

Direct Testimony and Schedules
Timothy S. Lyons

Before the Minnesota Public Utilities Commission
State of Minnesota

In the Matter of the Application of Northern States Power Company
for Authority to Increase Rates for Electric Service in Minnesota

Docket No. E002/GR-21-630
Exhibit___(TSL-1)

MYRP Return on Equity

October 25, 2021

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Schedules

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1 **I. INTRODUCTION**

2

3 Q. PLEASE STATE YOUR NAME AND OCCUPATION.

4 A. My name is Timothy S. Lyons. I am a Partner at ScottMadden, Inc.
5 (ScottMadden). My business address is 1900 West Park Drive, Suite 250,
6 Westborough, MA 01581.

7

8 Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.

9 A. I have more than 30 years of experience in the energy industry. I started my
10 career in 1985 at Boston Gas Company, eventually becoming Director of Rates
11 and Revenue Analysis. In 1993, I moved to Providence Gas Company,
12 eventually becoming Vice President of Marketing and Regulatory Affairs.
13 Starting in 2001, I held a number of management consulting positions in the
14 energy industry first at KEMA and then at Quantec, LLC. In 2005, I became
15 Vice President of Sales and Marketing at Vermont Gas Systems, Inc. before
16 joining Sussex Economic Advisors, LLC (Sussex) in 2013. Sussex was acquired
17 by ScottMadden in 2016.

18

19 I hold a bachelor's degree from St. Anselm College, a master's degree in
20 Economics from The Pennsylvania State University, and a master's degree in
21 Business Administration from Babson College. Exhibit___(TSL-1), Schedule
22 1 summarizes my qualifications.

23

24 Q. ARE YOU SPONSORING ANY SCHEDULES IN CONNECTION WITH YOUR
25 TESTIMONY?

26 A. Yes. I am sponsoring the following schedules that were prepared by me or
27 under my direction:

- 1 • Schedule TSL-1 – Qualifications
- 2 • Schedule TSL-2 – Cost of Capital Adjustment Mechanism Case Studies

3

4 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

5 A. The purpose of my testimony is to present the proposal of Northern States
6 Power Company d/b/a Xcel Energy (Xcel Energy or the Company) to establish
7 a mechanism that could adjust its Return on Equity (ROE) for the 2024 plan
8 year of its 2022-2024 Multi-Year Rate Plan (MYRP). The proposed mechanism
9 would allow the Company to symmetrically adjust its ROE for the 2024 plan
10 year to reflect significant changes in financial market conditions. In addition,
11 the proposed mechanism could be applied to a stay-out rate plan after
12 expiration of the MYRP as well as to rider proceedings beginning in 2024.

13

14 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

15 A. My testimony first summarizes the Company’s proposed MYRP. I then discuss
16 the general concept behind ROE adjustment mechanisms and the benefits such
17 mechanisms provide for customers, utilities, and regulators. I then present the
18 Company’s proposed ROE adjustment mechanism to be applied to the 2024
19 plan year, and potentially beyond, to reflect significant changes in financial
20 market conditions. Finally, I provide information on ROE adjustment
21 mechanisms in effect in other jurisdictions as part of a multi-year rate plan or
22 similar stay out rate plan.

23

24 The proposed ROE adjustment mechanism is designed to reflect significant
25 changes in financial market conditions that could take place during the term of
26 the MYRP. The proposed adjustment mechanism is symmetrical and thus it

1 reasonably balances the interests of both the Company and its customers and,
2 if approved, will result in just and reasonable rates if and when it is triggered.

3
4 For example, to the extent that financing rates increase significantly during the
5 term of the MYRP, then the Company would increase its ROE for the 2024
6 plan year consistent with the ROE adjustment methodology approved by the
7 Commission in this proceeding. Conversely, to the extent that financing rates
8 decrease significantly during the term of the MYRP, then the Company would
9 decrease its ROE for the 2024 plan year consistent with the ROE adjustment
10 methodology approved by the Commission in this proceeding.

11
12 Any ROE adjustment would be subject to a deadband under the Company's
13 proposal, reflecting the Company's intent to adjust the ROE only in cases of
14 significant changes in financial market conditions that could have a substantial
15 adverse impact on the Company's ability to attract capital at a reasonable cost
16 or, conversely, could provide substantial benefits to customers if the cost of
17 capital has decreased significantly. The proposed deadband is based on changes
18 in a utility-specific financial metric.

19
20 For example, to the extent changes in the financial metric are within the
21 deadband, then the ROE would not be adjusted. Conversely, to the extent
22 changes in the financial metric are outside of the deadband, then the ROE
23 would be adjusted consistent with the adjustment methodology approved by
24 the Commission in this proceeding.

1 The proposed ROE adjustment methodology utilizes third-party financial data.¹
2 The Company proposes this approach to ensure the adjustment process is
3 transparent, non-controversial, and easily replicated. It is important to note the
4 proposed methodology is not a substitute for the Company's cost of capital
5 methodology proposed in this proceeding. The Company believes the cost of
6 capital for the first and second plan years of the MYRP should reflect a rigorous,
7 analytical process that yields a cost of capital that assures the Company's ability
8 to attract capital at a reasonable cost.

9
10 Company witness Mr. Benjamin Halama discusses the mechanics of the
11 proposed ROE adjustment mechanism. At a high level, any ROE adjustment
12 for the 2024 plan year would be applied to the Company's approved rate base
13 for the 2024 plan year, resulting in updated revenue requirements for the 2024
14 plan year. The Company also proposes that any approved adjustment
15 mechanism be applied in 2025 and future years if the Company is again able to
16 avoid filing a new rate case for one or more years beyond the end of its MYRP
17 or if the parties and the Commission agree on a MYRP longer than three years.
18 Finally, the Company proposes that any approved adjustment mechanism be
19 used in rider proceedings, streamlining that process.

20
21 The proposed ROE adjustment mechanism is consistent with adjustment
22 mechanisms in effect for other utilities – and is consistent with the MYRP

¹ The proposed ROE adjustment methodology relies on Moody's Aa utility bond yield averages, which are available from Moody's and Bloomberg subscription services. To the extent that reviewing parties do not have access to the Moody's or Bloomberg services, the Company will make available the data review and confirm the ROE adjustment.

1 Statute that states the Commission “may allow the utility to adjust recovery of
2 its cost of capital or other costs in a reasonable manner within the plan period.”²

3
4 Q. HOW IS THE REMAINING PORTION OF YOUR TESTIMONY ORGANIZED?

5 A. The remaining portion of my testimony is organized into the following sections.

- 6 ■ Section II describes the Company’s MYRP;
- 7 ■ Section III describes cost of capital adjustment mechanisms and the
8 benefits they can provide;
- 9 ■ Section IV describes the proposed cost of capital adjustment mechanism;
10 and
- 11 ■ Section V summarizes the testimony and recommendations.

12
13 Q. ARE ANY OTHER WITNESSES ADDRESSING ISSUES RELATED TO THE PROPOSED
14 ROE ADJUSTMENT MECHANISM?

15 A. Yes. Company witness Mr. Gregory Chamberlain describes the Company’s
16 position regarding the ROE adjustment mechanism, and Mr. Halama discusses
17 the application of the Company’s proposed mechanism.

