Co.	ALA	C-9651	Natural Gas	Distribution	4/9/2021	7.09%	9.70%	52.03%	Below Average / 1	7
North Dakota	MDU Resources Group	MDU	C-PU-20-379	Natural Gas	Distribution	5/5/2021	6.85%	9.30%	50.31%	Average / 1	4
Washington	Cascade Natural Gas Corp.	MDU	D-UG-200568	Natural Gas	Distribution	5/18/2021	6.95%	9.40%	49.10%	Average / 3	6
New York	Conning Natural Gas Corp.	CNIG	C-20-G-0101	Natural Gas	Distribution	5/19/2021	6.28%	8.80%	48.00%	Average / 2	5
Pennsylvania	PECO Energy Co.	EXC	D-R-2020-3018929	Natural Gas	Distribution	6/17/2021	7.26%	10.24%	53.38%	Above Average / 2	2
Kentucky	Louisville Gas & Electric Co.	PPL	C-2020-00350 (gas)	Natural Gas	Distribution	6/30/2021	NA	9.43%	NA	Average / 1	4
Idaho	Avista Corp.	AVA	C-AVU-G-21-01	Natural Gas	Distribution	7/1/2021	7.05%	9.40%	50.00%	Average / 2	5
West Virginia	Hope Gas Inc.	D	C-20-0746-G-42T	Natural Gas	Distribution	7/27/2021	5.90%	9.54%	46.26%	Below Average / 2	8
New Hampshire	Liberty Utilities Energy/North	AQN	D-DG-20-105	Natural Gas	Distribution	7/30/2021	6.96%	9.30%	52.00%	Average / 3	6
New York	Brooklyn Union Gas Co.	NG	C-19-G-0309	Natural Gas	Distribution	8/12/2021	6.34%	8.80%	48.00%	Average / 2	5
New York	KeySpan Gas East Corp.	NG	C-19-G-0310	Natural Gas	Distribution	8/12/2021	6.32%	8.80%	48.00%	Average / 2	5
Illinois	North Shore Gas Co.	WEC	D-20-0810	Natural Gas	Distribution	9/8/2021	6.63%	9.67%	51.58%	Average / 2	5
Michigan	Michigan Gas Utilities Corp.	WEC	C-U-20718	Natural Gas	Distribution	9/9/2021	NA	9.85%	NA	Above Average / 3	3
Virginia	Virginia Natural Gas Inc.	SO	C-PUR-2020-00095	Natural Gas	Distribution	9/14/2021	7.05%	9.50%	51.89%	Average / 1	4
Washington	Avista Corp.	AVA	D-UG-200901	Natural Gas	Distribution	9/27/2021	7.12%	9.40%	48.50%	Average / 3	6
Massachusetts	Boston Gas Co.	NG	DPU 20-120	Natural Gas	Distribution	9/30/2021	6.98%	9.70%	53.44%	Average / 2	5
Indiana	So. Indiana Gas & Electric Co.	CNP	Ca-45447	Natural Gas	Distribution	10/6/2021	5.78%	9.70%	45.74%	Average / 1	4

Source: Regulatory Research Associates

Average	7.14%	9.60%	51.66%
Median	7.15%	9.60%	51.81%
Max	8.59%	11.88%	60.18%
Min	5.75%	8.70%	42.90%
Count >= Stipulation	88	88	75
Count all	149	160	148
% >= Stipulation	59.06%	55.00%	50.68%

Authorized Rate of Return (Excluding States that Include Non-Investor Supplied Capital)		
	RRA Ranking: Above Average/3 and Higher	RRA Ranking: Average/1 and Lower
Average	7.35%	7.11%
Median	7.30%	7.13%
High	7.88%	8.59%
Low	6.85%	5.75%

Authorized Equity Ratio (Excluding States that Include Non-Investor Supplied Capital)		
	RRA Ranking: Above Average/3 and Higher	RRA Ranking: Average/1 and Lower
Average	53.28%	51.37%
Median	52.52%	51.38%
High	59.64%	60.18%
Low	49.23%	42.90%



