

Northern States Power Company, a Minnesota Corporation
Summary of Cost of Equity Models Applied to
Proxy Group of Forty-Eight Non-Price Regulated Companies
Comparable in Total Risk to the
Proxy Group of Twelve Electric Companies

<u>Principal Methods</u>	<u>Proxy Group of Forty-Eight Non- Price Regulated Companies</u>
Discounted Cash Flow Model (DCF) (1)	12.14 %
Risk Premium Model (RPM) (2)	13.00
Capital Asset Pricing Model (CAPM) (3)	12.31
	Mean <u>12.48 %</u>
	Median <u>12.31 %</u>
	Average of Mean and Median <u>12.40 %</u>

Notes:

- (1) From page 2 of this Schedule.
- (2) From page 3 of this Schedule.
- (3) From page 6 of this Schedule.

Northern States Power Company, a Minnesota Corporation
DCF Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Twelve Electric Companies

	[1]	[2]	[3]	[5]	[6]	[7]	[8]
Proxy Group of Forty-Eight Non-Price Regulated Companies	Average Dividend Yield	Value Line Projected Five Year Growth in EPS	Zack's Five Year Projected Growth Rate in EPS	Yahoo! Finance Projected Five Year Growth in EPS	Average Projected Five Year Growth Rate in EPS	Adjusted Dividend Yield	Indicated Common Equity Cost Rate (1)
Agilent Technologies	0.64 %	11.50 %	9.00 %	14.21 %	11.57 %	0.68 %	12.25 %
Abbott Labs.	1.56	10.00	7.80	11.53	9.78	1.64	11.42
Analog Devices	1.91	14.00	12.30	14.71	13.67	2.04	15.71
Assurant Inc.	1.55	15.50	17.70	17.70	16.97	1.68	18.65
Smith (A.O.)	1.67	11.50	9.00	8.00	9.50	1.75	11.25
Air Products & Chem.	2.68	12.00	11.90	12.00	11.97	2.84	14.81
Brown-Forman 'B'	1.13	12.00	NA	7.01	9.51	1.18	10.69
Ball Corp.	0.89	21.00	5.00	14.35	13.45	0.95	14.40
Bristol-Myers Squibb	3.03	NMF	6.20	4.97	5.59	3.11	8.70
Broadridge Fin'l	1.71	9.00	NA	11.80	10.40	1.80	12.20
Brady Corp.	1.95	9.00	7.00	7.00	7.67	2.02	9.69
CACI Int'l	-	10.50	3.80	2.40	5.57	-	NA
Cerner Corp.	1.16	9.50	12.80	13.52	11.94	1.23	13.17
Chemed Corp.	0.30	7.00	8.50	7.00	7.50	0.31	7.81
Cisco Systems	2.80	8.00	6.50	7.14	7.21	2.90	10.11
CSW Industrials	0.59	12.00	NA	12.00	12.00	0.63	12.63
Danaher Corp.	0.36	17.00	8.70	9.20	11.63	0.38	12.01
Dolby Labs.	1.32	9.50	16.00	16.00	13.83	1.41	15.24
FactSet Research	0.85	9.50	10.00	15.10	11.53	0.90	12.43
GATX Corp.	1.83	5.50	NA	12.00	8.75	1.91	10.66
Gentex Corp.	1.64	10.00	11.50	15.80	12.43	1.74	14.17
Alphabet Inc.	-	23.50	19.80	17.06	20.12	-	NA
Ingredion Inc.	2.98	8.00	NA	7.50	7.75	3.10	10.85
Hunt (J.B.)	0.84	11.00	15.00	22.97	16.32	0.91	17.23
Henry (Jack) & Assoc	1.05	10.50	17.00	14.00	13.83	1.12	14.95
McCormick & Co.	1.48	6.00	6.10	6.95	6.35	1.53	7.88
Monster Beverage	-	11.50	15.70	13.95	13.72	-	NA
Motorola Solutions	1.39	8.00	9.00	14.27	10.42	1.46	11.88
Mettler-Toledo Int'l	-	13.50	19.10	17.80	16.80	-	NA
Northrop Grumman	1.45	7.50	6.20	4.80	6.17	1.49	7.66
Old Dominion Freight	0.41	12.00	17.30	25.56	18.29	0.45	18.74
Pfizer, Inc.	3.15	6.50	9.50	3.13	6.38	3.25	9.63
Packaging Corp.	2.61	9.00	5.00	9.71	7.90	2.71	10.61
Post Holdings	-	4.00	NA	(0.40)	4.00	-	NA
RLI Corp.	0.94	12.00	NA	9.80	10.90	0.99	11.89
Service Corp. Int'l	1.55	6.50	8.70	7.06	7.42	1.61	9.03
Sherwin-Williams	0.93	11.50	13.20	14.86	13.19	0.99	14.18
Selective Ins. Group	1.33	11.00	2.00	13.40	8.80	1.39	10.19
Sirius XM Holdings	1.38	32.50	9.70	9.75	17.32	1.50	18.82
Sensient Techn.	2.01	2.50	NA	3.80	3.15	2.04	5.19
Thermo Fisher Sci.	0.21	15.50	14.00	9.13	12.88	0.22	13.10
Texas Instruments	2.64	8.50	9.30	10.00	9.27	2.76	12.03
AMERCO	-	11.50	NA	15.00	13.25	-	NA
UniFirst Corp.	0.68	5.50	NA	10.00	7.75	0.71	8.46
VeriSign Inc.	-	8.50	NA	8.00	8.25	-	NA
Waters Corp.	-	6.00	8.50	10.00	8.17	-	NA
Watsco, Inc.	3.09	11.00	NA	15.00	13.00	3.29	16.29
Western Union	5.05	8.00	NA	8.11	8.06	5.25	13.31
						Mean	12.25 %
						Median	12.02 %
						Average of Mean and Median	12.14 %

