

Spire Missouri Inc.

Table of Contents  
Supporting Schedules Accompanying the Direct Testimony of  
Adam Woodard

	<u>Schedule</u>
2021-2022 Survey of Natural Gas Utilities	AWW-D1
Confidential Moody's Issuer Comment dated 11/17/2021	AWW-D2
Confidential Moody's Rating Action dated 11/29/2021	AWW-D3
Confidential Moody's Credit Opinion dated 12/1/2021	AWW-D4
Confidential S&P Credit Metrics	AWW-D5
Woodard Base ROE Model	AWW-D6
Peer Group Survey	AWW-D7
Wall Street Journal Article dated 3/10/2022	AWW-D8
Confidential Flotation Cost Adjustment	AWW-D9
Woodard Base Plus ROE Model	AWW-D10
Embedded Cost of Long-Term Debt	AWW-D11
Cost of Short-Term Debt	AWW-D12
Confidential Short-Term Assets and Liabilities	AWW-D13

**Natural Gas Rate Proceedings**

since January 1, 2021

Company	State	Ticker	Docket	Increase Authorized							
				Date	Decision Type	Rate Increase (\$M)	Return on Original Cost Rate (%)	Return on Equity (%)	Common Equity to Total Capital (%)	Rate Case Test Year End Date	Rate Base (\$M)
1 Delmarva Power & Light Co.	Delaware	EXC	D-20-0150	1/6/2021	Settled	6.7	6.80	9.60	50.37	03/2020	399.7
2 Cascade Natural Gas Corp.	Oregon	MDU	D-UG 390	1/6/2021	Settled	3.2	7.07	9.40	50.00	12/2020	130.1
3 Ameren Illinois	Illinois	AEE	D-20-0308	1/13/2021	Fully Litigated	76.1	7.14	9.67	52.00	12/2021	2,096.1
4 Black Hills/NE Gas Utility Co	Nebraska	BKH	D-NG-109	1/26/2021	Settled	10.7	6.71	9.50	50.00	12/2019	502.7
5 Piedmont Natural Gas Co.	Tennessee	DUK	D-20-00086	2/16/2021	Settled	16.3	6.85	9.80	50.50	12/2021	897.3
6 Columbia Gas of Pennsylvania	Pennsylvania	NI	D-R-2020-3018895	2/19/2021	Fully Litigated	63.5	7.41	9.86	54.19	12/2021	2,329.1
7 Washington Gas Light Co.	District of Columbia	ALA	FC-1162	2/24/2021	Settled	19.5	7.05	9.25	52.10	12/2019	542.6
8 Southwest Gas Corp.	California	SWX	A-19-08-015 (SoCal)	3/25/2021	Settled	3.0	7.11	10.00	52.00	12/2021	285.7
9 Southwest Gas Corp.	California	SWX	A-19-08-015 (NoCal)	3/25/2021	Settled	0.0	7.44	10.00	52.00	12/2021	93.0
10 Southwest Gas Corp.	California	SWX	A-19-08-015 (LkTah)	3/25/2021	Settled	3.4	7.44	10.00	52.00	12/2021	56.8
11 Washington Gas Light Co.	Maryland	ALA	C-9651	4/9/2021	Fully Litigated	13.1	7.09	9.70	52.03	03/2020	1,212.3
12 MDU Resources Group	North Dakota	MDU	C-PU-20-379	5/5/2021	Settled	6.9	6.85	9.30	50.31	12/2021	181.7
13 Cascade Natural Gas Corp.	Washington	MDU	D-UG-200568	5/18/2021	Fully Litigated	(0.4)	6.95	9.40	49.10	12/2019	409.3
14 Corning Natural Gas Corp.	New York	CNIG	C-20-G-0101	5/19/2021	Fully Litigated	(0.8)	6.28	8.80	48.00	01/2022	69.1
15 PECO Energy Co.	Pennsylvania	EXC	D-R-2020-3018929	6/17/2021	Fully Litigated	28.8	7.26	10.24	53.38	06/2022	2,426.7
16 Louisville Gas & Electric	Kentucky	PPL	C-2020-00350 (gas)	6/30/2021	Settled	20.4	NA	9.43	NA	06/2022	1,061.8
17 Hope Gas Inc.	West Virginia	D	C-20-0746-G-42T	7/27/2021	Fully Litigated	12.8	5.90	9.54	46.26	12/2019	208.6
18 Liberty Utilities EnergyNorth	New Hampshire	AQN	D-DG-20-105	7/30/2021	Settled	6.3	6.96	9.30	52.00	12/2019	346.1
19 Brooklyn Union Gas Co.	New York	NG.	C-19-G-0309	8/12/2021	Settled	(4.7)	6.34	8.80	48.00	03/2021	4,921.9