18
19 **II. The Company’s Three-Year Multi-Year Rate Plan**

20
21 Q. WHAT ARE THE COMPANY’S GOALS OVER THE THREE-YEAR TERM OF ITS MYRP?

22 A. As discussed by Mr. Chamberlain, the Company’s goals over the term of its
23 MYRP include to:

- 24 • Continue transforming its generation portfolio toward a 100.00 percent
25 carbon free electric energy supply system;

² Minnesota Statutes 2020, Section 216B.16, Subd. 19(a)

1 investment-related costs including income tax impact, depreciation expense,
2 and property taxes.⁴

3
4 Q. DOES THE PROPOSED MYRP INCLUDE A CAPITAL TRUE-UP TO REFLECT
5 DIFFERENCES BETWEEN ACTUAL AND AUTHORIZED CAPITAL INVESTMENTS
6 AND INVESTMENT-RELATED COSTS?

7 A. Yes. The proposed MYRP includes an asymmetrical capital true-up, consistent
8 with the capital true-up approved in the Company's 2016-2019 MYRP.
9 Specifically, if the Company's actual capital-related revenue requirement in each
10 year is less than the Commission-authorized revenue requirement, then the
11 Company refunds to customers the difference in revenue requirements.
12 However, if the Company's actual capital-related revenue requirement in each
13 year is more than the Commission-authorized revenue requirement, then the
14 Company is not able to recover the difference in revenue requirements.

15
16 Q. DOES THE PROPOSED MYRP INCLUDE A SALES REVENUE TRUE-UP TO REFLECT
17 DIFFERENCES BETWEEN ACTUAL AND AUTHORIZED SALES REVENUES?

18 A. Yes. The proposed MYRP includes a sales revenue true-up similar to the sales
19 true-up approved in the 2016-2019 MYRP and in the 2020 and 2021 stay-outs.
20 Specifically, if the Company's actual sales revenues in each year are higher than
21 the Commission-authorized amount, then the Company refunds to customers
22 the difference in sales revenues. Conversely, if the Company's actual sales
23 revenues in each year are lower than the Commission-authorized amount, then
24 the Company recovers from customers the difference in sales revenues.

⁴ Minnesota Statutes 2020, Section 216B.16, Subd. 19(a)(1)

1 Q. DOES THE PROPOSED MYRP INCLUDE A PROPERTY TAX TRUE-UP TO REFLECT
2 DIFFERENCES BETWEEN ACTUAL AND AUTHORIZED PROPERTY TAXES?

3 A. Yes. The proposed MYRP includes a property tax true-up similar to the
4 property true-up approved in the 2016-2019 MYRP and in the 2020 and 2021
5 stay-outs. Specifically, if the Company's actual property taxes in each year are
6 lower than the Commission-authorized amount, then the Company refunds to
7 customers the difference in property taxes. Conversely, if the Company's actual
8 property taxes in each year are higher than the Commission-authorized amount,
9 then the Company recovers from customers the difference in property taxes.

10
11 Q. DOES THE PROPOSED MYRP INCLUDE AN ROE ADJUSTMENT MECHANISM TO
12 REFLECT SIGNIFICANT CHANGES IN FINANCIAL MARKET CONDITIONS?

13 A. Yes. The proposed MYRP includes an ROE adjustment mechanism for the
14 2024 plan year to reflect significant changes, if any, in financial market
15 conditions. The 2016-2019 MYRP did not have such an adjustment
16 mechanism. However, the proposed ROE adjustment mechanism I discuss
17 below is consistent with similar provisions in the MYRP, such as the capital,
18 sales revenue, and property tax true-up mechanisms, in that it is designed to
19 reflect changes that may occur during the term of the MYRP in a way that
20 reasonably balances the interests of the Company and its customers.

21
22 **III. Cost of Capital Update/Adjustment Mechanisms**

23
24 Q. PLEASE DESCRIBE THE PURPOSE OF ROE ADJUSTMENT MECHANISMS.

25 A. The purpose of ROE adjustment mechanisms is to better align a utility's
26 authorized cost of capital to current financial market conditions, thus

1 maintaining for utilities the ability to attract capital at a reasonable cost and for
2 customers just and reasonable rates.

3
4 Q. WHAT ARE THE POTENTIAL BENEFITS OF ROE ADJUSTMENTS MECHANISMS?

5 A. Properly designed and implemented ROE adjustment mechanisms can:

- 6 • Maintain fair and reasonable ROEs for utilities and customers during
7 multi-year rate plans;
- 8 • Streamline the regulatory workload; and
- 9 • Reduce regulatory costs.

10
11 In addition, properly designed and implemented ROE adjustment
12 mechanisms should be free from conflicting interpretations, simple and
13 transparent. Such mechanisms reduce the need for contentious and time-
14 consuming annual cost of capital assessments, while still reflecting
15 significant changes in capital markets.

16
17 Q. WHAT ARE POTENTIAL DISADVANTAGES OF COST OF CAPITAL ADJUSTMENT
18 MECHANISMS?

19 A. Potential disadvantages of cost of capital adjustment mechanisms are largely
20 related to potential misalignment between the cost of capital that results from
21 the adjustment mechanism and the cost of capital that would otherwise be
22 determined through a more rigorous, analytical process. The misalignment
23 could be meaningful if applied over an extended period.

24
25 The ROE adjustment mechanism proposed by the Company seeks to achieve
26 the benefits of such a mechanism while limiting the potential disadvantages.

1 Q. WHAT ARE THE TYPES OF COST OF CAPITAL ADJUSTMENT MECHANISMS?

2 A. Generally, there are two types of cost of capital adjustment mechanisms.

3 1. Index-based Mechanisms: Under this mechanism, utilities track an index
4 (usually interest rate-based) on a periodic basis and implement
5 adjustments based on the deviations in the index. This mechanism is in
6 effect in California, Illinois, and Vermont, as discussed in Schedule 2;
7 and

8 2. Analysis-based Mechanisms: Under this mechanism, utilities conduct
9 analyses (usually industry-recognized ROE methodologies) on a periodic
10 basis and implement adjustments based on the results of the analyses.
11 This mechanism is in effect in Mississippi, as discussed in Schedule 2.

12

13 Q. WHAT ARE DESIGN FEATURES OF AN INDEX-BASED COST OF CAPITAL
14 ADJUSTMENT MECHANISM?

15 A. There are three design features of an index-based cost of capital adjustment
16 mechanism:

- 17 1. An index that tracks economic and financial market conditions;
18 2. A deadband that triggers an adjustment only when the index deviates
19 from a benchmark by a set amount; and
20 3. A mechanism that determines the magnitude of the cost of capital
21 adjustment.

22

23 Q. PLEASE DISCUSS CONSIDERATIONS IN DEVELOPING AN INDEX FOR A COST OF
24 CAPITAL ADJUSTMENT MECHANISM.

25 A. An index in a cost of capital adjustment mechanism should have three
26 characteristics. First, it should reflect changes in economic and financial market
27 conditions over the term of the mechanism. Second, it should be objective and

1 based on third-party financial data to avoid disputes. Third, it should reflect a
2 utility's financial risks associated with changes in these conditions.