NA= Not Available
NMF= Not Meaningful Figure

(1) The application of the DCF model to the domestic, non-price regulated comparable risk companies is identical to the application of the DCF to the Utility Proxy Group. The dividend yield is derived by using the 60 day average price and the spot indicated dividend as of April 29, 2022. The dividend yield is then adjusted by 1/2 the average projected growth rate in EPS, which is calculated by averaging the 5 year projected growth in EPS provided by Value Line, www.zacks.com, and www.yahoo.com (excluding any negative growth rates) and then adding that growth rate to the adjusted dividend yield.

Source of Information: Value Line Investment Survey
www.zacks.com Downloaded on 04/29/2022
www.yahoo.com Downloaded on 04/29/2022

Northern States Power Company, a Minnesota Corporation
Indicated Common Equity Cost Rate
Through Use of a Risk Premium Model
Using an Adjusted Total Market Approach

<u>Line No.</u>		<u>Proxy Group of Forty- Eight Non-Price Regulated Companies</u>
1.	Prospective Yield on Baa2 Rated Corporate Bonds (1)	5.36 %
2.	Adjustment to Reflect Bond rating Difference of Non-Price Regulated Companies (2)	<u>(0.13)</u>
3.	Adjusted Prospective Bond Yield	5.23
4.	Equity Risk Premium (3)	<u>7.77</u>
5.	Risk Premium Derived Common Equity Cost Rate	<u><u>13.00 %</u></u>

Notes: (1) Average forecast of Baa corporate bonds based upon the consensus of nearly 50 economists reported in Blue Chip Financial Forecasts dated April 29, 2022 and December 1, 2021 (see pages 9 and 10 of Schedule 6). The estimates are detailed below.