State	Company	Parent Company Ticker	Docket	Rate Case Service Type	Case Type	Date of Final Order	Return on Equity
Colorado	Atmos Energy Corporation	ATO	D-17AL-0429G	Natural Gas	Distribution	5/3/2018	9.45%
Kansas	Atmos Energy Corporation	ATO	D-19-ATMG-525-RTS	Natural Gas	Distribution	2/24/2020	9.10%
Kentucky	Atmos Energy Corporation	ATO	C-2018-00281	Natural Gas	Distribution	5/7/2019	9.65%
Louisiana	Atmos Energy Corporation	ATO	D-U-21484 (LGS)	Natural Gas	Distribution	7/1/2020	9.80%
Mississippi	Atmos Energy Corporation	ATO	C-2005-UN-503	Natural Gas	Distribution	10/10/2018	10.24%
Tennessee	Atmos Energy Corporation	ATO	D-19-00018	Natural Gas	Distribution	5/20/2019	9.80%
Texas	Atmos Energy Corporation	ATO	D-GUD-10743 (West Texas Environs)	Natural Gas	Distribution	12/11/2018	9.80%
Texas	Atmos Energy Corporation	ATO	D-GUD-10779 (Mid-Tex Division)	Natural Gas	Distribution	5/21/2019	9.80%
Texas	Atmos Energy Corporation	ATO	West Texas (Cities)	Natural Gas	Distribution	10/1/2019	9.80%
Texas	Atmos Energy Corporation	ATO	Mid-Tex (Cities)	Natural Gas	Distribution	10/1/2019	9.80%
Texas	Atmos Energy Corporation	ATO	D-GUD-10900 (West Texas Triangle)	Natural Gas	Distribution	4/21/2020	9.80%
Texas	Atmos Energy Corporation	ATO	West Texas (ALDC)	Natural Gas	Distribution	4/28/2020	10.50%
Texas	Atmos Energy Corporation	ATO	Mid-Tex (Environs)	Natural Gas	Distribution	5/20/2020	9.80%
Texas	Atmos Energy Corporation	ATO	Mid-Tex (Dallas)	Natural Gas	Distribution	9/1/2020	9.80%
Virginia	Atmos Energy Corporation	ATO	PUR-2018-00014	Natural Gas	Distribution	3/11/2019	9.20%
Delaware	Chesapeake Utilities Corporation	CPK	D-15-1734	Natural Gas	Distribution	12/20/2016	9.75%
Delaware	Chesapeake Utilities Corporation	CPK	D-18-0934	Natural Gas	Distribution	8/2/2018	NA
Maryland	Chesapeake Utilities Corporation	CPK	C-9062	Natural Gas	Distribution	9/26/2006	10.75%
Florida	Florida Public Utilities Company	CPK	D-080366-GU	Natural Gas	Distribution	12/28/2009	10.85%
Oregon	Cascade Natural Gas Corporation	MDU	D-UG 390	Natural Gas	Distribution	1/6/2021	9.40%
Washington	Cascade Natural Gas Corporation	MDU	D-UG-200568	Natural Gas	Distribution	5/18/2021	9.40%
Idaho	Intermountain Gas Company	MDU	C-INT-G-16-2	Natural Gas	Distribution	4/28/2017	9.50%
Montana	MDU Resources Group, Inc.	MDU	D2017.9.79	Natural Gas	Distribution	5/29/2018	9.40%
Montana	MDU Resources Group, Inc.	MDU	D2020.06.076	Natural Gas	Distribution	2/16/2021	NA
North Dakota	MDU Resources Group, Inc.	MDU	C-PU-20-379	Natural Gas	Distribution	5/5/2021	9.30%
Wyoming	MDU Resources Group, Inc.	MDU	D-30013-351-GR-19	Natural Gas	Distribution	1/15/2020	9.35%
New York	National Fuel Gas Distribution Corporation	NFG	C-16-G-0257	Natural Gas	Distribution	4/20/2017	8.70%
Pennsylvania	National Fuel Gas Distribution Corporation	NFG	C-R-00061493	Natural Gas	Distribution	11/30/2006	NA
Kentucky	Columbia Gas of Kentucky, Incorporated	NI	C-2013-00167	Natural Gas	Distribution	12/13/2013	NA
Kentucky	Columbia Gas of Kentucky, Incorporated	NI	C-2016-00162	Natural Gas	Distribution	12/22/2016	NA
Maryland	Columbia Gas of Maryland, Incorporated	NI	C-9644	Natural Gas	Distribution	11/7/2020	9.60%
Ohio	Columbia Gas of Ohio, Inc.	NI	C-94-987-GA-AIR	Natural Gas	Distribution	9/29/1994	NA
Ohio	Columbia Gas of Ohio, Inc.	NI	C-08-0072-GA-AIR	Natural Gas	Distribution	12/3/2008	10.39%
Pennsylvania	Columbia Gas of Pennsylvania, Inc.	NI	D-R-2020-3018835	Natural Gas	Distribution	2/19/2021	9.86%
Virginia	Columbia Gas of Virginia, Incorporated	NI	C-PUE-2014-00020	Natural Gas	Distribution	8/21/2015	9.75%