3
4 For example, in a 2008 proceeding, the California Public Utilities Commission
5 ("CPUC") recognized the importance of an interest rate-based index for the
6 cost of capital adjustment mechanisms, stating:

7
8 "The purpose of an interest rate benchmark is to gauge changes in
9 interest rates that also indicate changes in the equity costs of utilities."⁵

10
11 Q. WHAT ARE SOME TYPES OF INDICES CURRENTLY APPROVED IN ROE
12 ADJUSTMENT MECHANISMS?

13 A. There are four types of indices in effect for utilities in North America. The
14 indices reflect various interest rate markets.

- 15 1. Corporate Utility Bonds. The California utilities have ROE adjustment
16 mechanisms based on changes in Moody's utility bond rates.⁶
- 17 2. Average Ten-Year Treasury Note Yield. Green Mountain Power
18 ("GMP") in Vermont has an ROE adjustment mechanism based on
19 changes in average ten-year Treasury note yields.⁷
- 20 3. Average 30-Year Treasury Bond Yield. The Illinois utilities set the ROE
21 based on the monthly average yields of 30-year U.S. Treasury bonds.⁸
- 22 4. Hybrid of Corporate and Government Bonds. The Ontario utilities have
23 ROE adjustments based on changes in forecast government bond yields

⁵ CPUC Decision 08-05-035, p. 12

⁶ CPUC Decision 08-05-035

⁷ Vermont Public Service Board Order, Issued 12/22/2006 in Docket Nos. 7175/7176, p. 20

⁸ Illinois Senate Bill 1652

1 over the upcoming year and changes in utility corporate credit spreads
2 (weighted equally).⁹

3
4 Q. PLEASE DISCUSS CONSIDERATIONS IN DEVELOPING A DEADBAND FOR A COST
5 OF CAPITAL ADJUSTMENT MECHANISM.

6 A. A deadband establishes when cost of capital adjustments are triggered. Use
7 of a deadband can eliminate minor ROE adjustments, increasing regulatory
8 efficiency and rate stability. Accordingly, the deadband needs to be set at a
9 level that does not trigger ROE adjustments too often (i.e., too sensitive to
10 market changes) or not often enough (i.e., too unresponsive to market
11 changes).

12
13 Q. PLEASE DISCUSS CONSIDERATIONS IN THE CALCULATION OF THE COST OF
14 CAPITAL ADJUSTMENT MECHANISMS.

15 A. The cost of capital adjustment mechanism establishes the change in the
16 ROE relative to the change in the index. For example, in both California
17 and Vermont, the ROE is adjusted to reflect 50.00 percent of the change
18 between the current interest rates and the benchmark interest rates (also
19 termed the ‘Adjustment Ratio’).

⁹ Ontario Energy Board, ‘Report of the Board on the Cost of Capital for Ontario’s Regulated Utilities’, EB-2009-0084, p. 47-49

1 **IV. Cost of Capital Adjustment Proposal**

2
3 Q. PLEASE DESCRIBE THE PRINCIPLES USED TO GUIDE THE COMPANY'S
4 PROPOSED ROE ADJUSTMENT MECHANISM.

5 A. Based on ROE adjustment mechanisms approved in other jurisdictions,
6 consistent with the discussion above, the Company's ROE adjustment
7 mechanism was guided by several principles, including that it:

- 8 • Tracks changes in economic and financial market conditions;
- 9 • Demonstrates a strong relationship with utility financial markets;
- 10 • Triggers ROE adjustments when there is a significant change in the
11 financial market conditions and conversely does not trigger ROE
12 adjustments when there is little to no changes in the financial market
13 conditions;
- 14 • Tempers ROE adjustments to reflect only a portion of the changes in
15 financial market conditions while avoiding volatility; and
- 16 • Streamlines the ROE adjustment process in a manner that relies on
17 third-party financial data, is transparent, non-controversial, and easily
18 replicated.

19
20 Q. WHAT IS THE COMPANY'S PROPOSAL FOR THE POTENTIAL IMPLEMENTATION OF
21 THE ROE ADJUSTMENT MECHANISM?

22 A. The Company proposes to establish an index-based ROE adjustment
23 mechanism, similar to those implemented in other jurisdictions.

24
25 The Company proposes to implement the cost of capital adjustment mechanism
26 for the 2024 plan year. Under the mechanism, the Company will track the
27 deviations in Moody's Long-Term Utility Bond Yield for Aa-rated utilities

1 against a Benchmark yield. The Benchmark yield is 2.89 percent, which is based
2 on the average Moody's Aa utility bond yield for 12 months' ending September
3 2021 period.

4
5 Under the proposed mechanism, the Company will file in October 2023 a
6 compliance filing that will include:

- 7 1. a comparison between the most recent October 2022 through
8 September 2023 average Moody's Aa utility bond yield and the
9 Benchmark yield,
- 10 2. adjustment to the Company's authorized 2024 ROE (if any) under the
11 proposed ROE adjustment mechanism, and
- 12 3. the Company's updated 2024 rates to reflect the adjusted ROE (if
13 applicable).

14
15 If the deviation in October 2022 through September 2023 average yield does
16 not exceed 100 basis points compared to the Benchmark yield, there will be no
17 adjustment to the authorized ROE for 2024. Conversely, if the deviation in
18 October 2022 through September 2023 average yield exceeds 100 basis points
19 compared to the Benchmark yield, the authorized ROE for 2024 would be
20 adjusted by 50.00 percent of the deviation between current yield and the
21 Benchmark yield.

22
23 Q. WHY IS THE COMPANY NOT PROPOSING TO IMPLEMENT THE ROE ADJUSTMENT
24 FOR THE 2023 PLAN YEAR?

25 A. The Company recognizes that this rate case is unlikely to conclude until after
26 the beginning of 2023, potentially complicating the application of any
27 adjustment mechanism. Additionally, the Company believes that the ROE set

1 in this proceeding will reasonably reflect the current economic and financial
2 market conditions the Company and customers will face. However, there is
3 uncertainty on what these conditions would be for 2024 and future years. The
4 Company is proposing this mechanism so that substantial changes in financial
5 market conditions are reflected in the Company's authorized ROE in 2024.

6
7 Q. WHY HAS THE COMPANY PROPOSED TO ESTABLISH MOODY'S LONG-TERM
8 UTILITY BOND YIELD FOR AA-RATED UTILITIES AS THE INDEX FOR THE ROE
9 ADJUSTMENT MECHANISM?

10 A. Moody's Aa utility bonds have been recognized in the industry as having a
11 strong relationship with utility financial markets. Significant changes in utility
12 bond yields are likely to impact a utility's cost of capital.

13
14 Q. WHY HAS THE COMPANY PROPOSED TO ESTABLISH THE BENCHMARK BASED ON
15 AVERAGE YIELDS FOR 12 MONTHS' ENDING SEPTEMBER 2021?

16 A. The Benchmark yield is proposed as the October 2020 through September 2021
17 average as this reasonably reflects financial market conditions at the time the
18 Company developed its proposed return on equity. The changes compared to
19 this Benchmark yield would appropriately reflect changes in economic and
20 financial market changes that may occur between now and the ROE compliance
21 filing in October 2023.