20 KeySpan Gas East Corp.	New York	NG.	C-19-G-0310	8/12/2021	Settled	(22.8)	6.32	8.80	48.00	03/2021	3,243.8
21 Avista Corp.	Idaho	AVA	C-AVU-G-21-01	9/1/2021	Settled	(0.7)	7.05	9.40	50.00	12/2019	172.3
22 North Shore Gas Co.	Illinois	WEC	D-20-0810	9/8/2021	Fully Litigated	4.1	6.63	9.67	51.58	12/2021	353.4
23 Michigan Gas Utilities Corp.	Michigan	WEC	C-U-20718	9/9/2021	Settled	9.3	NA	9.85	NA	12/2022	400.9
24 Virginia Natural Gas Inc.	Virginia	SO	C-PUR-2020-00095	9/14/2021	Settled	43.0	7.05	9.50	51.89	12/2019	1,059.2
25 Avista Corp.	Washington	AVA	D-UG-200901	9/27/2021	Settled	8.1	7.12	9.40	48.50	12/2019	441.9
26 Boston Gas Co.	Massachusetts	NG.	DPU 20-120	9/30/2021	Fully Litigated	144.9	6.98	9.70	53.44	03/2020	2,894.6
27 Sthrn IN Gas & Electric Co.	Indiana	CNP	Ca-45447	10/6/2021	Settled	20.5	5.78	9.70	45.74	12/2021	469.3
28 Spire Missouri Inc.	Missouri	SR	C-GR-2021-0108	10/27/2021	Fully Litigated	81.9	6.37	9.37	49.86	09/2020	2,777.2
29 New Jersey Natural Gas Co.	New Jersey	NJR	D-GR21030679	11/17/2021	Settled	79.3	6.84	9.60	54.00	08/2021	2,523.0
30 Central Hudson Gas & Electric	New York	FTS	C-20-G-0429	11/18/2021	Settled	4.6	6.48	9.00	50.00	06/2022	547.4
31 Northern Illinois Gas Co.	Illinois	SO	D-21-0098	11/18/2021	Fully Litigated	240.2	6.96	9.75	54.46	12/2022	4,652.1
32 Wisconsin Power and Light Co	Wisconsin	LNT	D-6680-UR-123 (Gas)	11/18/2021	Settled	15.4	7.44	10.00	52.50	12/2023	488.7
33 Northern States Power Co.	Wisconsin	XEL	D-4220-UR-125 (Gas)	11/18/2021	Settled	13.0	7.31	10.00	52.50	12/2023	223.3
34 Atlanta Gas Light Co.	Georgia	SO	D-42315 (2021 review)	11/18/2021	Settled	50.6	NA	10.25	56.00	12/2022	3,874.8
35 Madison Gas and Electric Co.	Wisconsin	MGEE	D-3270-UR-124 (Gas)	11/23/2021	Settled	4.2	NA	9.80	55.00	12/2022	300.8
36 Oklahoma Natural Gas Co	Oklahoma	OGS	Ca-PUD202100063	11/30/2021	Settled	15.3	7.20	9.40	58.55	12/2020	1,726.5
37 Columbia Gas of Maryland Inc	Maryland	NI	C-9664	12/3/2021	Fully Litigated	2.6	7.06	9.65	52.95	05/2021	187.1
38 DTE Gas Co.	Michigan	DTE	C-U-20940	12/9/2021	Fully Litigated	84.2	5.41	9.90	39.23	12/2022	5,608.3
39 Columbia Gas of Pennsylvania	Pennsylvania	NI	D-R-2021-3024296	12/16/2021	Settled	58.5	NA	10.20	NA	12/2022	2,673.0
40 Union Electric Co.	Missouri	AEE	C-GR-2021-0241	12/22/2021	Settled	5.0	NA	NA	NA	12/2020	313.0
41 Black Hills Iowa Gas Utility	Iowa	BKH	D-RPU-2021-0002	12/28/2021	Settled	5.9	6.75	9.60	50.01	12/2020	300.9
42 Columbia Gas of Kentucky Inc	Kentucky	NI	C-2021-00183	12/28/2021	Settled	18.3	6.89	9.35	52.64	12/2022	431.1
43 Duke Energy Kentucky Inc.	Kentucky	DUK	C-2021-00190	12/28/2021	Settled	9.2	6.54	9.38	51.34	12/2022	466.5
44 Black Hills Kansas Gas Utility	Kansas	BKH	D-21-BHCG-418-RTS	12/30/2021	Settled	6.6	NA	NA	NA	12/2020	NA
45 Delta Natural Gas Co.	Kentucky	WTRG	C-2021-00185	1/3/2022	Settled	5.2	NA	9.25	NA	12/2022	133.8
46 Piedmont Natural Gas Co.	North Carolina	DUK	D-G-9, Sub 781	1/6/2022	Settled	74.2	6.90	9.60	51.60	12/2020	4,731.1
47 Niagara Mohawk Power Corp.	New York	NG	C-20-G-0381	1/20/2022	Settled	12.5	6.08	9.00	48.00	06/2022	1,560.3
48 Public Service Co. of NC	North Carolina	D	D-G-5 Sub 632	1/21/2022	Settled	29.5	7.07	9.60	51.60	12/2020	1,702.1

