

**BEFORE THE
PUBLIC UTILITIES COMMISSION
OF NEW HAMPSHIRE**

LIBERTY UTILITIES (GRANITE STATE)
ELECTRIC) CORP. D/B/A/ LIBERTY,)
REQUEST FOR CHANGE IN DISTRIBUTION)
RATES)
_____)

Docket DE 23-039

**Direct Testimony of
Courtney Lane**

**On Behalf of the
Office of the Consumer Advocate**

December 13, 2023

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Schedule CL-1: Resume of Courtney Lane

1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q Please state your name, title, and employer.**

3 **A Ms. Lane:** My name is Courtney Lane. I am a Principal Associate at Synapse Energy
4 Economics (Synapse), located at 485 Massachusetts Avenue #3, Cambridge, MA 02139.

5 **Q Please describe Synapse Energy Economics.**

6 **A**Synapse is a research and consulting firm specializing in electricity and gas industry
7 regulation, planning, and analysis. Our work covers a range of issues, including economic
8 and technical assessments of demand-side and supply-side energy resources; energy
9 efficiency policies and programs; integrated resource planning; electricity market
10 modeling and assessment; renewable resource technologies and policies; and climate
11 change strategies. Synapse works for a wide range of clients, including attorneys general,
12 offices of consumer advocates, public utility commissions, environmental advocates, the
13 U.S. Environmental Protection Agency, the U.S. Department of Energy, the U.S.
14 Department of Justice, the Federal Trade Commission, and the National Association of
15 Regulatory Utility Commissioners. Synapse has over 40 professional staff with extensive
16 experience in the energy industry.

17 **Q Please summarize your professional and educational experience.**

18 **A**I have 19 years of experience in energy policy and regulation. At Synapse, I work on
19 issues related to utility regulatory models, grid modernization, benefit-cost assessment
20 frameworks, and performance incentive mechanisms. Prior to working at Synapse, I was
21 employed by National Grid as the growth management lead for New England where I
22 oversaw the development of customer products, services, and business models for

1 Massachusetts and Rhode Island. Part of this role included the development of
2 performance incentive mechanisms. In previous roles at National Grid, I worked on the
3 deployment of non-wires alternatives and grid modernization efforts and led the
4 development of annual and three-year energy efficiency plans. Prior to joining National
5 Grid, I worked on regulatory and state policy issues pertaining to energy conservation,
6 retail competition, net metering, and the Alternative Energy Portfolio Standard for
7 Citizens for Pennsylvania's Future. Before that, I worked for Northeast Energy
8 Efficiency Partnerships, Inc. where I promoted energy efficiency throughout the
9 Northeast.

10 I hold a Master of Arts in Environmental Policy and Planning from Tufts University and
11 a Bachelor of Arts in Environmental Geography from Colgate University. My resume is
12 attached as Schedule CL-1.

13 **Q Have you previously testified before the New Hampshire Public Utilities**
14 **Commission?**

15 **A** Yes. I sponsored written testimony before the New Hampshire Public Utilities
16 Commission (the Commission) in Docket DE 20-092 on the 2021-2023 Triennial Energy
17 Efficiency Plan and in Docket DG 21-104 pertaining to the application of Northern
18 Utilities, Inc.

19 **Q On whose behalf are you testifying in this case?**

20 **A** I am presenting testimony on behalf of the Office of the Consumer Advocate (OCA).

1 **Q What is the purpose of your testimony?**

2 **A** The purpose of my testimony is to address certain aspects of the distribution rate
3 application of Liberty Utilities (Liberty or the Company). Specifically, my testimony
4 addresses the design of the Company's proposed multi-year rate plan (MYRP) and
5 performance incentive mechanisms (PIM). I do not address all aspects of the Company's
6 proposal; silence on any issue should not necessarily be taken as acceptance of the
7 Company's proposals.

8 **Q What materials did you rely on to develop your testimony?**

9 **A** The sources for my testimony are Liberty's application and responses to discovery
10 requests, public documents, and my professional knowledge and experience.

11 **Q Was your testimony prepared by you or under your direction?**

12 **A** Yes. My testimony was prepared by me or under our direct supervision and control.

1 **II. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS**

2 **Q Please summarize your primary conclusions regarding Liberty's proposed MYRP.**

3 **A** My primary conclusions regarding Liberty's proposed MYRP are as follows:

4 • The Company's proposed MYRP includes a revenue adjustment mechanism that
5 is based on Liberty's forecast of future capital costs. This design significantly
6 reduces the Company's incentive to reduce costs and unduly shifts risks
7 associated with future costs onto customers.

8 • The Company's proposed MYRP includes a reconciliation mechanism that further
9 reduces the Company's incentive to reduce costs and further shifts risks
10 associated with future costs onto customers.

11 • The Company's proposed MYRP includes an earnings sharing mechanism (ESM)
12 that further shifts risks associated with future costs onto customers.

13 • The Company's proposed MYRP is likely to impose greater costs and greater
14 risks for customers relative to traditional, cost-of-service regulation.

15 **Q Please summarize your primary conclusions regarding Liberty's proposed PIMs.**

16 **A** My primary conclusions regarding Liberty's proposed PIMs are as follows:

17 • The proposed Reliability PIM would have customers paying a financial reward to
18 the Company for an outcome it is already incentivized to achieve.

19 • The Company's proposed time-of use (TOU) Rate Adoption PIM is not based on
20 a target that will stretch performance beyond business-as-usual.

- 1 • The Company is already achieving its proposed Interconnect PIM targets and
2 should therefore not require a financial incentive to maintain this level of
3 performance.

4 **Q Please summarize your primary recommendations regarding Liberty’s proposed**
5 **MYRP.**

6 **A My primary recommendations regarding Liberty’s proposed MYRP are as follows:**

- 7 • The Commission should reject the Company’s proposed MYRP.
- 8 • The Commission should instead require the Company to continue under
9 traditional, cost-of-service regulation. However, Liberty’s current ratemaking
10 practice should be modified by eliminating the use of annual step adjustments that
11 track to the Company’s actual costs. This provision significantly reduces
12 Liberty’s incentive to contain capital costs and unduly shifts the risks of those
13 costs onto ratepayers.

14 If the Commission decides to implement an MYRP for Liberty, it should adopt several
15 modifications to address the concerns raised in my testimony. In particular:

- 16 • The revenue requirement cap should be escalated using an external index instead
17 of a Company-specific forecast.
- 18 • The external index should include an adjustment for inflation based on a widely
19 used and easy to understand inflation index such as the gross domestic product
20 price index and include a productivity factor that is commonly used in MYRPs to
21 reduce allowed revenues over time to reflect productivity improvements.

- 1 • The external index should allow Liberty to continue to collect certain charges that
2 are currently passed through to customers, such as the energy efficiency charge.
- 3 • The external index should limit the use of cost forecasts to large and unusual
4 investments such as specific grid modernization investments, if used at all.
- 5 • The ESM should be modified to allow for upside adjustments only, where the
6 Company would be responsible for return on equity (ROE) that falls below the
7 amount authorized by the Commission in this rate case.
- 8 • The MRP should include metrics and targets to measure the results of the MYRP
9 against its purported outcomes.

10 **Q Please summarize your primary recommendations regarding Liberty’s proposed**
11 **PIMs.**

12 **A My primary recommendations regarding Liberty’s proposed PIMs are as follows:**

- 13 • The Commission should establish a reliability PIM that includes a penalty for
14 underperformance but does not include a reward for overperformance.
- 15 • The Commission should require Liberty to establish a TOU Rate Adoption PIM
16 with more aggressive targets that are based on TOU enrollment rates across the
17 country.
- 18 • The Commission should reject the Interconnect PIM.
- 19 • The Commission should require Liberty to develop a PIM to support cost-
20 effective non-wires alternatives (NWA).