Second Quarter 2022	4.80 %
Third Quarter 2022	5.10
Fourth Quarter 2022	5.30
First Quarter 2023	5.50
Second Quarter 2023	5.60
Third Quarter 2023	5.70
2023-2027	5.20
2028-2032	<u>5.70</u>
Average	<u><u>5.36 %</u></u>

(2) The average yield spread of Baa2 rated corporate bonds over A2 corporate bonds for the three months ending April 2022 . To reflect the Baa1 average rating of the non-utility proxy group, the prospective yield on Baa2 corporate bonds must be adjusted by 1/3 of the spread between A2 and Baa2 corporate bond yields as shown below:

	A2 Corp. Bond Yield		Baa2 Corp. Bond Yield		Spread
Apr-22	4.21 %		4.64	%	0.43 %
Mar-22	3.88		4.29		0.41
Feb-22	3.60		3.97		<u>0.37</u>
	Average yield spread				<u>0.40</u>
	1/3 of spread				<u><u>0.13</u></u>

(3) From page 5 of this Schedule.

Northern States Power Company, a Minnesota Corporation
Comparison of Long-Term Issuer Ratings for the
Proxy Group of Forty-Eight Non-Price Regulated Companies of Comparable risk to the
Proxy Group of Twelve Electric Companies

Proxy Group of Forty-Eight Non-Price Regulated Companies	Moody's Long-Term Issuer Rating April 2022		Standard & Poor's Long-Term Issuer Rating April 2022	
	Long-Term Issuer Rating	Numerical Weighting (1)	Long-Term Issuer Rating	Numerical Weighting (1)
Agilent Technologies	Baa2	9.0	BBB+	8.0
Abbott Labs.	A1	5.0	AA-	4.0
Analog Devices	A3	7.0	A-	7.0
Assurant Inc.	Baa3	10.0	BBB	9.0
Smith (A.O.)	NA	--	NA	--
Air Products & Chem.	A2	6.0	A	6.0
Brown-Forman 'B'	A1	5.0	A-	7.0
Ball Corp.	Ba1	11.0	BB+	11.0
Bristol-Myers Squibb	A2	6.0	A+	5.0
Broadridge Fin'l	Baa1	8.0	BBB+	8.0
Brady Corp.	NA	--	NA	--
CACI Int'l	NA	--	BB+	11.0
Cerner Corp.	NA	--	NA	--
Chemed Corp.	WR	--	NR	--
Cisco Systems	A1	5.0	AA-	4.0
CSW Industrials	NA	--	NA	--
Danaher Corp.	Baa1	8.0	BBB+	8.0
Dolby Labs.	NA	--	NA	--
FactSet Research	Baa3	10.0	NA	--
GATX Corp.	Baa2	9.0	BBB	9.0
Gentex Corp.	NA	--	NA	--
Alphabet Inc.	Aa2	3.0	AA+	2.0
Ingredion Inc.	Baa1	8.0	BBB	9.0
Hunt (J.B.)	Baa1	8.0	BBB+	8.0
Henry (Jack) & Assoc	NA	--	NA	--
McCormick & Co.	Baa2	9.0	BBB	9.0
Monster Beverage	NA	--	NA	--
Motorola Solutions	Baa3	10.0	BBB-	10.0
Mettler-Toledo Int'l	WR	--	NR	--
Northrop Grumman	Baa1	8.0	BBB+	8.0
Old Dominion Freight	NA	--	NA	--
Pfizer, Inc.	A2	6.0	A+	5.0
Packaging Corp.	Baa2	9.0	BBB	9.0
Post Holdings	B2	15.0	B+	14.0
RLI Corp.	Baa2	9.0	BBB	9.0
Service Corp. Int'l	Ba3	13.0	BB+	11.0
Sherwin-Williams	Baa2	9.0	BBB	9.0
Selective Ins. Group	Baa2	9.0	BBB	9.0
Sirius XM Holdings	NA	--	BB	12.0
Sensient Techn.	WR	--	NR	--
Thermo Fisher Sci.	A3	7.0	BBB+	8.0
Texas Instruments	Aa3	4.0	A+	5.0
AMERCO	WR	--	NR	--
UniFirst Corp.	NA	--	NA	--
VeriSign Inc.	Baa3	10.0	BBB	9.0
Waters Corp.	NA	--	NA	--
Watsco, Inc.	NA	--	NA	--
Western Union	Baa2	9.0	BBB	9.0
Average	Baa1	8.2	BBB+	8.1

Notes:
(1) From page 6 of Schedule 6.