Company	State	Ticker	Docket	Increase Authorized							
				Date	Decision Type	Rate Increase (\$M)	Return on Original Cost Rate (%)	Return on Equity (%)	Common Equity to Total Capital (%)	Rate Case Test Year End Date	Rate Base (\$M)

#REF! 2,496

*excluding Spire Missouri*

*excluding Spire Missouri*

	Rate of Return	ROE	
LTM			
Last Twelve Months	<b>6.80</b>	<b>9.58</b>	38 cases
Settled (LTM)	6.86	9.55	
Fully Litigated (LTM)	6.63	9.61	
2021			
2021 Full Year	<b>6.83</b>	<b>9.58</b>	44 cases
Settled	6.87	9.55	
Fully Litigated	6.76	9.66	

AWW-D2 has been marked Confidential in  
its entirety pursuant 20 CSR 4240-2.135(2)  
(A)3, 4, and 5

AWW-D3 has been marked Confidential in its  
entirely pursuant 20 CSR 4240-2.135(2)(A)5

AWW-D4 has been marked Confidential in its  
entirely pursuant 20 CSR 4240-2.135(2)(A)5

AWW-D5 has been marked Confidential in its  
entirely pursuant 20 CSR 4240-2.135(2)(A)5

**SPIRE MISSOURI, INC.**  
**CASE NO. GR-2022-**  
**ALLOWED RATE OF RETURN**

Capital Component	Percentage of Capital	Embedded Cost	Lower <b>9.82%</b>	Allowed Rate of Return Common Equity Return of:	
				ROE <b>10.07%</b> <sup>2</sup>	Upper <b>10.32%</b>
Common Stock Equity	55.00%	-	5.40%	5.54%	5.68%
Preferred Stock					
Long-Term Debt	45.00%	3.98% <sup>1</sup>	1.79%	1.79%	1.79%
<b>Total</b>	<b><u>100.00%</u></b>		<b><u>7.19%</u></b>	<b><u>7.33%</u></b>	<b><u>7.47%</u></b>