1 **III. LIBERTY’S PROPOSAL SHOULD BE REJECTED AS IT DOES NOT**
2 **IMPROVE UPON EXISTING UTILITY REGULATION**

3 **The Role of Performance-Based Regulation in New Hampshire**

4 **Q Please describe performance-based regulation.**

5 **A**Performance-based regulation (PBR) is a departure from cost-of-service regulation and is
6 intended to create different incentives for the regulated utility to improve its performance.
7 The rationale for implementing PBR is its ability to strengthen utility incentives to
8 control costs while providing for increased operational flexibility; this allows for
9 innovative utility investments that better align with a jurisdiction’s policy goals. The
10 most common approach to PBR is the combination of an MYRP and PIMs.

11 An MYRP is a set of rules governing the rates or allowed revenues of the utility for
12 multiple years into the future, with a regulatory requirement that the utility not have
13 another rate case until the end of a stay-out period. During the MYRP, an attrition relief
14 mechanism (ARM) automatically adjusts revenue requirements or rates through a known
15 or formulaic fashion to compensate a utility for changes in costs without tracking to its
16 actual cost. Since utility profits depend on the difference between revenues and costs, this
17 structure provides an incentive for the utility to contain and reduce costs over multiple
18 years.

19 PIMs are sets of metrics with targets and financial implications. PIMs can serve as a
20 useful regulatory mechanism to positively influence utility behavior towards the
21 advancement of energy policy goals that are not directly aligned with a distribution
22 company’s public service obligations or existing financial incentives

1 **Q What are the potential benefits of PBR?**

2 **A** If designed properly, PBR can provide benefits to customers. For example, a well-
3 designed MYRP can reduce regulatory costs, encourage the utility to find cost-
4 efficiencies, create more predictable rates, and reduce the impact of information and
5 resource asymmetry. PIMs can improve service quality, align utility incentives with
6 achievement of state policy goals, and incentivize the utility to support or implement
7 distributed energy resources (DER).

8 From a utility perspective, an MYRP can provide more predictable revenues and timely
9 recovery of costs for new capital projects, which creates an improved opportunity to earn
10 its authorized rate of return and bolster financial health.¹

11 **Q Please describe how PBR can undermine the public interest.**

12 **A** PBR plans are generally designed by utilities, which operate under a strong profit motive,
13 and can therefore sometimes have a bias that favors the utilities. For example, potential
14 pitfalls associated with a poorly designed PBR proposal could include:

- 15 • Ability of the utility to recover its costs more quickly, without providing
16 increased benefits to customers or advancing energy policy objectives beyond
17 what would have been achieved through cost-of-service regulation;

¹ Costello, Ken. 2016. *Multiyear Rate Plans and the Public Interest*. National Regulatory Research Institute. Pgs. 16-17.

- 1 • A reduction in regulatory lag (and the cost containment incentives associated with
2 regulatory lag) with no commensurate strengthening of cost containment
3 incentives elsewhere;
- 4 • Shifting risk onto ratepayers by requesting that the Commission pre-approve
5 investments and costs, thereby substantially reducing the risk of later regulatory
6 review and determinations of imprudence;
- 7 • Exploitation of information asymmetries, particularly through reliance on cost
8 forecasts, to increase profits for the utility; and
- 9 • PIMs that reward the utility for performing a core utility function or for meeting
10 targets that can be easily achieved.

11 **Q How should the Commission evaluate a PBR proposal?**

12 **A**Liberty’s PBR proposal is the first of its kind in New Hampshire. A decision in this case
13 will set precedent for future utility proposals and it is therefore critical that the
14 Commission thoroughly examine the structure of the MYRP and PIMs to ensure that any
15 proposal is likely to increase incentives for utility cost control, lower rates, reduce
16 administrative burden, and better align the utility business model with the achievement of
17 New Hampshire’s energy policy goals.

18 Specifically, I recommend that the Commission evaluate an MYRP proposal using
19 criteria included in Table 1 below.

1
2

Table 1. Evaluation Criteria for Multi-Year Rate Plan

Category	Key Criteria
Information and Resource Asymmetry	<ul style="list-style-type: none">• Are the allowed revenues set based on an objective, external index, or are they based on the utility’s own estimates? If the latter, information asymmetry will be high and problematic.• Is a capital plan provided in the context of a comprehensive integrated distribution plan?• Are alternatives to proposed investments appropriately considered and evaluated, including third-party provided solutions such as NWAs?
Risk	<ul style="list-style-type: none">• Does the risk associated with managing the utility remain with utility managers? Or are risks shifted to ratepayers?• Who bears the risk of cost overruns?• Who bears the risk of forecast error?• Who bears the risk of stranded costs?
Core Services	<ul style="list-style-type: none">• Is the utility maintaining an acceptable level of reliability and customer service?
Policy Goals	<ul style="list-style-type: none">• Is the utility achieving energy policy goals beyond business-as-usual utility investments (e.g., resilience, grid modernization, DER interconnection, EV adoption, microgrids, customer empowerment, etc.)
Administrative Burden	<ul style="list-style-type: none">• Does the MYRP actually reduce administrative burden after the rate plan is approved?

3 Regarding PIM proposals, I recommend the Commission use the following set of
4 evaluation criteria included Table 2.

1 **Table 2. Evaluation Criteria for PIMs**

Category	Key Criteria
Objectives	<ul style="list-style-type: none">• Are the PIMs based on clearly-defined policy objectives of New Hampshire?• Are the PIMs appropriately balanced across policy objectives, or are some objectives disproportionately emphasized?
Net Benefits to Customers	<ul style="list-style-type: none">• Do the benefits of target attainment outweigh the costs of achieving the PIM target plus any incentive payment?• Is the utility rewarded only for performance that exceeds its expected (baseline) performance level?• Is a financial reward or penalty necessary to offset an existing disincentive or lack of incentive to perform in this area?
Risk and Transparency	<ul style="list-style-type: none">• Are metrics and targets well-defined and measured transparently?• Are PIM targets reasonable and largely within the control of the utility?• Are financial incentives no larger than necessary, thereby avoiding undue risk and excessive contention?• Are steps taken to reduce the potential for gaming?

2 **Regulatory Context for PBR in New Hampshire**

3 **Q Please summarize Liberty’s current approach to ratemaking.**

4 **A** Liberty, similar to the other utilities in New Hampshire, sets distribution rates based on a
5 step adjustment methodology. Through this approach, the Company is authorized to
6 adjust distribution rates through a “step” increase in each year of a predetermined stay-
7 out period to recover additional revenue for certain capital additions, subject to
8 Commission approval.² In the Company’s most recent distribution rate case, Docket No.

² Direct Testimony of Matthew DeCoursey and Gregg Therrien, pg. 8, lines 15-20.

1 DE 19-064, the total allowed revenue requirement for each step was capped at a defined
2 level based on a settlement agreement.³

3 For each step increase, if the actual cost of the capital additions is less than the budgeted
4 amounts, the actual amounts are used to calculate the step adjustment. On the other hand,
5 if the actual cost of the capital additions exceeds the budgeted amounts, then Liberty is
6 authorized to file a request to the Commission for the Company to recover the excess
7 costs through this step adjustment process, except for the last step increase which is
8 capped.⁴ The Company may also seek recovery for any above-budget investments that
9 are not approved through the step adjustment process as part of its next rate case filing.⁵

10 **Q Did OCA previously identify flaws with the step adjustment methodology?**

11 **A** Yes. In Docket No. DE 19-064, Ron Nelson, a Senior Manager with Strategen
12 Consulting, presented testimony on behalf of OCA. In his testimony, Mr. Nelson stated
13 that Liberty’s proposal for step increases beyond the first rate year would “not generate
14 benefits to ratepayers that are equal to or greater than those generated for shareholders
15 and the utility.”⁶ Mr. Nelson also cautioned that without implementing a cohesive PBR
16 framework with complementary PBR mechanisms, an MYRP only serves as a revenue
17 collection device and fails at aligning utility incentives with ratepayer benefits.⁷

³ Liberty Response to OCA TS 2-1(2).