22
23 Q. WHY HAS THE COMPANY PROPOSED 100 BASIS POINTS AS THE DEADBAND FOR
24 THE ROE ADJUSTMENT MECHANISM?

25 A. The proposed deadband would promote rate stability by limiting the likelihood
26 and frequency of adjustments. Based on historical data, the 100 basis-point
27 threshold strikes a reasonable balance between triggering ROE adjustments too

1 often and not triggering often enough. Under the proposed deadband, an ROE
2 adjustment would not be triggered at all unless the bond yield were to change
3 by over 100 basis points above or below the benchmark. Deviations of that
4 magnitude have proven to be rare over the past 20 years. The Company
5 evaluated the changes in Moody's Aa-rated utility bond rates in the past 21 years
6 and found that the ROE under the proposed mechanism would qualify for
7 adjustments in only four out of 19 years.¹⁰ Accordingly, the Company
8 concluded that a 100-basis point deadband appropriately captures large
9 variations in economic and financial market conditions, while also promoting
10 rate stability.

11
12 Q. WHY HAS THE COMPANY PROPOSED THE ADJUSTMENT TO BE 50.00 PERCENT OF
13 THE DEVIATION BETWEEN CURRENT BOND YIELD AND THE BENCHMARK?

14 A. While the proposed 100 basis-point deadband would limit the likelihood or
15 frequency of an ROE adjustment, the Company's proposed 50.00 percent
16 adjustment tempers the magnitude of any such adjustment. As a result, the
17 50.00 percent threshold would similarly promote rate stability while still
18 adequately reflecting changes in financial market conditions. In addition, the
19 50.00 percent adjustment is consistent with other industry ROE mechanisms,
20 such as those in effect in California.

¹⁰ First two years (2000-2001) excluded as the analysis compares two-year change.

1 Q. BASED ON THE COMPANY’S PROPOSED 100 BASIS POINT DEADBAND AND 50.00
2 PERCENT ADJUSTMENT RATIO, WHAT WOULD HAVE BEEN THE FREQUENCY AND
3 MAGNITUDE OF ROE ADJUSTMENTS IN THE LAST 20 YEARS?

4 A. As noted above, the Company prepared analysis of the historical changes in
5 Moody’s Aa-rated utility bond rates and found that the ROE under the
6 proposed ROE adjustment mechanism would qualify for adjustments in only
7 four out of the past 19 years, as shown in Figure 1 (below). The Figure shows
8 that the four ROE adjustments would be downward, ranging from 0.58 percent
9 to 0.70 percent

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Figure 1

ROE Adjustment Mechanism – Analysis of 2000-2020 Period

Year	12ME December Avg. Yield	2-Year % Change	ROE Adjustment
2000	8.06%		
2001	7.58%		
2002	7.19%	-0.87%	NA
2003	6.40%	-1.18%	-0.59%
2004	6.04%	-1.15%	-0.58%
2005	5.44%	-0.95%	NA
2006	5.84%	-0.21%	NA
2007	5.94%	0.50%	NA
2008	6.18%	0.35%	NA
2009	5.75%	-0.19%	NA
2010	5.23%	-0.95%	NA
2011	4.78%	-0.97%	NA
2012	3.83%	-1.40%	-0.70%
2013	4.24%	-0.54%	NA
2014	4.18%	0.35%	NA
2015	4.00%	-0.25%	NA
2016	3.73%	-0.45%	NA
2017	3.82%	-0.18%	NA
2018	4.09%	0.36%	NA
2019	3.60%	-0.22%	NA
2020	2.79%	-1.30%	-0.65%

Q. HAS THE COMPANY PREPARED EXAMPLES OF HOW THE ROE ADJUSTMENT MECHANISM WOULD WORK?

A. Yes. As shown in Figure 2 (below), the Company prepared three scenarios that illustrate how the mechanism would work:

Scenario A: Upward ROE Adjustment;

Scenario B: Downward ROE Adjustment; and

Scenario C: No ROE Adjustment.

Figure 2
ROE Adjustment Mechanism –Scenarios

ROE Adjustment Scenarios			Scenario A	Scenario B	Scenario C
		Reference			
Benchmark Moody's Aa Utility Yield	(a)	Oct' 20 thru Sep' 21 Average	2.89%	2.89%	2.89%
Current Moody's Aa Utility Yield	(b)	Oct' 22 thru Sep' 23 Average	4.39%	1.39%	3.79%
Deviation Current vs. Benchmark	(c)	(c) = (b) - (a)	+1.50%	-1.50%	+0.90%
Qualifies 100 basis points Deadband?	(d)	Absolute Value of (c) > 1.00%?	YES	YES	NO
ROE Adjustment	(e)	IF (d) = Yes, THEN (e) = (c) x 0.5	+0.75%	-0.75%	0.00%
Authorized Return on Equity	(f)	Illustrative	10.20%	10.20%	10.20%
ROE Adjustment	(g)	(e)	+0.75%	-0.75%	0.00%
Adjusted Return on Equity	(h)	(h) = (g) + (f)	10.95%	9.45%	10.20%

Scenario A: October 2022 through September 2023 Moody's Aa utility bond yield is 4.39 percent (150 basis points above the Benchmark yield). In this scenario, there would be an upward adjustment of 75 basis points in the Company's authorized 2024 Return on Equity (one-half of the 150-basis point deviation from the Benchmark yield).

Scenario B: October 2022 through September 2023 Moody's Aa utility bond yield is 1.39 percent (150 basis points below the Benchmark yield). In this scenario, there would be a downward adjustment of 75 basis points in the Company's authorized 2024 Return on Equity (one-half of the 150-basis point deviation from the Benchmark yield).

Scenario C: October 2022 through September 2023 Moody's Aa utility bond yield is 3.79 percent (90 basis points above the Benchmark yield). In this scenario, there would be no adjustment in the Company's authorized 2024 Return on Equity

1 Q. DOES THE COMPANY PROPOSE TO APPLY THE ROE ADJUSTMENT MECHANISM
2 OTHER THAN IN THE CONTEXT OF 2024 RATES UNDER THE MYRP?

3 A. Yes. As Mr. Chamberlain and Mr. Halama discuss, the Company recommends
4 that the ROE adjustment mechanism continue to be applied after 2024: (1) if
5 the Commission ultimately approves a longer term MYRP than the three years
6 proposed by the Company; or (2) if the Company proposes and the
7 Commission approves a stay-out after the expiration of the MYRP. As I
8 discussed above, the ROE adjustment mechanism is similar to the other true-
9 up mechanisms the Commission has approved, in that it balances utility and
10 customer interests and assures that rates reflect current conditions. In this way,
11 the adjustment mechanism is an enhancement to the Company's past MYRP
12 that left the ROE static for six years. Additionally, the Company proposes to
13 apply the mechanism in rider proceedings, beginning in 2024. This can simplify
14 and streamline rider proceedings, compared to requiring a full cost of capital
15 analysis.