Note:

1 Source: Cost of Long-Term Debt

2 Sources: see ROE tab



SPIRE MISSOURI  
Peer Group Survey of ROE and ROR  
as of 4.1.2022

Company	Operating	Jurisdiction	Effective	Rate Base (\$M)	Rate Of Return	Equity Ratio	Return on Equity
<b>OneGas</b>	Oklahoma Natural Gas	OK	Jun-20	\$1,726	7.20%	59%	9.40%
	Kansas Gas Service	KS	21-Dec	\$1,133	8.60%	NA	9.30%
	Texas Gas Service	Central Gulf	21-Jun	\$458	7.46%	59%	9.50%
		West Texas	21-Aug	\$397	7.28%	60%	9.50%
	Rio Grande Valley	21-Aug	\$120	7.35%	61%	9.50%	
	North	21-Aug	\$54	7.55%	62%	9.75%	
	Borger/Skellytown	20-Dec	\$10	7.55%	62%	9.75%	
<b>Atmos Energy</b>	Mid-Tex Dallas/DARR		21-Sep	\$4,293	7.57%	59%	9.80%
	Mid-Tex Cities RRM		21-Dec	\$4,399	7.36%	58%	9.80%
	Mid-Tex ATM		21-Sep	\$4,307	7.97%	60%	9.80%
	Mid-Tex Environs		21-Sep	\$4,307	7.97%	60%	9.80%
	WTX Cities		21-Dec	\$760	7.36%	58%	9.80%
	WTX ALDC-SOI		21-Jun	\$752	7.35%	NA	NA
	WTX ALDC-GRIP		20-Sep	\$672	8.57%	52%	10.50%
	WTX Environs		21-Sep	\$765	7.97%	60%	9.80%
	WTX Triangle		21-Sep	\$40	7.71%	60%	9.80%
	Louisiana RSC		21-Jul	\$837	7.30%	NA	NA
	Mississippi SRF		21-Nov	\$474	7.81%	NA	NA
	Mississippi SIR		21-Nov	\$324	7.81%	NA	NA
	Kentucky PRP		20-Oct	\$39	7.49%	58%	9.65%
	Kentucky		19-May	\$425	7.49%	58%	9.65%
	Tennessee ARM		21-Jun	\$421	7.62%	60%	9.80%
	Kansas		20-Apr	\$242	7.03%	56%	9.10%
	Kansas GSRS		21-Feb	\$17	7.03%	56%	9.10%
	Colorado		18-May	\$135	7.55%	56%	9.45%
Colorado SSIR		21-Jan	\$78	7.55%	56%	9.45%	
Colorado GIS		19-Apr	\$1	7.55%	56%	9.45%	
Virginia		19-Apr	\$48	7.43%	58%	9.20%	
Virginia SAVE		21-Oct	\$7	7.43%	58%	9.20%	
<b>NJR Resources</b>	New Jersey Natural Gas	New Jersey	21-Nov	\$2,523	6.84%	54%	9.60%
<b>SJI Industries</b>	South Jersey Gas	New Jersey	20-Sep	\$2,134	6.90%	54%	9.60%
	Elizabethtown Gas	New Jersey	19-Nov	\$989	7.13%	51.5%	9.60%
<b>Southwest Gas Holdings</b>		Arizona	20-Dec	\$1,931	7.02%	51.10%	9.10%
	South	Nevada	20-Sep	\$1,325	6.52%	49.26%	9.25%
	North	Nevada	20-Sep	\$155	6.75%	49.26%	9.25%
<b>NW Natural</b>	*see below	Oregon	20-Oct	\$1,451	6.97%	50%	9.40%
	*see below	Washington	21-Oct	NA	6.81%	NA	NA
<b>AVERAGE</b>					<b>7.43%</b>	<b>57%</b>	<b>9.55%</b>

This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers visit <https://www.djreprints.com>.