⁴ Settlement Agreement, pgs. 5-6.

⁵ Settlement Agreement, pg. 6.

⁶ Docket No. DE 19-064, Direct Testimony of Ron Nelson, pgs. 13-14.

⁷ *Id.*, at pgs. 17-18.

1 **Q What was the outcome of Docket No. DE 19-064?**

2 **A** The case was resolved through settlement. Under one of the terms of the Settlement
3 Agreement, Liberty was required to “(1) present proposals to Staff, the OCA, and
4 NHDES for PBR mechanism(s) for inclusion in its next distribution rate case through
5 meetings or technical sessions commenced at least nine months prior to the April 6, 2022,
6 step increase filing; and (2) in good faith consider the comments of Staff and the OCA in
7 determining the details of the PBR mechanisms before finalizing and proposing them in
8 the next distribution rate filing” as a prerequisite to obtaining approval for its third step
9 increase for capital additions.⁸

10 **Q How did the Settlement Agreement define PBR?**

11 **A** The Settlement Agreement defines PBR as a “a process of defining regulatory goals,
12 specifying outcomes toward the achievement of those goals, applying performance
13 metrics that measure such achievement, and establishing revenue adjustment mechanisms
14 that support safe and reliable utility service, while rewarding utility shareholders for the
15 achievement of performance metric benchmarks and penalizing them for failing to
16 achieve such benchmarks.”⁹

17 **Q Has Liberty proposed a PBR mechanism in this proceeding?**

18 **A** Yes. The Company’s PBR proposal includes an MYRP and PIMs.

⁸ Settlement Agreement, pg. 6.

⁹ *Ibid.*

1 **Q Please summarize Liberty's PBR proposal.**

2 **A** The MYRP component of Liberty's proposal would set revenue requirements for a three-
3 year period, using a historical test year ending December 31, 2022.¹⁰ Liberty proposes a
4 set of three rate adjustments, occurring annually from July 2023 through June 2026. The
5 rate adjustments in each rate year are based on a Company-specific capital spending plan
6 and an operating and maintenance (O&M) cost forecast based on an escalation factor.¹¹
7 The Company will adjust collections each year based on the reconciliation of certain
8 costs to actuals within predefined variance limits and full reconciliation of operational
9 expenses for cybersecurity, vegetation management, and Pension and Other Post-
10 Employment Benefits.¹²

11 The MYRP also includes an ESM, which allows for annual reconciliation based on
12 deviations from the Company's allowed ROE. The ESM has a deadband of +/- 100 basis
13 points around the target proposed ROE of 10.35 percent for each rate year. If Liberty's
14 earned ROE is greater than 100 basis points but less than 200 basis points higher than the
15 authorized ROE, then 50 percent of the excess earnings are returned to customers. If the
16 earned ROE is greater than 200 basis points, then 75 percent of the overearnings are
17 returned to customers. Conversely, if Liberty's earnings fall below the deadband, it
18 would recover 50 percent of the under-earnings from customers, up to 200 basis points
19 below the authorized ROE. If under-earnings were more than 200 basis points below the
20 authorized ROE, Liberty would collect 75 percent from customers.¹³ The result of the

¹⁰ Direct Testimony of K. Jardin and D. Dane, pg. 4, lines 9-11.

¹¹ Direct Testimony of Philip Q. Hanser, pg. 12, lines 13-18.

¹² DeCoursey and Therrien Direct Testimony, pg. 14, lines 7-16.

¹³ *Id.*, pg. 35, Table 5.

1 ESM would be made through a volumetric charge that would be adjusted following each
2 rate year.¹⁴

3 The PIM component includes three proposed financial PIMs: (1) reliability, (2) TOU rate
4 adoption, and (3) interconnect times. The reliability PIM contains financial rewards and
5 penalties while the TOU rate adoption and interconnect times PIMs are reward only. The
6 Company also proposed a reporting metric for the collection and reporting of electric
7 vehicle (EV) penetration rates.

8 **Q Does Liberty categorize its proposal as a pilot?**

9 **A**Yes. The Company states that it is fair to characterize its proposal as a pilot program
10 because at the end of the MYRP term, the Commission can assess whether the pilot
11 resulted in benefits to Liberty’s customers and determine whether a second MYRP should
12 be approved.¹⁵

13 **Q Does Liberty propose an evaluation plan or metrics to support the review of the**
14 **pilot?**

15 **A**No, it does not.

16 **Critical Flaws in Liberty’s Proposal**

17 **Q Does Liberty’s proposal address problems with the step adjustment approach to**
18 **ratemaking?**

19 **A**No. In Docket DE 19-064, PBR mechanisms were envisioned to mitigate the risk to
20 ratepayers resulting from Liberty’s ability to reconcile actual costs to budgets through

¹⁴ *Id.*, pg. 12, lines 16-19.

¹⁵ *Id.*, pg. 11, lines 13-17.

1 annual step adjustments. While Liberty’s proposal contains many of the elements
2 commonly found in a PBR framework, the specific design of these components does little
3 to shield ratepayers from risk or incentivize cost efficiencies, while still providing the
4 Company with guaranteed revenue increases over the MYRP term.

5 **Q Does Liberty define its proposal as PBR?**

6 **A** No. The Company describes its proposal as “somewhat of a hybrid between MYRP and
7 PBR” because it would (1) allow for annual changes to distribution rates over a three-
8 year period based on forward-looking cost-of-service estimates; (2) provide for revenues
9 to be adjusted during the MYRP due to changes to the Company’s capital spending,
10 within limits; and, (3) provide for changes to revenue during the MYRP to adjust for
11 over-or under-earnings and based on the achievement of PIMs.¹⁶

12 **Q How does Liberty define PBR?**

13 **A** The Company states that PBR mechanisms are generally designed to disassociate a
14 utility’s rates from its cost of service, which provides a utility with an opportunity to earn
15 higher profits if it can operate more efficiently and reduce costs, while also providing rate
16 certainty over the term of the PBR. The Company indicates that PBR is good for utility
17 shareholders and customers due to the efficiency gains in the form of lower costs.¹⁷

18 **Q How does the Company define an MYRP?**

19 **A** Instead of defining an MYRP as a component of PBR, Liberty instead indicates that an
20 MYRP actually differs from PBR because revenues are not disassociated from the

¹⁶ *Id.*, pg. 5, line 7-14.

¹⁷ *Id.*, pg. 4, lines 7-13.

1 utility's cost of service but are set at prescribed levels over the MYRP term and subject to
2 known, certain adjustments.¹⁸

3 **Q Do you agree with the way Liberty differentiates PBR from an MYRP?**

4 **A** No. I find that the bifurcation of an MYRP from PBR creates confusion. As indicated
5 earlier in my testimony, the most common approach to PBR is the combination of an
6 MYRP and PIMs. An MYRP is a component of PBR. It is the structure of the MYRP
7 itself that can be designed in a manner that achieves the desired outcomes of PBR as
8 described by Liberty, including incentivizing the utility to make efficiency gains in the
9 form of lower costs, while providing rate certainty.