16

17 Q. PLEASE SUMMARIZE THE BENEFITS OF THE COMPANY'S PROPOSED ROE
18 ADJUSTMENT MECHANISM?

19 A. The ROE adjustment mechanism achieves the benefits discussed earlier in this
20 testimony. These include:

- 21 1. Maintaining a fair and reasonable ROE for the Company during the MYRP,
22 while also balancing the interests of customers;
- 23 2. Streamlining the regulatory workload, while keeping the process to update
24 the ROE transparent, easy to replicate, and based on third-party financial
25 data; and
- 26 3. Reducing regulatory and administration costs.

1 **V. Conclusion**

2

3 Q. PLEASE SUMMARIZE YOUR TESTIMONY AND RECOMMENDATIONS.

4 A. The Company proposes to update the cost of capital for the 2024 plan year of
5 the MYRP if there are significant changes in financial market conditions during
6 the term of the MYRP and to use this mechanism for rider proceedings and in
7 the event of a longer term MYRP or a stay out at the conclusion of the MYRP.
8 The proposed update would reflect potential changes in financial market
9 conditions, such as changes in interest rates, that could take place after the
10 setting of final rates in this proceeding. The Company believes the proposed
11 update is an improvement over the 2016-2019 MYRP since it mitigates a risk to
12 the Company and its customers of changes in financial market conditions on
13 the cost of capital and can bring regulatory efficiency to rider proceedings.

14

15 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

16 A. Yes, it does.

Summary of Qualifications

Tim Lyons is a partner with ScottMadden with more than 30 years of experience in the energy industry. Tim has held senior positions at several gas utilities and energy consulting firms. His experience includes rates and regulatory support, sales and marketing, customer service and strategy development. Prior to joining ScottMadden, Tim served as Vice President of Sales and Marketing for Vermont Gas. He has also served as Vice President of Marketing and Regulatory Affairs for Providence Gas Company, Director of Rates at Boston Gas Company, and Project Director at Quantec, LLC, an energy consulting firm.

Tim has sponsored testimony before 20 state regulatory commissions. Tim holds a B.A. from St. Anselm College, an M.A. in Economics from The Pennsylvania State University, and an M.B.A. from Babson College.

Areas of Specialization

- Regulation and Rates
- Retail Energy
- Utilities
- Natural Gas

Capabilities

- Regulatory Strategy and Rate Case Support
- Strategic and Business Planning
- Capital Project Planning
- Process Improvements

Articles and Speeches

- “Country Strong: Vermont Gas shares its comprehensive effort to expand natural gas service into rural communities.” ***American Gas Association***, June 2011 (with Don Gilbert).
- “Talking Safety With Vermont Gas.” ***American Gas Association***, February 2009 (with Dave Attig).
- “Consumers Say ‘Act Now’ To Stabilize Prices.” ***Power & Gas Marketing***, September/ October 2001 (with Jim DeMetro and Gerry Yurkevicz).
- “Rate Reclassification: Who Buys What and When.” ***Public Utilities Fortnightly***, October 15, 1991 (with John Martin).

Sponsor	Date	Docket No.	Subject
Regulatory Commission of Alaska			
ENSTAR Natural Gas Company	06/16	Docket No. U-16-066	Adopted and sponsored testimony supporting a lead-lag study for a general rate case proceeding.
Arkansas Public Service Commission			
Liberty Utilities (Pine Bluff Water)	10/18	Docket No. 18-027-U	Sponsored testimony supporting the cost of service, rate design and bill impact studies for a general rate case proceeding.
California Public Utilities Commission			
Liberty Utilities (CalPeco Electric)	5/21	Docket No. A 21-05-017	Sponsored testimony supporting the lead-lag study/cash working capital, marginal cost study, rate design and bill impact analysis for a general rate case proceeding.
Southwest Gas Corporation (Southern California, Northern California and South Lake Tahoe jurisdictions)	8/19	Docket No. A.19-08-015	Sponsored testimony on behalf of three separate rate jurisdictions supporting revenue requirements, lead-lag/ cash working capital, and class cost of service, rate design and bill impact analysis for a general rate case proceeding.
Connecticut Public Utilities Regulatory Authority			
Yankee Gas Company	07/14	Docket No. 13-06-02	Sponsored report and testimony supporting the review and evaluation of gas expansion policies, procedures and analysis.
Illinois Commerce Commission			
Liberty Utilities (Midstates Natural Gas)	07/16	Docket No. 16-0401	Sponsored testimony supporting the cost of service, rate design and bill impact studies for a general rate case proceeding. The testimony includes proposal for new commercial classes and a decoupling mechanism.
Iowa Utilities Board			
Liberty Utilities (Midstates Natural Gas)	07/16	Docket No. RPU-2016-0003	Sponsored testimony supporting the cost of service, rate design and bill impact studies for a general rate case proceeding. The testimony includes proposal for new commercial classes.
Kansas Corporation Commission			
The Empire District Electric Company	12/18	Docket No. 19-EPDE-223-RTS	Sponsored testimony supporting cost of service, rate design, bill impact and lead-lag studies for a general rate case proceeding.
Maine Public Utilities Commission			
Maine Water Company	03/21	Docket No. 2021-00053	Sponsored testimony supporting a proposed rate smoothing mechanism.
Northern Utilities, Inc. d/b/a Unitil	06/19	Docket No. 2019-00092	Sponsored testimony supporting a proposed capital investment cost recovery mechanism.
Northern Utilities, Inc. d/b/a Unitil	06/15	Docket No. 2015-00146	Sponsored testimony supporting the proposed gas expansion program, including a zone area surcharge.
Maryland Public Service Commission			
Sandpiper Energy, a Chesapeake Utilities company	12/15	Case No. 9410	Sponsored testimony supporting the cost of service, rate design and bill impact studies for a general rate case proceeding. The testimony includes proposal for new residential and commercial classes.

Sponsor	Date	Docket No.	Subject
Massachusetts Department of Public Utilities			
Liberty Utilities (New England Gas Company)	08/20	Docket No. DPU 20-92	Sponsored the Long-Range Forecast and Supply Plan filing for the five-year forecast period 2020/2021 through 2024/2025.
Liberty Utilities (New England Gas Company)	07/18	Docket No. DPU 18-68	Sponsored the Long-Range Forecast and Supply Plan filing for the five-year forecast period 2018/2019 through 2022/2023.
Liberty Utilities (New England Gas Company)	07/16	Docket No. DPU 16-109	Sponsored the Long-Range Forecast and Supply Plan filing for the five-year forecast period 2016/2017 through 2020/2021.
Boston Gas	10/93	Docket No. DPU 92-230	Sponsored testimony describing the Company's position regarding rate treatment of vehicular natural gas investments and expenses.
Boston Gas	03/90	Docket No. DPU 90-55	Sponsored testimony supporting the weather and other cost of service adjustments, rate design and customer bill impact studies for a general rate case proceeding.
Boston Gas	03/88	Docket No. DPU 88-67-II	Sponsored testimony supporting the rate reclassification of commercial and industrial customers for a rate design proceeding.
Michigan Public Service Commission			
Lansing Board of Water & Light and Michigan State University	04/20	Docket No. U-20650	Sponsored testimony evaluating Consumer Energy's cost of service and rate design proposals.
Lansing Board of Water & Light and Michigan State University	04/19	Docket No. U-20322	Sponsored testimony evaluating Consumer Energy's cost of service and rate design proposals.
Midland Cogeneration Ventures, LLC	09/18	Docket No. U-18010	Sponsored testimony evaluating Consumer Energy's cost of service and rate design proposals.
Missouri Public Service Commission			
The Empire District Gas Company	08/21	Docket No. GR-2021-0320	Sponsored testimony supporting the cost of service, rate design, bill impact and lead-lag studies for a general rate case proceeding.
The Empire District Electric Company	05/21	Docket No. ER-2021-0312	Sponsored testimony supporting the cost of service, rate design, bill impact and lead-lag studies for a general rate case proceeding.
Spire Missouri, Inc.	12/20	Docket No. GR-2021-0108	Sponsored testimony supporting class cost of service, rate design, and lead-lag study proposals for a general rate case proceeding. The testimony also included support for a proposed revenue adjustment mechanism.
The Empire District Electric Company	08/19	Docket No. ER-2019-0374	Sponsored testimony supporting the cost of service, rate design, bill impact and lead-lag studies for a general rate case proceeding. The testimony also included proposals for a weather normalization mechanism.