<https://www.wsj.com/articles/us-inflation-consumer-price-index-february-2022-11646857681>

U.S. ECONOMY

# Inflation Reached 7.9% in February; Consumer Prices Are the Highest in 40 Years

Surging energy costs related to Russian invasion of Ukraine are pushing prices higher



The outbreak of war is threatening higher inflation for longer.

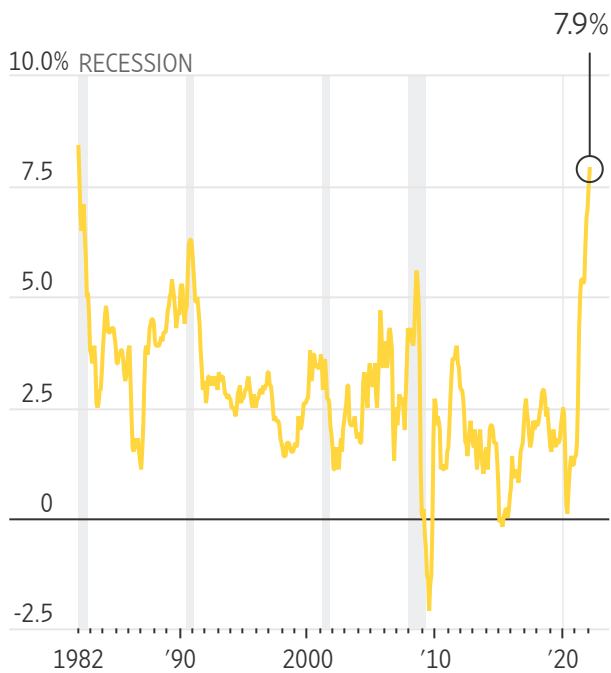
PHOTO: HANNAH BEIER/BLOOMBERG NEWS

By [Gabriel T. Rubin](#) [Follow](#)

Updated March 10, 2022 8:55 am ET

U.S. inflation climbed to a 7.9% annual rate in February, another four-decade high, as skyrocketing energy and commodity prices related to the Russian invasion of Ukraine pushed already-elevated costs higher.

## Consumer-price index, 12-month change



Source: Labor Department

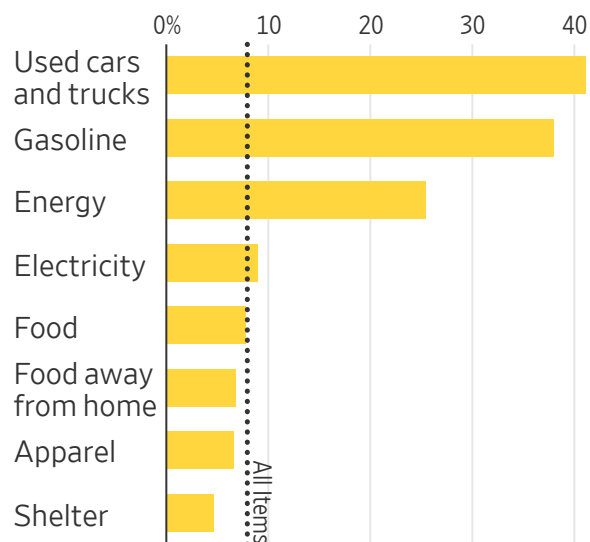
The Labor Department's consumer-price index, which measures the cost of goods and services across the economy, was at its highest rate since January 1982, when annual inflation was 8.4%

Rising energy prices, including higher gasoline prices, helped push up the inflation reading, along with increases for groceries, restaurant food, transportation services and apparel. Economists expect additional price increases related to the Ukraine crisis after crude oil prices in March hit their highest levels since 2008, and U.S. gasoline prices reached record highs.