10 **Q Please summarize the critical flaws in Liberty's proposal as it pertains to your**
11 **recommended evaluation criteria.**

12 **A** There are several critical flaws in Liberty's proposal. I summarize these below and
13 expound upon them in the next section of my testimony:

14 1) Liberty's proposal increases information asymmetry by setting revenues based on a
15 Company-specific capital forecast, which puts the Commission and intervenors at a
16 disadvantage regarding understanding, reviewing, and critiquing the Company's
17 proposal.

18 2) Liberty's proposal does not provide incentives for cost-efficiencies by eliminating the
19 regulatory lag that provides incentives under cost of service regulation.

¹⁸ *Id.*, pg. 4, lines 17-19.

1 3) Liberty's proposal shifts risks to ratepayers by increasing rates based on internal
2 capital cost forecasts that are not anchored in comprehensive integrated distribution
3 and grid modernization plans.

4 **IV. LIBERTY'S PROPOSED MULTI-YEAR RATE PLAN**

5 **Liberty's MYRP Proposal provides insufficient cost-containment incentives**

6 **Q How can an MYRP incentivize a utility to seek cost efficiencies?**

7 **A**An MYRP can provide incentives for cost containment by divorcing a utility's actual
8 costs from its revenues. During the MYRP term, revenues are typically adjusted using a
9 pre-defined formula. The revenue adjustments can be based on an external cost index, a
10 utility cost forecast, or both. During the MYRP stay-out period, a utility is not permitted
11 to file a new rate case if its costs and revenues diverge. This incentivizes a utility to
12 control costs within the allowed revenue adjustments thereby shifting the risks associated
13 with poor utility cost management to shareholders instead of ratepayers.

14 A necessary design element to achieve this incentive for cost-containment is that the
15 revenue adjustment formula should not be set to equal the utility's actual costs. Any
16 revenue adjustments should be designed to give a utility an allowance for likely,
17 anticipated cost growth rather than reimbursement for its *actual* cost growth.¹⁹ The utility

¹⁹ Lowry, M., Makos, M., and Waschbusch, G. 2015. *Alternative Regulation for Emerging Utility Challenges: 2015 Update*. Edison Electric Institute, page 34.

1 will be able to keep the difference between anticipated cost growth and actual growth as
2 increased profits, thereby providing the utility an incentive to reduce actual cost growth.

3 Liberty's MYRP, however, does not include this critical design element, for two reasons.
4 First, it uses a forecast of actual costs—a forecast proposed by Liberty. Second, it
5 includes a reconciliation mechanism that allows Liberty to collect its actual costs
6 regardless of how they compare with the forecasted costs. In sum, Liberty's MYRP
7 provides the Company with (a) an incentive to overstate its cost forecast to create ample
8 revenues to cover costs, and (b) no incentive to contain those costs because they will be
9 fully reconciled at the end of the MYRP term.

10 **The Use of Cost Forecasts Shifts Risks to Customers**

11 **Q Please summarize how the Company calculates its proposed revenue requirement**
12 **over the MYRP term.**

13 **A** The Company's proposed revenue requirements are a result of incremental adjustments to
14 a historical test year based on known and measurable changes to revenue, expense, and
15 plant figures, including the application of a general inflation factor for O&M expenses
16 not adjusted for elsewhere.²⁰ Specifically, the Company is requesting that the
17 Commission "approve a capital spending plan for each of the three rate years and
18 establish a revenue requirement from which distribution rates can be derived."²¹

²⁰ Jardin and Dane Direct Testimony, pg. 8, lines 7-14.

²¹ DeCoursey and Therrien Direct Testimony, pg. 11, lines 14-16.

1 **Q Please explain how the Company’s proposal shifts risks to ratepayers.**

2 **A** A key means by which the Company’s proposal shifts risks to ratepayers is through the
3 use of a utility-specific capital cost forecast. Because of information asymmetry, this
4 creates opportunities for the utility to game forecasts to advance its own profits, at the
5 expense of customers.

6 **Q Please explain what you mean by information asymmetry.**

7 **A** The use of a utility-specific cost forecast exacerbates information asymmetries since the
8 utility will always have the most technical knowledge and information regarding its
9 systems, which creates significant challenges for the intervening parties and regulators to
10 ensure that cost forecasts are reasonable. As explained by the National Regulatory
11 Research Institute:

12 “Information asymmetry reflects the relatively less knowledge that a
13 regulator has (relative to the utility’s) on the correlation between forecasted
14 costs and utility-management competence. When a utility files a cost
15 forecast, how does the regulator know whether it reflects competent
16 management? The analyst or auditor can evaluate the forecast applying
17 state-of-the-art techniques; still, however, a level of uncertainty remains
18 that leaves unknown the utility’s level of managerial competence embedded
19 in the forecast.”²²

²² Costello, K, 2016, *Multiyear Rate Plans and the Public Interest*, National Regulatory Research Institute, pages 35–36.

1 The regulator and intervening parties do not have perfect information (in terms of data
2 availability, models, or knowledge of the level of effort expended by utility
3 management), nor do the regulator and the parties have the same level of resources (e.g.,
4 economists, engineers) as the utility. Thus, it is extremely difficult to ensure that
5 Liberty's cost forecasts are accurate, which places customers at risk that the allowed
6 MYRP revenues will be set too high. Because intervening parties and regulators can
7 never completely vet the accuracy of cost forecasts, utilities have an inherent bias to
8 overstate their costs and understate revenues.

9 When a utility's rate of return is greater than the cost of borrowing, utilities have a
10 financial incentive to maximize their capital expenditures in order to increase rate base
11 and thereby increase profits. This is often referred to as the Averch-Johnson effect.

12 The combination of these factors incentivizes utilities to overestimate future costs to
13 maximize their allowed revenues under an MYRP. For these reasons, utility cost
14 forecasts are likely to be higher than necessary.

15 **Liberty's Proposed Reconciliation Process Further Eliminates Incentives to Reduce**
16 **Costs**

17 **Q Please summarize the Company's proposed reconciliation process.**

18 **A** The Company's proposed MYRP would allow changes to the approved revenue
19 requirements in each year related to variances from the approved capital spending plan.
20 Specifically, the Company proposes to reconcile its Utility Plant in Service (UPIS)
21 budget to actual spending, within defined variance limits. Following the end of each rate
22 year, Liberty would provide an annual reconciliation filing that includes a list of capital

1 projects approved for the rate year, the authorized cost, and a calculation of the variance
2 both by project and for the total year.²³

3 The Company states that any variances that decrease UPIS costs compared to the filed
4 spending plan would be reconciled without limit, but it places limits to upward
5 adjustments. The upward adjustments to UPIS costs are capped at a 20 percent increase
6 for any individual project or 10 percent of the total change in UPIS costs for any one rate
7 year.²⁴ For capital cybersecurity expenses, the Company proposes to cap costs at a 25
8 percent increase of any individual project.²⁵ There is no limit on the reconciliation for
9 cybersecurity and vegetation management operational expenses; the Company would be
10 allowed to recover all variances for these expenses.²⁶

11 **Q Please explain the flaws with the reconciliation process.**

12 **A** The proposed reconciliation process reduces incentives for Liberty to seek cost
13 efficiencies during the MYRP term and creates an incentive for the Company to inflate its
14 UPIS budget.

15 **Q How does the reconciliation process reduce Liberty's incentive to control capital**
16 **costs?**

17 **A** There are two ways in which the reconciliation process erodes Liberty's incentive to
18 control costs. First, there is virtually no benefit to the Company should it spend less than
19 its approved capital budget. Through the proposed reconciliation process, any

²³ DeCoursey and Therrien Direct Testimony, pg. 28, lines 5-7.

²⁴ *Id.*, at pg. 21, lines 4-7.

²⁵ *Id.* at pg. 38, lines 7-12.

²⁶ *Id.*, at pg. 43, lines 1-7.