Sponsor	Date	Docket No.	Subject
Liberty Utilities (Midstates Natural Gas)	09/17	Docket No. GR-2018-0013	Sponsored testimony supporting the cost of service, rate design, bill impact and lead-lag studies for a general rate case proceeding. The testimony also included proposals for a revenue decoupling/ weather normalization mechanism as well as tracker accounts for certain O&M expenses and capital costs.
Missouri Gas Energy	04/17	Docket No. GR-2017-0216	Sponsored testimony supporting the cost of service, rate design, bill impact and Lead/Lag studies for a general rate case proceeding. The testimony included support for a decoupling mechanism.
Laclede Gas Company	04/17	Docket No. GR-2017-0215	Sponsored testimony supporting the cost of service, rate design, bill impact and Lead/Lag studies for a general rate case proceeding. The testimony included support for a decoupling mechanism.
<i>New Hampshire Public Utilities Commission</i>			
Unitil (Northern Utilities, Inc.)	8/21	Docket No. DG 21-104	Sponsored testimony supporting a revenue decoupling mechanism.
Unitil Energy Systems, Inc.	4/21	Docket No. DE 21-030	Sponsored testimony supporting a revenue decoupling mechanism.
Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities	11/17	Docket No. DG 17-198	Sponsored testimony supporting a levelized cost analysis for approval of firm supply and transportation agreements.
Liberty Utilities d/b/a Granite State Electric Company	04/16	Docket No. DE 16-383	Adopted testimony and sponsored Lead/Lag study for a general rate case proceeding.
<i>Nevada Public Utilities Commission</i>			
Southwest Gas Corporation	08/21	Docket No. 21-09001	Sponsored testimony supporting the class cost of service, rate design, bill impact and Lead/Lag studies for a general rate case proceeding.
Southwest Gas Corporation	02/20	Docket No. 20-02023	Sponsored testimony supporting the class cost of service, rate design, bill impact and Lead/Lag studies for a general rate case proceeding.
<i>New Jersey Board of Public Utilities</i>			
South Jersey Gas Company	03/20	Docket No. GR20030243	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Elizabethtown Gas Company	04/19	Docket No. GR19040486	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Pivotal Utility Holdings, Inc. d/b/a Elizabethtown Gas Company	08/16	Docket No. GR16090826	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
<i>Corporation Commission of Oklahoma</i>			
The Empire District Electric Company	03/19	Cause No. PUD 201800133	Sponsored testimony supporting the cost of service, rate design, bill impact and Lead/Lag studies for a general rate case proceeding.
The Empire District Electric Company	04/17	Cause No. PUD 201600468	Adopted direct testimony and sponsored rebuttal testimony supporting the revenue requirements

Sponsor	Date	Docket No.	Subject
			for a general rate case proceeding. The testimony included proposals for alternative ratemaking mechanisms.
Rhode Island Public Utilities Commission			
Providence Gas Company	08/01 09/00 08/96	Docket No. 1673	Sponsored testimony supporting the changes in cost of gas adjustment factor related to projected under-recovery of gas costs; Filed testimony and witness for pilot hedging program to mitigate price risks to customers; Filed testimony and witness for changes in cost of gas adjustment factor related to extension of rate plan.
Providence Gas Company	08/00	Docket No. 2581	Sponsored testimony supporting the extension of a rate plan that began in 1997 and included certain modifications, including a weather normalization clause.
Providence Gas Company	03/00	Docket No. 3100	Sponsored testimony supporting the de-tariff and deregulation of appliance repair service, enabling the Company to have needed pricing flexibility.
Providence Gas Company	06/97	Docket No. 2581	Sponsored testimony supporting a rate plan that fixed all billing rates for three-year period; included funding for critical infrastructure investments in accelerated replacement of mains and services, digitized records system, and economic development projects.
Providence Gas Company	04/97	Docket No. 2552	Sponsored testimony supporting the rate design, customer bill impact studies and retail access tariffs for commercial and industrial customers, including redesign of cost of gas adjustment clause, for a rate design proceeding.
Providence Gas Company	02/96	Docket No. 2374	Sponsored testimony supporting the rate design, customer bill impact studies and retail access tariffs for largest commercial and industrial customers for a rate design proceeding.
Providence Gas Company	01/96	Docket No. 2076	Sponsored testimony supporting the rate reclassification of customers into new rate classes, rate design (including introduction of demand charges), and customer bill impact studies for a rate design proceeding.
Providence Gas Company	11/92	Docket No. 2025	Sponsored testimony supporting the Integrated Resource Plan filing, including a performance-based incentive mechanism.
Railroad Commission of Texas			
Texas Gas Service Company – Central Texas and Gulf Coast Service Areas	12/19	GUD No. 10928	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
CenterPoint Energy – Beaumont/ East Texas Division	11/19	GUD No. 10920	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Texas Gas Service Company – Borger/ Skellytown Service Area	08/18	GUD No. 10766	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.

Sponsor	Date	Docket No.	Subject
Texas Gas Service Company – North Texas Service Area	06/18	GUD No. 10739	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
CenterPoint Energy – South Texas Division	11/17	GUD No. 10669	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Texas Gas Service Company – Rio Grande Valley Service Area	06/17	GUD No. 10656	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Atmos Pipeline – Texas	01/17	GUD No. 10580	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
CenterPoint Energy – Texas Gulf Division	11/16	GUD No. 10567	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Public Utility Commission of Texas			
CenterPoint Energy Houston Electric, LLC	04/19	Docket No. 49421	Sponsored testimony supporting the Lead/Lag study for a general rate case proceeding.
Vermont Public Utilities Commission			
Vermont Gas Systems	12/12	Docket No. 7970	Sponsored testimony describing the market served by \$90 million natural gas expansion project to Addison County, VT. Also described the terms and economic benefits of a special contract with International Paper.
Vermont Gas Systems	02/11	Docket No. 7712	Sponsored testimony supporting the market evaluation and analysis for a system expansion and reliability regulatory fund.
Virginia State Corporation Commission			
American Electric Power - Appalachian Power Company	3/20	Case No. PUR-2020-00015	Sponsored testimony supporting the Lead/Lag study for the 2020 triennial review of base rates, terms and conditions.