Excluding volatile energy and food prices, the Labor Department reported Thursday that consumer inflation rose at a 6.4% annual rate in February, up from 6% the prior month.

The 12-month rates aren't adjusted for seasonality. The CPI measures what consumers pay for goods and services, including groceries, clothes, restaurant meals, recreation and vehicles. Month to month, CPI rose a seasonally adjusted 0.8% in February.

**Consumer-price index, 12-month change ending in February**



Note: Not seasonally adjusted

Source: Labor Department

Gasoline prices were up a seasonally-adjusted 6.6% from the prior month, for an unadjusted annual increase of 38%. Groceries were up 1.4% over the prior month for an annual rate of 8.6%. Housing-rental costs rose at a slower rate, up 4.7% over the year. Used car prices declined slightly last month, pausing double digit price increases over the past year.

Before the Ukraine crisis, economists and policy makers had been hoping for a peak in year-over-year inflation this spring as supply chains heal from pandemic-related disruptions and the Federal Reserve begins an expected series of interest rate increases next week. But the outbreak of war has supercharged prices for oil, wheat, and precious metals, threatening higher inflation for longer.

“We thought that inflation would come down, especially due to the untangling of the global supply chain, but we don’t know how what’s happening in Ukraine will re-tangle that,” said Joel Naroff, chief economist at Naroff Economics LLC.

Elevated inflation, prior to the war in Ukraine, was primarily driven by brisk demand for goods, shipping bottlenecks and shortages of supplies such as semiconductors. Fed officials were braced for a run of higher inflation to start the year, but recent trends have been higher than expected. Housing and food costs have risen sharply, and hints at moderating prices in the used-car market have been overshadowed by further disruptions in new automotive manufacturing.

Economic disruptions from Russia's invasion of Ukraine and the global response could further stoke inflation, in part because Russia is a top global supplier of oil and natural gas. One rule of thumb, which Fed Chairman Jerome Powell referenced last week, holds that a \$10-per-barrel increase in oil prices boosts overall U.S. inflation by 0.2 percentage point. Brent crude, the global oil benchmark, has increased by around \$40 a barrel since the start of the year. Russia also is a major player in global markets for metals used in the production of cars and airplanes and for components in fertilizer, a big expense in food production.

Because of Russia's role in global energy and other commodity markets, "we're going to see upward pressure on inflation at least for a while," Mr. Powell told the Senate Banking Committee last week.

Mr. Powell has said he expects the central bank to raise rates by a quarter percentage point at its March 15-16 meeting with additional increases to follow later in the year. The plan was formulated ahead of the Ukraine invasion.

"I do think it's going to be appropriate for us to proceed along the lines we had in mind before the Ukraine invasion happened," Mr. Powell said. "In this very sensitive time at the moment, it's important for us to be careful in the way we conduct policy simply because things are so uncertain and we don't want to add to that uncertainty."

On Sunday, the nation's average gasoline price surpassed \$4 a gallon for the first time since 2008, according to AAA, which tracks retail prices daily. By Wednesday, prices had hit their highest level ever, unadjusted for inflation.



The nation's average gasoline price unadjusted for inflation hit a new high this week.

PHOTO: MANDEL NGAN/AGENCE FRANCE-PRESSE/GETTY IMAGES

The surge in energy and commodity prices is the latest challenge for businesses that have had to test whether their customers are willing to pay higher prices for products and services.

John Merritt, vice president of Elaine Bell Catering in Napa, Calif., has been pleased to see the recovery of his business after a tough two years in which in-person events dried up and planning for the future seemed impossible. But the rising cost of labor and the lack of price stability for food and gas has hurt business.

“We’re able to pass some costs on to customers, but a lot of people were contracted at lower prices,” and rising costs have eaten up his profit margin, Mr. Merritt said.