1 underspending due to achieving cost efficiencies flows to the customers, not to the
2 Company. This also removes any incentive for Liberty to seek out cost efficiencies
3 during the MYRP term.

4 Conversely, there is little disincentive to Liberty for spending above the proposed cost
5 variance limits. The Company would track deferred capital costs above the variance limit
6 as a regulatory asset. If found prudent after the final rate year of the MYRP, the Company
7 would be allowed to recover these costs, *including its allowed return* on those
8 expenditures.²⁷

9 **Q Does the requirement of a prudency review of any deferred capital spending protect**
10 **ratepayers?**

11 **A** Not sufficiently. The practical burden of proving imprudence of costs incurred is high, as
12 it requires extensive time and resources by the challenger to request and comb through a
13 vast amount of data in an attempt to decipher exactly what the utility knew and when.
14 However, this information is readily available to the utility. As a result, it is often
15 extremely challenging for other parties or the Commission to establish imprudence of
16 costs in all but the most egregious cases.

17 **Q Is it common for MYRPs to include this type of reconciliation mechanism?**

18 **A** No. I am not aware of any other jurisdiction that implements a similar cost reconciliation
19 process for over- and underspending in the context of an MYRP.

²⁷ *Id.*, at pgs. 25-26.

1 The MYRPs currently in effect in Maryland and the District of Columbia allow for the
2 reconciliation of over- and underspending; but unlike Liberty’s proposal, they do not
3 allow utilities to earn a return on expenditures that are above the cost forecasts. It should
4 also be noted that these reconciliation proposals have been vehemently opposed by the
5 consumer advocates in both jurisdictions.²⁸ Most recently, the witness for the Maryland
6 Office of People’s Counsel found that the reconciliation process originally approved for
7 Baltimore Gas and Electric Company’s (BGE) first MYRP reduced the incentive to
8 reduce capital and O&M spending between rate cases, finding that BGE overspent its
9 capital budget by 8.6 percent in 2021 and 47.6 percent in 2022.²⁹

10 **Q Is it ever appropriate for a reconciliation mechanism to be included in an MYRP?**

11 **A** There are two cases when it can be appropriate for MYRPs to include a reconciliation
12 mechanism. First, a limited reconciliation mechanism can be appropriate for certain large,
13 unusual investments, such as part of a grid modernization plan, recurring pass-through or
14 mandated costs, or extraordinary costs that are largely outside of the utility's control.
15 However, it is important that any reconciliation mechanism be downward-only, so that a
16 utility is not rewarded for overspending.

17 Second, if the revenue requirement is based on utility-specific cost forecasts, then a one-
18 way downward reconciliation mechanism should be implemented. Although the

²⁸ See: Public Service Commission of the District of Columbia Formal Case No. 1156, Direct Testimony of Courtney Lane on Behalf of the District of Columbia Government (March 6, 2020) and Public Service Commission of Maryland Case No. 9692, Panel Response Testimony of Paul Alvarez and Dennis Stephens on Behalf of the Maryland Office of People’s Counsel (June 20, 2023).

²⁹ Panel Response Testimony of Paul J Alvarez and Dennis Stephens Office of People’s Counsel Maryland PSC Case No. 9692 (June 20, 2023) at pg. 14 and pg. 22.

1 downward reconciliation does not encourage the Company to find cost efficiencies as
2 indicated above, it does protect customers from excessive overspending or the utility
3 failing to make its planned capital investments. This is because a downward-only
4 reconciliation mechanism does not allow the Company to profit from under-investment
5 and ensures that overspend is not considered until a subsequent rate case when rates are
6 reset.

7 **The Proposed Earnings Sharing Mechanism Shifts Risks to Ratepayers**

8 **Q Please explain how Liberty's MYRP shifts risks to ratepayers.**

9 **A** The Company's proposed ESM prevents the Company's earned ROE from deviating far
10 from its allowed ROE, even if the Company overspends compared to its approved cost
11 forecasts and revenue requirement. If Liberty's ROE is more than 100 basis points below
12 its allowed ROE, Liberty proposes to recover 50 percent of the under-earning (below the
13 deadband) from customers. If the ROE falls to more than 200 basis points below the
14 authorized ROE, Liberty would then recover 75 percent of the deficit from customers. In
15 this case the ratepayer has risk, but no control over that risk. On the other hand, Liberty
16 has control over the management of its costs to address risk associated with overspend.

17 **Q Is an ESM for under-earning common in MRPs?**

18 **A** No. While it is fairly common to institute ESMs for utility *overearnings*, reconciliations
19 of utility under-earnings are very rare. The Company itself notes this, stating that it is
20 only aware that the Hawaiian electric companies and Green Mountain Power have ESMs

1 for under-earnings in their MYRPs.³⁰ The Brattle Group came to a similar conclusion in
2 2019, stating that ESMs that apply to “utility over earnings (but not under earnings) are in
3 place in 10 states.”³¹

4 Instead, reconciliations of utility under-earnings are commonly found in a formula rate
5 plan (FRP). An FRP formulaically ensures that revenues track costs (often measured as
6 deviations in ROE from the utility’s target ROE). Under an FRP, if a utility spends less
7 than it collects through revenues, the utility’s return will exceed its ROE target, and it
8 will be required to reduce its rates. Likewise, if a utility overspends, its earned return will
9 fall below its target return and it will be allowed to increase its rates. These rate increases
10 or decreases are accomplished through periodic reconciliations.³²

11 **Q Do you have any other concerns with Liberty’s proposed ESM?**

12 **A** Yes. The purpose of an ESM is to provide utilities with a strong incentive for cost
13 efficiency across the utility business while placing bounds on its profits. However, the
14 structure of Liberty’s MYRP results in an ESM that only creates cost control incentives
15 for certain operational expenses and not for capital investments. This is because any
16 underspend in a rate year compared to the forecast capital plan is fully reconciled to
17 customers. Therefore, any Company achievement of cost efficiencies related to its capital
18 budget does not have a positive effect on its ROE.

³⁰ Liberty Response OCA 1-19(a).

³¹ Pepco Exhibit J, Witness Zarakas, in D.C. PSC FC 1156, The Application of the Potomac Electric Power Company Authority to Implement a Multiyear Rate Plan for Electric Distribution Service in the District of Columbia, at 13.

³² Whited, M., C. Roberto. 2019. *Multi-Year Rate Plans: Core Elements and Case Studies*. Synapse Energy Economics Synapse prepared for Maryland PC51 and Case 9618, pg. 4

1 For these reasons, the ESM only creates an incentive for operational cost efficiencies—
2 not including those related to cybersecurity, vegetation management, and Pension and
3 Other Post- Employment Benefits, which it fully reconciles. This significantly reduces
4 the effectiveness of the ESM.

5 **Recommended Modifications to Liberty’s Proposed MYRP**

6 **Q What is your recommendation regarding the Company’s proposed MYRP?**

7 **A** For the purposes of this rate case, I recommend that the Commission reject the
8 Company’s proposed MYRP and continue under traditional cost-of-service regulation.
9 Based on my review, traditional cost-of-service regulation would provide the Company
10 with a greater incentive to control its costs than the proposed MYRP, thereby better
11 ensuring that rates are just and reasonable.

12 **Q If the Commission agrees that the Company should continue under traditional cost-**
13 **of-service regulation, are any changes to Liberty’s current ratemaking practices**
14 **warranted?**

15 Yes. If the Commission agrees that the Company should continue under traditional cost-
16 of-service regulation, the Commission should eliminate the use of annual step
17 adjustments that track to the Company’s actual costs. This provision significantly reduces
18 Liberty’s incentive to contain capital costs and unduly shifts the risks of those costs onto
19 ratepayers.