Source of Information:
Bloomberg Professional Services

Northern States Power Company, a Minnesota Corporation
Derivation of Equity Risk Premium Based on the Total Market Approach
Using the Beta for
Proxy Group of Forty-Eight Non-Price Regulated Companies of Comparable risk to the
Proxy Group of Twelve Electric Companies

<u>Line No.</u>	<u>Equity Risk Premium Measure</u>	<u>Proxy Group of Forty-Eight Non- Price Regulated Companies</u>
1.	Ibbotson Equity Risk Premium (1)	6.13 %
2.	Regression on Ibbotson Risk Premium Data (2)	7.96
3.	Ibbotson Equity Risk Premium based on PRPM (3)	8.35
4.	Equity Risk Premium Based on <u>Value Line</u> Summary and Index (4)	8.46
5.	Equity Risk Premium Based on <u>Value Line</u> S&P 500 Companies (5)	10.98
6.	Equity Risk Premium Based on Bloomberg S&P 500 Companies (6)	<u>9.89</u>
7.	Conclusion of Equity Risk Premium	8.63 %
8.	Adjusted Beta (7)	<u>0.90</u>
9.	Forecasted Equity Risk Premium	<u><u>7.77</u></u> %

Notes:

- (1) From note 1 of page 9 of Schedule 6.
- (2) From note 2 of page 9 of Schedule 6.
- (3) From note 3 of page 9 of Schedule 6.
- (4) From note 4 of page 9 of Schedule 6.
- (5) From note 5 of page 9 of Schedule 6.
- (6) From note 6 of page 9 of Schedule 6.
- (7) Average of mean and median beta from page 6 of this Schedule.

Sources of Information:

Stocks, Bonds, Bills, and Inflation - 2022 SBBI Yearbook, John Wiley & Sons, Inc.
Value Line Summary and Index
Blue Chip Financial Forecasts, April 29, 2022 and December 1, 2021
Bloomberg Professional Services

Northern States Power Company, a Minnesota Corporation
Traditional CAPM and ECAPM Results for the Proxy Group of Non-Price-Regulated Companies Comparable in Total Risk to the
Proxy Group of Twelve Electric Companies