Virginia	Columbia Gas of Virginia, Incorporated	NI	C-PUE-2016-00033	Natural Gas	Distribution	3/17/2017	NA
Virginia	Columbia Gas of Virginia, Incorporated	NI	C-PUR-2018-00131	Natural Gas	Distribution	6/12/2019	NA
Indiana	Northern Indiana Public Service Company	NI	Ca-44988	Natural Gas	Distribution	9/19/2018	9.85%
New Jersey	New Jersey Natural Gas Company	NJR	D-GR19030420	Natural Gas	Distribution	11/13/2019	9.60%
Oregon	Northwest Natural Gas Company	NWN	D-UG-388	Natural Gas	Distribution	10/16/2020	9.40%
Washington	Northwest Natural Gas Company	NWN	D-UG-181053	Natural Gas	Distribution	10/21/2019	9.40%
Kansas	Kansas Gas Service Company, Inc.	OGS	D-18-KGSG-560-RTS	Natural Gas	Distribution	2/5/2019	NA
Oklahoma	Oklahoma Natural Gas Company	OGS	Ca-PUD201500213	Natural Gas	Distribution	1/6/2016	9.50%
Oklahoma	Oklahoma Natural Gas Company	OGS	Ca-PUD202000022	Natural Gas	Distribution	7/8/2020	NA
Texas	Texas Gas Service Company, Inc.	OGS	D-GUD-10928	Natural Gas	Distribution	8/4/2020	9.50%
New Jersey	Elizabethtown Gas Company	SJI	D-GR19040486	Natural Gas	Distribution	11/13/2019	9.60%
New Jersey	South Jersey Gas Company	SJI	D-GR20030243	Natural Gas	Distribution	9/23/2020	9.60%
Alabama	Spire Alabama Inc.	SR	D-18328	Natural Gas	Distribution	10/25/2018	10.40%
Alabama	Spire Gulf Inc.	SR	D-28101	Natural Gas	Distribution	9/12/2017	10.70%
Missouri	Spire Missouri Inc.	SR	C-GR-2017-0215	Natural Gas	Distribution	2/21/2018	9.80%
Mississippi	Spire Mississippi	SR	D-2015-UN-109	Natural Gas	Distribution	1/6/2021	10.03%
Arizona	Southwest Gas Corporation	SWX	D-G-01551A-19-0055	Natural Gas	Distribution	12/9/2020	9.10%
California	Southwest Gas Corporation	SWX	A-19-08-015 (NoCal)	Natural Gas	Distribution	3/25/2021	10.00%
California	Southwest Gas Corporation	SWX	A-19-08-015 (LKTah)	Natural Gas	Distribution	3/25/2021	10.00%
California	Southwest Gas Corporation	SWX	A-19-08-015 (SoCal)	Natural Gas	Distribution	3/25/2021	10.00%
Nevada	Southwest Gas Corporation	SWX	D-20-02023 (Southern)	Natural Gas	Distribution	9/25/2020	9.25%
Nevada	Southwest Gas Corporation	SWX	D-20-02023 (Northern)	Natural Gas	Distribution	9/25/2020	9.25%
West Virginia	Mountaineer Gas Company	UGI	C-19-0316-G-42T	Natural Gas	Distribution	12/26/2019	9.75%
Pennsylvania	UGI Central Penn Gas, Inc.	UGI	D-R-2008-2079675	Natural Gas	Distribution	8/27/2009	NA
Pennsylvania	UGI Central Penn Gas, Inc.	UGI	D-R-2010-2214415	Natural Gas	Distribution	8/11/2011	NA
Pennsylvania	UGI Penn Natural Gas, Inc.	UGI	D-R-2008-2079660	Natural Gas	Distribution	8/27/2009	NA
Pennsylvania	UGI Penn Natural Gas, Inc.	UGI	D-R-2016-2580030	Natural Gas	Distribution	8/31/2017	NA
Pennsylvania	UGI Utilities, Inc.	UGI	D-R-2015-2518438	Natural Gas	Distribution	9/1/2016	NA
Pennsylvania	UGI Utilities, Inc.	UGI	D-R-2018-3006814	Natural Gas	Distribution	9/19/2019	NA
Pennsylvania	UGI Utilities, Inc.	UGI	D-R-2019-3015162	Natural Gas	Distribution	10/8/2020	NA

Source: Regulatory Research Associates; SEC Form 10-K

Average 9.73%  
Median 9.75%  
High 10.85%  
Low 8.70%

Count >=9.60% 31  
Count all 48

% >= 9.60% 64.58%



Proxy Company Average Current Authorized ROE

ATO	9.76%
CPK	10.45%
MDU	9.39%
NFG	8.70%
NI	9.89%
NJR	9.60%
NWN	9.40%
SJI	9.60%
SR	10.23%
SWX	9.60%
UGI	9.75%
Average	9.67%
Median	9.60%
High	10.45%
Low	8.70%

Proxy company average current authorized ROE reflects the average of each proxy company's operating subsidiaries' current authorized ROE listed in Nelson Settlement Exhibit 2, page 1.