20 **Q If the Commission decides to implement an MYRP for Liberty, are any changes to**
21 **the Company’s proposal warranted?**

22 **A** Yes. If the Commission decides to implement an MYRP for Liberty, it should adopt
23 several modifications to address the concerns raised in my testimony. In particular:

- 1 1) Apply an external index for business-as-usual costs: The revenue requirement
2 from the historical test year should be escalated for each year of the MYRP
3 according to an inflation index, rather than being based on cost forecasts. The
4 external index should allow Liberty to continue to collect certain charges that are
5 currently passed through to customers, such as the energy efficiency charge.
- 6 2) Cost forecasts should be limited to large and unusual investments, if used at all:
7 Allowed revenues for large, unusual costs (such as specific grid modernization
8 investments with specified and measured performance outcomes).
- 9 3) Require one-way (downward) reconciliations for costs that are less than the cost
10 forecast, but no reconciliations for costs that exceed the cost forecast.
- 11 4) Implement an ESM for upside adjustments only, where the Company would be
12 responsible for ROEs that fall below the amount authorized by the Commission in
13 this rate case.
- 14 5) Develop metrics and targets to measure the results of the MYRP against its
15 purported outcomes.

16 1. *External Index for Business-as-Usual Costs*

17 **Q** **Why do you recommend use of an external index for most costs?**

18 **A** Escalating allowed revenues based on an external cost index is a common and effective
19 means of addressing information asymmetry concerns in MYRPs. Because they allow
20 increases in revenue requirements from year to year, MYRPs are often adopted where it
21 is recognized that traditional cost-of-service regulation is not providing sufficient

1 revenues to allow a utility to maintain its financial strength while making the necessary
2 investments to support energy policy goals. However, basing revenue increases on utility
3 forecasts is problematic and shifts risk to ratepayers because utilities have an information
4 advantage.

5 To address information asymmetry, external indices are often used instead of cost
6 forecasts, since this approach “permits the utility to continue making necessary
7 investments and avoid revenue attrition, while avoiding concerns regarding strategic
8 behavior (i.e., gaming of forecasts) and information asymmetry that are present in
9 forecast-based [Attrition Relief Mechanisms].”³³ The basis for such indices vary by
10 jurisdiction, but the indices are often based on inflation rates and productivity factors. In
11 some cases, different categories of costs are escalated at different rates based on separate
12 cost indices.

13 Index-based revenue adjustment mechanisms have many advantages over cost forecasts:

- 14 • External cost indices do not require that specific costs be reviewed and pre-
15 approved at the beginning of the MYRP. In contrast, basing revenue adjustments
16 on a cost forecast essentially asks that the regulator pre-approve investments and
17 their associated costs. This unduly shifts risks from the utility to ratepayers.
18 Further, it increases the administrative burden for regulators and stakeholders.

³³ Whited, M., C. Roberto. 2019. *Multi-Year Rate Plans: Core Elements and Case Studies*. Synapse Energy Economics Synapse prepared for Maryland PC51 and Case 9618 at 10.

- 1 • External cost indices do not rely on utility cost forecasts that may be subject to
2 error or may be inflated.

3 An index-based mechanism avoids the above challenges, but still allows utility revenues
4 to increase over the term of the MYRP, allowing for longer time between rate cases,
5 without unduly shifting risk to ratepayers.

6 ***2. Limited Use of Cost Forecasts***

7 **Q Why do you recommend that cost forecasts be limited to large, unusual**
8 **investments?**

9 **A**I recommend the use of cost forecasts in an MYRP be restricted to a limited number of
10 large and unusual types of costs. These include investments that are part of a holistic
11 plan, such as a grid modernization plan that has been vetted and approved by
12 stakeholders and the Commission. For example, SCE and San Diego Gas & Electric have
13 preapproved multiyear cost forecasts for advanced metering infrastructure.³⁴ In addition,
14 the Massachusetts Department of Public Utilities ordered a three-year preauthorization of
15 grid-facing investments as part of grid modernization plans filed by Eversource, National
16 Grid, and Unitil. Costs are tracked through a Grid Modernization Factor (GMF) and each
17 company is required to submit a GMF rate adjustment and reconciliation filing containing
18 its proposed grid modernization factors, as well as testimony and supporting

³⁴ Lowry, M.N., Deason, J., Makos, M., Schwartz, L., “State Performance-Based Regulation Using Multiyear Rate Plans for U.S. Electric Utilities” (U.S. Department of Energy), July 2017, 4.5.

1 documentation, regarding documentation of projects completed, cost variances, and
2 prudence.³⁵

3 **3. Reconciliations**

4 **Q How can the increased risk to ratepayers from cost forecasts be mitigated?**

5 **A** The risk to ratepayers cannot be fully mitigated if cost forecasts are used. However, the
6 risk shifted to ratepayers can be reduced by allowing only a one-way, downward
7 reconciliation of costs.

8 **Q How does a one-way (downward) reconciliation of costs lower the risk shifted to**
9 **ratepayers?**

10 **A** A one-way reconciliation mechanism reduces the benefit that the utility receives from
11 inflating its cost projections and protects customers from utility under-spend. The one-
12 way nature of the reconciliation also encourages the utility to keep costs below the
13 projections and ensures that over-spends are not approved until a prudence review in the
14 subsequent rate case.

15 **Q Do other jurisdictions use one-way reconciliations for cost forecasts?**

16 **A** Yes. Where cost forecasts are used, the reconciliation mechanisms are typically
17 downward-only, so that any cost overruns are borne by the utility. For example,
18 Minnesota and New York both use cost forecasts to project revenue requirements

³⁵ Massachusetts Department of Public Utilities, Order on D.P.U. 15-120; D.P.U 15-121; D.P.U. 15-122. May 10, 2018.

1 associated with capital investments but have coupled the forecasts with a one-way
2 (downward) reconciliation mechanism.³⁶

3 **Q Why do you not recommend reconciliations for indexed costs?**

4 **A** MYRPs can provide powerful cost-efficiency incentives to utilities by capping revenues
5 at pre-set levels and de-linking revenues from actual costs. As explained in the Edison
6 Electric Institute’s survey of alternative regulation mechanisms, “[t]he rate adjustments
7 provided by [attrition relief mechanisms] are largely “external” in the sense that they give
8 a utility an allowance for cost growth rather than reimbursement for its actual growth.”³⁷
9 Because revenues do not increase in lock-step with costs, the utility has an incentive to
10 reduce costs to increase its profits for the duration of the rate plan. At the end of the
11 MYRP term, these cost reductions can then be passed on to ratepayers when rates are
12 reset in a rate case.

13 **4. ESMs**

14 **Q Please explain why an ESM should not include reconciliations of utility under-**
15 **earnings.**

16 **A** As explained earlier in my testimony, the proposed deadband for under-earnings shifts
17 risk of overspending to ratepayers by allowing the Company to recover a percentage of
18 cost overruns, unless found to be imprudent by the Commission. It is the Company and

³⁶ Minnesota Public Utilities Commission, Findings of Fact, Conclusions, and Order, Docket E-002/GR-15-826, June 12, 2017.

Order Approving Electric, Gas and Steam Rate Plans in Accord with Joint Proposal, Case 13-E-0030, Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Electric Service, February 21, 2014, at 29-30.

³⁷ Lowry, M.N., Makos, M., Waschbusch, G., “Alternative Regulation for Emerging Utility Challenges: 2015 Update” (Edison Electric Institute, November 11, 2015), 34.

1 not the ratepayer that has control over the Company's performance and the customer
2 therefore should not bear the risk of poor utility performance.