To hedge against future price increases, Elaine Bell Catering has started to include an inflation rider in new contracts. “We’re giving them the best price we can if they were having their event today,” Mr. Merritt added. “But where we are booking things 18 months out commonly, we have to price this more like a long-term labor contract that has a CPI adjustment.”

---

#### SHARE YOUR THOUGHTS

---

*What is your outlook on inflation? Join the conversation below.*

---

Some economists believe that inflation is still likely to peak soon, perhaps as early as this month. But the war in Ukraine increases the chance that the peak will be higher, and the

descent to lower levels will take longer, they say.

“Momentum on the supply-chain front is disrupted by the war,” said Kathy Bostjancic, chief economist at Oxford Economics. She has now raised her expectations for annual inflation at the end of 2022 to closer to 4% rather than 3%.

A primary worry for policy makers going forward is that higher wages will keep pressure on inflation by causing companies to raise prices to account for labor costs. Still, private-sector average hourly earnings rose a seasonally adjusted 5.1% in February from the previous year, lower than the rate of inflation.

Nitin Kumar, a Herndon, Va., resident who works at a financial technology company, was grateful to get a “substantial raise” at the beginning of 2022, but after seeing the rate of inflation, has questioned how far his money really goes. He is considering whether he should shop at a discount grocery store or take other cost-saving measures.

“I need to start considering things I can do myself—like walk more instead of driving,” Mr. Kumar said. “It’s not a sustainable practice to spend more.”

The Wall Street Journal wants to hear from you. How is inflation affecting you? \*

Are you a consumer, a worker or a business owner?\*

Name\*

Email\*

SUBMIT

By submitting your response to this questionnaire, you consent to Dow Jones processing your special categories of personal information and are indicating that your answers may be investigated and published by The Wall Street Journal and you are willing to be contacted by a Journal reporter to discuss your answers further. In an article on this subject, the Journal will not attribute your answers to you by name unless a reporter contacts you and you provide that consent.

Write to Gabriel T. Rubin at [gabriel.rubin@wsj.com](mailto:gabriel.rubin@wsj.com)

---

Copyright © 2022 Dow Jones & Company, Inc. All Rights Reserved

This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers visit <https://www.djreprints.com>.



AWW-D9 has been marked Confidential in  
its entirety pursuant 20 CSR 4240-2.135(2)  
(A)3, 4 and 5

**SPIRE MISSOURI, INC.**  
**CASE NO. GR-2022-**  
**ALLOWED RATE OF RETURN**

Capital Component	Percentage of Capital	Embedded Cost	Lower <b>10.23%</b>	Allowed Rate of Return Common Equity Return of:	
				ROE <b>10.48%</b> <sup>2</sup>	Upper <b>10.73%</b>
Common Stock Equity	55.00%	-	5.63%	5.76%	5.90%
Preferred Stock					
Long-Term Debt	45.00%	3.98% <sup>1</sup>	1.79%	1.79%	1.79%
<b>Total</b>	<b><u>100.00%</u></b>		<b><u>7.42%</u></b>	<b><u>7.56%</u></b>	<b><u>7.69%</u></b>

Note:

1 Cost of Long-Term Debt

2 Sources: ROE tab

Cost of Long-Term Debt  
**SPIRE MISSOURI**  
 excluding index floating rate bonds  
 at 2/28/22