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1 **Cost of Capital Adjustment Mechanism Case Studies**

2
3 **I. CALIFORNIA**

4 In 1994, the CPUC approved a Market Indexed Capital Adjustment Mechanism
5 (“MICAM”) for San Diego Gas & Electric (“SDG&E”). Under MICAM,
6 SDG&E would track on an annual basis the deviations in Moody’s Long-Term
7 Utility Bond Yield for A-rated utilities and implement adjustments to its ROE
8 if the deviation exceeded 100 basis points compared to a benchmark value. The
9 ROE adjustment would be one-half of the deviation between current average
10 yield and benchmark yield. Since 1994, SDG&E’s MICAM has gone through
11 several modifications. The CPUC approved similar mechanisms for Southern
12 California Edison (“SCE”) and Southern California Gas (“SoCalGas”) in 1996¹
13 and 1997².

14
15 In 2008, the CPUC established a uniform multi-year cost of capital mechanism
16 (“CCM”) for SCE, San SDG&E and Pacific Gas and Electric Company
17 (“PG&E”).³ Similar to the MICAM, the CCM includes an ROE adjustment on
18 an annual basis based on variations in Moody’s utility bond rates. Under the
19 CCM, in any year where the difference between the current 12-month average
20 Moody’s utility bond rates and the benchmark exceeds a dead-band of 100-basis
21 point, ROE is automatically adjusted by one-half of the difference between the
22 current bond average rate and the benchmark rate.

¹ CPUC Decision 96-09-092

² CPUC Desision 97-07-054

³ ‘Decision Establishing a Multi-Year Cost of Capital Mechanism for the Major Energy Utilities’ (D.08-05-035) in Application 07-05-003 (Issued 5/30/2008) (“CCM Decision”)

1 CPUC’s rationale for approving the CCM was based on three primary
2 benefits:

- 3 1. Maintain a fair and reasonable ROE for the utilities during the multi-
4 year rate plans
- 5 2. Reduce and simplify the regulatory workload
- 6 3. Reduce regulatory costs

7
8 In defining the issue for CCM, the CPUC stated:

9
10 “The issue in this second phase of the consolidated ROE proceeding
11 was to address cost of capital mechanisms that could replace annual
12 cost of capital applications. This issue was raised to determine whether
13 a mechanism could be adopted to maintain fair and reasonable capital
14 structures and ROEs for the major energy utilities while reducing
15 ROE proceedings and simplifying workload requirements and
16 regulatory costs.”⁴ [Emphasis Added]

17
18 The CPUC also recognized that the CCM balances the interests of shareholders
19 and ratepayers, stating:

20
21 “We find it appropriate to establish a uniform CCM for SCE, PG&E,
22 and SDG&E that balances the interests of SCE, SDG&E and
23 PG&E’s shareholders and ratepayers...”⁵

⁴ CPUC Decision 08-05-035, p. 3

⁵ Id., p. 5

1 Similar benefits were recognized by CPUC in 1996 when approving the cost of
2 capital adjustment mechanism for SCE, as noted earlier in the testimony.

3
4 CPUC’s rationale in establishing an interest rate-based index was to align a
5 utility’s ROE with the changes in financial markets and economic conditions,
6 stating:

7
8 “The purpose of an interest rate benchmark is to gauge changes in
9 interest rates that also indicate changes in the equity costs of utilities.”⁶

10
11 Moreover, the CPUC found that an index based on utility bonds more
12 appropriately reflects the impacts on utilities’ cost of capital than U.S. treasury
13 bonds, stating:

14
15 “U.S. Treasuries are more sensitive to economic changes and risks in
16 the international capital markets than utility bonds because they are
17 bought and sold globally. However, U.S. utility bonds are generally
18 affected less than Treasuries as a result of major shifts of international
19 capital because a majority of U.S. utility bonds are traded within the
20 U.S.

21 Consistent with our use of utility bond interest rates in ROE, PBR,
22 and MICAM proceedings and desire to use an index that more likely
23 correlates and moves with utility industry risk, utility bonds should be
24 adopted for the CCM index.”⁷

⁶ CPUC Decision 08-05-035, p. 12

⁷ Id., p. 12-13

1 CPUC’s rationale in establishing the 100 basis point deadband was that it strikes
2 a reasonable balance between triggering ROE adjustments too often and not
3 triggering the adjustments often enough. After reviewing the deadbands
4 proposed by the utilities, the CPUC determined that a 100 basis points
5 deadband mitigates volatility of interest rates.

6
7 CPUC’s rationale in establishing the ROE adjustment ratio equal to 50.00
8 percent of the deviation in utility bond rates compared to the benchmark was
9 based on a balance of shareholder and ratepayer interests. The adjustment ratio
10 establishes how sensitive the equity returns are compared to the movement in
11 interest rates. A 100 percent adjustment ratio would translate to a one-to-one
12 ROE adjustment in comparison to the changes in the interest rates. The CPUC
13 recognized that the adjustment ratio should balance shareholder and ratepayer
14 interests, stating:

15
16 “An adjustment ratio should be set at a point where a utility’s debt
17 cost and equity investment becomes volatile. Minor changes in debt
18 cost and equity investment should not warrant any adjustment.
19 Consistent with the majority consensus and goal of balancing
20 shareholder and ratepayer interests, a 50% adjustment ratio should be
21 adopted. This adjustment ratio should be applicable only when the
22 100-basis point deadband is exceeded and applied to the total basis
23 point difference between the old interest rate benchmark and new
24 interest rate benchmark.”⁸

⁸ Id., p. 14-15

1 Important to note that the CPUC rejected an interest rate only adjustment and
2 provided the following explanation:

3
4 “An application of the equity adjustment rate on only the basis points
5 that exceeded a 100-basis point deadband would not reasonably
6 reflect the volatility impact of interest rate changes on an equity
7 investment. Such an application would also reverse the Commission’s
8 long-standing practice of changing authorized ROEs by one-half to
9 two-thirds of the change in interest rates.”⁹

10
11 In summary, California has implemented cost of capital adjustment mechanisms
12 for major utilities since 1994. The CPUC has clearly recognized the benefits of
13 these mechanisms. These include: 1) Maintaining a fair and reasonable ROE for
14 the utilities during the multi-year rate plans, 2) Reducing and simplifying
15 regulatory workload, and 3) reducing regulatory costs.