3 **5. MYRP metrics and targets**

4 **Q Please explain why metrics and targets are needed to track MYRP performance.**

5 **A** The Company characterizes its proposal as a pilot program because at the end of the
6 MYRP term, the Commission can assess whether the pilot resulted in benefits to
7 Liberty's customers and determine whether a second MYRP should be approved.³⁸
8 However, it is unclear how the Commission will assess those benefits if Liberty is not
9 tracking metrics or targets related to the potential benefits. For example, if cost-
10 containment is a purported benefit of the MYRP, then metrics related to costs per
11 customer should be tracked. It is important to establish clear evaluation metrics prior to
12 the approval of an MYRP.

13 **V. LIBERTY'S PROPOSED PERFORMANCE INCENTIVE MECHANISMS**

14 **The Role of PIMs in Utility Regulation**

15 **Q Please describe how PIMs are utilized in utility regulation.**

16 **A** PIMs are a compensation mechanism whereby a utility receives a financial reward or
17 penalty for the achievement or failure to meet a performance target. Historically, PIMs
18 have been used to address traditional utility performance areas such as reliability, service
19 quality, and safety. However, in response to industry developments and evolving policy
20 goals, PIMs are being used to influence utility behavior to address new challenges and

³⁸ DeCoursey and Therrien Direct Testimony, pg. 10, lines 13-17.

1 advance energy policy goals that are not directly aligned with a distribution company's
2 existing financial incentives.

3 For example, under cost-of-service regulation, utilities have a financial disincentive to
4 invest in energy efficiency or other DERs. These resources create energy and peak-
5 demand savings that negatively impact the traditional way utilities earn profits, by
6 reducing sales and lessening the need for load growth and reliability-related capital
7 investments. PIMs that provide a financial reward to the utility for promoting efficiency
8 and DERs can help address this financial disincentive to better align the utility's business
9 model with a desired policy outcome. The energy efficiency performance incentive
10 currently in place for New Hampshire utilities is an example of such a PIM.

11 PIMs can also be used to drive utilities to respond to industry changes such as the
12 utilization of grid modernization technologies, delivery of customer services related to
13 those technologies, or implementing new forms of distribution planning such as NWAs.

14 **Q What are the characteristics of well-designed PIMs?**

15 **A** There are several important characteristics of well-designed PIMs. First, a PIM should
16 focus on performance areas where a utility lacks an incentive or has a disincentive to
17 achieve a desired outcome. Existing incentives can take many forms. For example, a
18 utility may have an incentive to invest in new capital to grow its rate base, avoid a
19 penalty, meet an existing regulatory standard, promote customer satisfaction, or achieve
20 internal corporate and shareholder goals.

1 Second, PIMs should be based on baseline data that demonstrates the utility can improve
2 performance to achieve desired outcomes. Baseline data is important to avoid rewarding
3 a utility for achieving increased performance where there is no demonstrated need for it.
4 In addition, if a utility is already performing well in an area, it may not be in the best
5 interest of ratepayers to incentivize the utility to achieve even higher performance
6 levels.³⁹

7 Third, PIMs should result in measurable benefits to customers in performance areas that
8 are important to customers and other stakeholders.

9 Fourth, the magnitude of any reward or penalty should be commensurate with the
10 benefits to customers. Financial rewards should be high enough to motivate utility
11 management but otherwise as low as possible to protect customers.

12 Fifth, PIMs should not reward the utility for an outcome it already has sufficient
13 incentive to achieve. Further, financial rewards should be designed to encourage utilities
14 to stretch beyond their past practices and performance levels. Utilities should not be
15 rewarded for performance levels that they have already achieved.

³⁹ Whited, M., Woolf, T., Napoleon, A. 2015. *Utility Performance Incentive Mechanisms: A Handbook for Regulators*. Prepared by Synapse Energy Economics, Inc. for the Western Interstate Energy Board. Pages 34-35.

1 **Overview of Liberty’s Proposed PIMs**

2 **Q Does Liberty propose PIMs in this proceeding?**

3 **A** Yes, the Company proposes three PIMs: Reliability, TOU Rate Adoption, and
4 Interconnect. The Company also proposes a tracking-only metric related to the collection
5 and reporting of EV penetration rates.

6 **Q Please describe the proposed structure of the PIMs.**

7 **A** The Company states that any resulting reward or penalty will be reflected as basis points
8 that will either be added to, or subtracted from, the Company’s ROE each year. Table 3
9 below, details the proposed basis points (bps) related to proposed rewards and/or
10 penalties for each performance metric as included in the MYRP.

11 **Table 3. Liberty Proposed PIM Rewards/Penalties for MYRP Period**

	RY 1 (2023/2024)	RY2 (2024/2025)	RY 3 (2025/2026)
Reliability	--	+/- 25 bps	+/- 25 bps
TOU Rate Adoption	--	--	+ 10 bps
Interconnect PIM	+ 10 bps	+10 bps	+ 10 bps

12 *Sources: Menard Direct Testimony at 18, lines 3-4 and 25, lines 6-7, and Liberty Response to OCA 1-*
13 *45, OCA 6-5(a).*

14 The Company indicates that 1 basis point would be worth approximately \$10,776 in Rate
15 Year 1, \$11,566 in Rate Year 2, and \$12,276 in Rate Year 3 in revenue requirement for
16 the electric distribution company.⁴⁰ Using these values, I calculated the estimated values
17 for each performance metric, which are shown in Table 4 below.

⁴⁰ Liberty Response to OCA 4-4.

1 **Table 4. Liberty Proposed PIM Rewards/Penalties (\$)**

	RY 1 (2023/2024)	RY2 (2024/2025)	RY 3 (2025/2026)
Reliability	--	+/- \$288,900	+/- \$306,900
TOU Rate Adoption	--	--	+ \$122,760
Interconnect PIM	+ \$107,760	+ \$115,560	+ \$122,760
Maximum Reward	\$107,760	\$404,460	\$552,420

2 The Company indicates that the revenue impacts resulting from PIM adjustments will be
3 reconciled with customers through a Revenue Adjustment Charge (RAC), a new
4 volumetric charge proposed in this proceeding.⁴¹

5 **Q Did Liberty assess whether the expected customer benefits of the PIMs will exceed**
6 **the expected costs of its PIMs?**

7 **A** No. The Company did not conduct this assessment. It indicates that this not required nor
8 was it requested by any stakeholder during the working sessions related to the Company's
9 proposal held ahead of the filing of this case.⁴²

10 **Q How did Liberty develop these PIMs?**

11 **A** The Company states that it engaged its advisors at The Brattle Group and also solicited
12 input from key external stakeholders including OCA. The Company states that most of its
13 proposed PIMs were either discussed at length with stakeholders or were proposed by
14 one of the parties.⁴³

⁴¹ DeCoursey and Therrien Direct Testimony, pg. 47, lines 4-14.

⁴² Liberty Response to OCA 1-39.

⁴³ Direct Testimony of Erica L. Menard, pg. 11, lines 8-16.

1 **Q Did you participate in these PIMs discussions and provide recommendations?**

2 **A** Yes, I did.

3 **Q Does Liberty propose PIMs that are consistent with your recommendations?**

4 **A** Not entirely. Liberty is proposing a TOU rate enrollment PIM, which is similar to my
5 recommendation that the Company create a metric based on time-varying rate
6 participation. However, it did not incorporate my other suggestions. The Company
7 includes my other suggestions as Attachment ELM-PBR-1.

8 **Q What metrics did you recommend related to reliability?**

9 **A** I recommended metrics focusing on improvements to both reliability and resiliency with
10 specific attention to areas where customers, and especially critical customers, may be
11 experiencing higher levels of outages. These recommendations were meant to be tracking
12 metrics at first to provide transparency and create a baseline to determine whether there
13 are performance issues that require improvement. These included (1) installed demand
14 response capacity for use in emergency load curtailment, by feeder, (2) cumulative
15 critical customer hours of outages during a major event, mapped by feeder, (3) number
16 and percent of critical customers with outages during a major event, mapped by feeder,
17 and (4) average time to recovery during a major event, by class, mapped by feeder.