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Proxy Group of Forty-Eight Non-Price Regulated Companies	Value Line Adjusted Beta	Bloomberg Beta	Average Beta	Market Risk Premium (1)	Risk-Free Rate (2)	Traditional CAPM Cost Rate	ECAPM Cost Rate	Indicated Common Equity Cost Rate (3)
Agilent Technologies	0.90	1.05	0.97	9.80 %	3.35 %	12.86 %	12.93 %	12.89 %
Abbott Labs.	0.90	0.75	0.82	9.80	3.35	11.39	11.83	11.61
Analog Devices	0.95	1.18	1.07	9.80	3.35	13.84	13.67	13.75
Assurant Inc.	0.95	0.80	0.88	9.80	3.35	11.97	12.27	12.12
Smith (A.O.)	0.85	1.09	0.97	9.80	3.35	12.86	12.93	12.89
Air Products & Chem.	0.90	0.86	0.88	9.80	3.35	11.97	12.27	12.12
Brown-Forman 'B'	0.90	0.87	0.89	9.80	3.35	12.07	12.34	12.21
Ball Corp.	0.95	0.92	0.94	9.80	3.35	12.56	12.71	12.64
Bristol-Myers Squibb	0.85	0.59	0.72	9.80	3.35	10.41	11.09	10.75
Broadridge Fin'l	0.85	0.88	0.87	9.80	3.35	11.88	12.20	12.04
Brady Corp.	1.00	1.17	1.09	9.80	3.35	14.03	13.81	13.92
CACI Int'l	0.90	0.69	0.79	9.80	3.35	11.09	11.61	11.35
Cerner Corp.	0.90	0.69	0.80	9.80	3.35	11.19	11.68	11.44
Chemed Corp.	0.85	0.77	0.81	9.80	3.35	11.29	11.75	11.52
Cisco Systems	0.90	0.86	0.88	9.80	3.35	11.97	12.27	12.12
CSW Industrials	0.90	1.02	0.96	9.80	3.35	12.76	12.86	12.81
Danaher Corp.	0.80	0.84	0.82	9.80	3.35	11.39	11.83	11.61
Dolby Labs.	0.95	0.85	0.90	9.80	3.35	12.17	12.42	12.29
FactSet Research	0.95	0.84	0.90	9.80	3.35	12.17	12.42	12.29
GATX Corp.	0.95	1.05	1.00	9.80	3.35	13.15	13.15	13.15
Gentex Corp.	0.95	1.07	1.01	9.80	3.35	13.25	13.22	13.24
Alphabet Inc.	0.90	1.11	1.00	9.80	3.35	13.15	13.15	13.15
Ingredion Inc.	0.95	0.81	0.88	9.80	3.35	11.97	12.27	12.12
Hunt (J.B.)	0.95	0.99	0.97	9.80	3.35	12.86	12.93	12.89
Henry (Jack) & Assoc	0.85	0.71	0.78	9.80	3.35	10.99	11.53	11.26
McCormick & Co.	0.80	0.57	0.68	9.80	3.35	10.01	10.80	10.41
Monster Beverage	0.85	1.00	0.92	9.80	3.35	12.37	12.56	12.46
Motorola Solutions	0.90	0.99	0.94	9.80	3.35	12.56	12.71	12.64
Mettler-Toledo Int'l	0.95	1.21	1.08	9.80	3.35	13.93	13.74	13.84
Northrop Grumman	0.85	0.63	0.74	9.80	3.35	10.60	11.24	10.92
Old Dominion Freight	0.95	1.08	1.01	9.80	3.35	13.25	13.22	13.24
Pfizer, Inc.	0.80	0.65	0.72	9.80	3.35	10.41	11.09	10.75
Packaging Corp.	0.95	0.82	0.89	9.80	3.35	12.07	12.34	12.21
Post Holdings	0.95	0.82	0.88	9.80	3.35	11.97	12.27	12.12
RLI Corp.	0.80	0.97	0.89	9.80	3.35	12.07	12.34	12.21
Service Corp. Int'l	0.95	0.96	0.95	9.80	3.35	12.66	12.78	12.72
Sherwin-Williams	0.90	0.86	0.88	9.80	3.35	11.97	12.27	12.12
Selective Ins. Group	0.90	1.06	0.98	9.80	3.35	12.95	13.00	12.98
Sirius XM Holdings	0.95	0.89	0.92	9.80	3.35	12.37	12.56	12.46
Sensient Techn.	0.90	1.07	0.99	9.80	3.35	13.05	13.08	13.06
Thermo Fisher Sci.	0.85	0.85	0.85	9.80	3.35	11.68	12.05	11.86
Texas Instruments	0.85	1.04	0.94	9.80	3.35	12.56	12.71	12.64
AMERCO	0.95	1.06	1.01	9.80	3.35	13.25	13.22	13.24
UniFirst Corp.	0.95	0.95	0.95	9.80	3.35	12.66	12.78	12.72
VeriSign Inc.	0.90	0.78	0.84	9.80	3.35	11.58	11.97	11.78
Waters Corp.	0.95	1.01	0.98	9.80	3.35	12.95	13.00	12.98
Watsco, Inc.	0.85	0.89	0.87	9.80	3.35	11.88	12.20	12.04
Western Union	0.80	1.00	0.90	9.80	3.35	12.17	12.42	12.29
Mean			0.90			12.21 %	12.45 %	12.33 %
Median			0.90			12.17 %	12.42 %	12.29 %
Average of Mean and Median			0.90			12.19 %	12.44 %	12.31 %

Notes:

- (1) From note 1 of page 2 of Schedule 7.
- (2) From note 2 of page 2 of Schedule 7.
- (3) Average of CAPM and ECAPM cost rates.