16 17 **II. MISSISSIPPI**

18
19 The cost of capital adjustment mechanisms in Mississippi include calculation of
20 ROE on an annual basis based on an average of ROE methodologies. For
21 example, for Entergy Mississippi LLC (“Entergy MS”), the ROE for an annual
22 evaluation period is calculated based on an average of the Discounted Cash
23 Flow (“DCF”) method and Bond Yield Plus Risk Premium Regression Analysis,
24 and adjusted 12.5 basis points for flotation costs.¹⁰

⁹ Id., p. 15, Footnote #20

¹⁰ Entergy Mississippi, Rider FRP-6, Attachment E

1 The cost of capital adjustment mechanisms in Mississippi are approved as part
2 of the Formula Rate Plans allowed by Mississippi Statute.¹¹ The mechanisms
3 are approved for three major energy utilities: Atmos Energy Corp. (“Atmos”),
4 Entergy MS, and Mississippi Power Co. (“MPCo”). The mechanisms
5 approved for these utilities are generally consistent with slight variations. For
6 example, for MPCo, the annual evaluation period ROE is calculated for the
7 annual filing based on an average of three method: DCF, Equity Risk
8 Premium (“ERP”), and Capital Asset Pricing Model (“CAPM”), and adjusted
9 12.5 basis points for flotation costs.¹²

11 III. VERMONT

12
13 Q. PLEASE DESCRIBE THE COST OF CAPITAL ADJUSTMENT MECHANISM
14 IMPLEMENTED IN VERMONT.

15 The cost of capital adjustment mechanism in Vermont was approved for Green
16 Mountain Power (“GMP”) in 2006 as part of GMP’s Alternative Regulation
17 Plan.¹³ The mechanism includes annual adjustment to GMP’s ROE based on
18 variations in yield to maturity of average ten-year Treasury note yield to maturity
19 in current year compared to prior year. The ROE is adjusted to reflect 50.0
20 percent of the difference in current year and prior year average ten-year
21 Treasury note yields.

¹¹ Mississippi Code Title 77. Public Utilities and Carriers §77-3-2

¹² Mississippi Power Company, Rate Schedule “PEP-5A”, Attachment C

¹³ Vermont Public Service Board Order, Issued 12/22/2006 in Docket Nos. 7175/7176

1 In discussing the Alternative Regulation Plan for GMP, the Vermont Public
2 Service Board presented the finding that the approved plan provided GMP a
3 reasonable opportunity to earn fair rate of return, noting:

4
5 “The Plan provides a reasonable opportunity to earn a fair rate of
6 return by providing for periodic rate adjustments to reflect differences
7 between target and actual costs...”¹⁴

8
9 **IV. ILLINOIS**

10
11 The cost of capital adjustment mechanisms for Commonwealth Edison
12 (“ComEd”) and Ameren Illinois (“AI”) were approved as part of the Formula
13 Rate Plans outlined in the Illinois Energy Infrastructure Modernization Act
14 (“EIMA”).¹⁵ Per EIMA, the ROE for ComEd and AI are determined as the
15 sum of: (1) the average for the applicable calendar year of the monthly average
16 yields of 30-year U.S. Treasury bonds published by the Board of Governors of
17 the Federal Reserve System in its weekly H.15 Statistical Release or successor
18 publication; and (2) 580 basis points.

19
20 **V. COST OF CAPITAL ADJUSTMENT MECHANISM (ONTARIO, CANADA)**

21
22 In 1997, the OEB determined that a procedure should be put in place to
23 automatically adjust the allowed ROE for each utility to account for changes in
24 the 30-Year Long Canada Bond Forecast (“LCBF”). The formula adjusted ROE

¹⁴ Id., p. 26 (Statutory Finding h.)

¹⁵ Illinois Senate Bill 1652

1 by 75 percent of the variation in 30-Year LCBF yields in current year compared
2 to the prior year.¹⁶

3
4 In December 2009, after the 2008-2009 financial crisis, the OEB reviewed and
5 updated the cost of capital policy. The review reaffirmed the economic, legal
6 and regulatory principles underlying the treatment of cost of capital for rate-
7 setting. The OEB made two major changes in the cost of capital adjustment
8 mechanism: 1) added a second term that would capture variability in A-rated
9 corporate bond yields, and 2) reduced the adjustment factor from 75 percent to
10 50 percent.¹⁷

11
12 The OEB stated that the cost of capital policy updated in 2009 aligned with the
13 following key principles:¹⁸

- 14
15 1. “Fair Return Standard. All three requirements – comparable investment,
16 financial integrity and capital attraction – must be met and none ranks in
17 priority to the others...”
18 2. “The overall ROE must be determined solely on the basis of a company’s
19 cost of equity capital...”
20 3. “Efficient amount of investment... the role of the regulator is to
21 determine, as accurately as possible, the opportunity cost of capital to

¹⁶ ‘OEB Draft Guidelines on a Formula-Based Return on Common Equity for Regulated Utilities’ (March 1997), p. 31-32

¹⁷ Ontario Energy Board, ‘Report of the Board on the Cost of Capital for Ontario’s Regulated Utilities’, EB-2009-0084 (“OEB Cost of Capital Report”), p. 49

¹⁸ Id., p. 31

- 1 ensure that an efficient amount of investment occurs in the public
2 interest ...”
- 3 4. “Predictability, transparency, and stability. The approach ... should result
4 in an environment where outcomes are predictable and consistent ...”
- 5 5. “Systematic and empirically-based approach. The methodology ...
6 should be a systematic approach that relies on economic theory and is
7 empirically derived from objective, data-based analysis.”
- 8 6. “Minimize the time and cost of administering the framework...”

9

10 OEB originally established LCBF yields as an appropriate index since these
11 were also used to set the initial allowed ROE in the formula-based equity risk
12 premium method. In 2009, the Commission confirmed this reasoning, stating:

13

14 “The Board is of the view that the LCBF continues to be an
15 appropriate base upon which to begin the ROE calculation ... The
16 Board also agrees ... that the LCBF provides an important forecast
17 component to the formula and ... that ‘there is an intrinsic logic to
18 using the same parameter to adjust ROE as was used to set the ROE
19 in the first place.’”¹⁹

20

21 The OEB added the corporate bond yields as part of the index as the
22 consultation process produced a statistically significant relationship between the
23 corporate bond yields and the cost of equity. Accordingly, the OEB determined

¹⁹ Id., p. 45

1 that addition of corporate bond yields would improve the cost of capital
2 formula.²⁰

3
4 “The Board also is of the view ... that the specification of the
5 relationship between interest rates and the ERP in the formula would
6 be improved by the addition of a further term to the formula.”²¹

7 “...the Board concludes that there is a statistically significant
8 relationship between corporate bond yields and the cost of equity...”

9
10 The adjustment factor of 0.5 was established after reviewing multiple empirical
11 analyses presented during the consultation process. In the determination, the
12 OEB noted:

13
14 “The Board views the determination of the LCBF adjustment factor
15 to be an empirical exercise, and as such, based on the empirical
16 analysis provided by participants in conjunction with the consultation,
17 the Board is of the view that the LCBF adjustment factor should be
18 set at 0.5.”²²

19
20 The OEB Staff conducted a review of the cost of capital policy in 2006 and
21 concluded that the cost of capital adjustment mechanism had worked as it was
22 intended. Specifically, the OEB Staff stated:

²⁰ Id., p. 47-48

²¹ Id., p. 47

²² Id., p. 46

1 “Based on the results of this review, OEB staff has concluded that the
2 methodology adopted in late 2009 has worked as intended. Movement
3 in the parameters have followed macroeconomic trends and activity
4 and have not resulted in excessive or anomalous volatility.”²³

²³ ‘OEB Staff Report: Review of the Cost of Capital for Ontario’s Regulated Utilities’, in EB-2009-0084, p.
1