SERIES A	COUPON B	ISSUED C	MATURITY D	PRINCIPAL E	OUTSTANDING F	UNAMORTIZED BALANCES			CARRYING VALUE J	ANNUALIZED COUPON INTEREST K	ANNUALIZED AMORTIZATION			ANNUALIZED EXP O	EMBEDDED COST P	
						DISC/(PREM) & ISSUANCE EXP G	INT HEDGE (GAIN)/LOSS EXP H	LOSS I			DISC/(PREM) & ISSUANCE EXP L	INT HEDGE (GAIN)/LOSS EXP M	LOSS N			
First Mortgage Bonds	3.400%	13-Aug-13	15-Aug-23	\$250,000,000	\$250,000,000		\$432,747			\$8,500,000	\$123,642	(\$385,035)				
First Mortgage Bonds	3.400%	15-Mar-13	15-Mar-28	\$45,000,000	\$45,000,000		\$78,224			\$1,530,000	\$5,395					
First Mortgage Bonds	7.000%	01-Jun-99	01-Jun-29	\$25,000,000	\$19,285,000		\$45,327			\$1,349,950	\$2,605					
First Mortgage Bonds	2.840%	12-Nov-13	15-Nov-29	\$275,000,000	\$275,000,000		\$1,198,438			\$7,810,000	\$64,780		355,511.54			
First Mortgage Bonds	7.900%	21-Sep-00	15-Sep-30	\$30,000,000	\$30,000,000		\$112,384			\$2,370,000	\$5,482					
First Mortgage Bonds	3.680%	15-Sep-17	15-Sep-32	\$50,000,000	\$50,000,000		\$234,082			\$1,840,000	\$9,252	(\$34,339)				
First Mortgage Bonds	6.000%	28-Apr-04	01-May-34	\$100,000,000	\$99,245,000		\$650,922			\$5,954,700	\$22,292					
First Mortgage Bonds	6.150%	09-Jun-06	01-Jun-36	\$55,000,000	\$54,500,000		\$343,004			\$3,351,750	\$10,029					
First Mortgage Bonds	4.625%	13-Aug-13	15-Aug-43	\$100,000,000	\$99,945,000		\$1,266,194			\$4,622,456	\$24,586	(\$145,743)				
First Mortgage Bonds	4.230%	15-Sep-17	15-Sep-47	\$70,000,000	\$70,000,000		\$344,958			\$2,961,000	\$5,627	(\$21,781)				
First Mortgage Bonds	3.300%	20-May-21	01-Jun-51	\$305,000,000	\$305,000,000		\$4,333,156			\$10,065,000	\$62,526	\$155,118				
First Mortgage Bonds	4.380%	15-Sep-17	15-Sep-57	\$50,000,000	\$50,000,000		\$224,745			\$2,190,000	\$2,635	(\$22,418)				
<b>TOTAL LONG-TERM DEBT</b>				<b>\$1,355,000,000</b>	<b>\$1,347,975,000</b>		<b>\$9,264,182</b>	<b>\$3,170,538</b>	<b>\$7,095,153</b>	<b>\$1,328,445,127</b>	<b>\$52,544,856</b>	<b>\$338,853</b>	<b>(\$98,686)</b>	<b>\$117,273</b>	<b>\$52,902,296</b>	<b>3.982%</b>

Carrying Value = Face Amount Outstanding less Unamortized Discount & Issuance Expenses, Int Hedge Expenses, and Loss on Reacquired Debt  
 $J = F - G - H - I$   
 Annualized Expense = Annual Coupon Interest plus Annual Amortization of Discount & Issuance Expenses, Int Hedge Expenses, and Loss on Reacquired Debt  
 $O = K + L + M + N$   
 Embedded Cost = Annualized Expense divided by Carrying Value  
 $P = O / J$

SPIRE MISSOURI

Cost of Short-Term Debt

February 2022

Average outstanding commercial paper	\$113,433,929
Term loan outstanding	\$250,000,000
Average commercial paper rate	0.41%
Facility fees (10bps undrawn on \$475M)	0.42%
Rating agency fees	0.22%
All-in cost of commercial paper	<b>1.05%</b>
Term Loan rate	<b>0.76%</b>
Cost of Short-Term Debt (February 2022)	<b>0.85%</b>

AWW-D13 has been marked Confidential in  
its entirety pursuant 20 CSR 4240-2.135(2)  
(A)3, 4 and 5