18 **Q What PIMs did you recommend related to DERs?**

19 **A** I recommended a PIM based on savings from NWAs to incentivize Liberty to invest in
20 cost-effective NWAs instead of traditional wires-side investments because these can
21 produce cost savings for customers and promote DERs such as storage.

1 **Liberty's Proposed Reliability PIM**

2 **Q Please summarize the Company's proposal for a reliability PIM.**

3 **A The Company proposes a reliability PIM based on how the Company's System Average**
4 **Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index**
5 **(SAIFI) performance, excluding Major Event Days, compares to a group of six peer**
6 **electric utilities in New Hampshire, Maine, and Massachusetts.⁴⁴ SAIDI identifies the**
7 **length of sustained interruptions experienced by customers, while SAIFI is an indication**
8 **of how many interruptions are experienced by customers.**

9 Under the proposed PIM, beginning after the second rate year and after each rate year
10 thereafter, Liberty will compare the Company's SAIDI and SAIFI performance against
11 the six peer utilities using data from the U.S. Energy Information Administration. If
12 Liberty's SAIDI and SAIFI scores are both the lowest or second lowest (i.e., best or
13 second best) of the peer group then it would earn an incentive. On the other hand, if
14 Liberty's SAIDI and SAIFI scores are both the highest or second highest (i.e., worst or
15 second worst) of the peer group, a financial penalty would be applied.⁴⁵

16 **Q What is the purpose of the Reliability PIM?**

17 **A The PIM is intended to provide Liberty with a financial incentive for reliability**
18 **performance. The Company states there is currently no incentive for a utility to improve**
19 **SAIDI and SAIFI when it is meeting industry standards and indicates that meeting**
20 **industry standards may not translate into customer satisfaction.⁴⁶ The Company explains**

⁴⁴ *Id.*, pg. 13, lines 1-12.

⁴⁵ *Id.*, at pg. 16, lines 2-7.

⁴⁶ *Id.*, pg. 18, lines 14-20.

1 that the Reliability PIM is intended to “bridge the gap” between incentives to meet the
2 industry standard for SAIDI and SAIFI and better outcome for customers.⁴⁷

3 **Q Does the Company provide the costs associated with improving SAIDI and SAIFI?**

4 **A** No, it does not. Liberty states that the proposed MYRP contains spending to maintain
5 current levels of reliability performance except for a proposal to increase spending on
6 vegetation management.⁴⁸ As noted earlier in my testimony, the Company does not
7 propose a spending cap on its vegetation management program and instead indicates
8 there will be no limit on the reconciliation of variances from planned spending.⁴⁹

9 **Q Did the Company calculate the expected benefits to customers from achieving the**
10 **Reliability PIM?**

11 **A** No. The Company did not calculate the incremental net benefits that would accrue to
12 customers from meeting the Reliability PIM.⁵⁰ Furthermore, Liberty did not conduct an
13 analysis to determine if the benefits of outperforming industry standards for SAIDI and
14 SAIFI will exceed the costs.

15 **Q Do you support the Reliability PIM as proposed?**

16 **A** No, I do not. The Company should not receive a financial incentive for actions associated
17 with its core public service obligations. As noted by the Company, its “core mission is to
18 provide customers with safe, reliable electric service.”⁵¹ I also find that the Reliability
19 PIM does not meet the criteria of a well-designed PIM because Liberty already has

⁴⁷ *Id.*, pg. 18, lines 20-22.

⁴⁸ Liberty Response to OCA 1-28(a).

⁴⁹ DeCoursey and Therrien, pg. 43, lines 4-7.

⁵⁰ Liberty Response to OCA 1-28(a).

⁵¹ Menard Direct Testimony, pg. 19, lines 6-7.

1 incentives to maintain and improve reliability and has not justified that incremental
2 improvements to reliability outweigh the costs to ratepayers.

3 **Q Please summarize the Company’s existing incentives to maintain and improve**
4 **reliability.**

5 **A** The Company has an existing financial incentive to improve reliability because it is
6 permitted to earn a return on capital investments that are required to maintain and
7 improve reliability. Furthermore, Liberty indicates that it has existing corporate targets
8 related to SAIDI and SAIFI and acknowledges that poor reliability performance would
9 create customer dissatisfaction.⁵²

10 The Company also fails to demonstrate that a PIM is needed to overcome a disincentive
11 to maintain and improve reliability. When asked if the Company would seek to improve
12 its SAIDI score in the absence of a PIM, Liberty stated it “seeks to improve its reliability
13 performance on an ongoing basis.”⁵³ This answer indicates that a performance incentive
14 is not required for the Company to improve reliability performance. To protect
15 ratepayers from unnecessary incentive payments, it is critical that a PIM does not reward
16 the utility for an outcome it already has an incentive to achieve.

17 **Q What are your proposed modifications to the Reliability PIM?**

18 **A** I recommend two penalty-only PIMs, one for SAIDI and one for SAIFI, based on
19 Liberty’s historical performance for the last three years. Penalties are appropriate for
20 unsatisfactory reliability performance because maintaining basic reliability standards is a

⁵² Liberty Response to OCA 1-32(c) and (d).

⁵³ Liberty Response to OCA 1-37(c).

1 critical aspect of customer service and the Company should be highly motivated to
2 maintain such standards. After those basic reliability standards are met, there is little to
3 no value to customers to exceed them, therefore the customers should not have to pay for
4 exceeding them.

5 **Liberty's Proposed TOU Rate Adoption PIM**

6 **Q Please summarize the Company's proposal for a TOU Rate Adoption PIM.**

7 **A** The purpose of the TOU Rate Adoption PIM is to encourage customer enrollment in
8 Liberty's proposed new, opt-in Residential TOU rate.⁵⁴ The Company would receive an
9 incentive equal to 10 basis points if TOU rate adoption reaches 0.5 percent of residential
10 customers in rate year three.⁵⁵

11 **Q Did Liberty calculate the net-benefits to customers from achieving this PIM?**

12 **A** No. While the Company states that the resulting reduction in peak demand from customer
13 enrollment will benefit all customers from reductions in capacity and transmission costs,
14 and potentially avoid the need for future capital distribution investments, Liberty does not
15 quantify the potential peak reduction or the cost savings.⁵⁶

16 **Q What are your concerns with Liberty's TOU Rate Adoption PIM as proposed?**

17 **A** While I support a PIM related to increasing customer enrollment in TOU rates and find
18 that a financial incentive is appropriate, the proposed enrollment target is too low.

⁵⁴ Menard Direct Testimony, pg. 20, lines 5-8.

⁵⁵ Liberty Response to OCA 1-45(a) and Hanser Direct Testimony, pg. 24, lines 10-12.

⁵⁶ Menard Direct Testimony, pgs. 20-21.

1 Across the United States, 3.4 percent of customers are enrolled in TOU rates where they
2 are offered.⁵⁷ This is significantly higher than Liberty’s proposed TOU enrollment target.
3 In addition, when funding and marketing of TOU rates is made a priority, enrollment
4 rates can be much higher. For example, under the Smart Grid Investment Grant Program
5 (SGIG), where the U.S. Department of Energy (DOE) partnered with several electric
6 utilities to gain an understanding of strategies around time-based rates, 15 percent of
7 customers enrolled in some form of time-varying rate.⁵⁸

8 **Q What are your proposed modifications to Liberty’s TOU Rate Adoption PIM?**

9 **A** I recommend that Liberty increase its TOU rate adoption target to 10 percent of
10 residential customers in rate year three. The Company should not earn an incentive for an
11 enrollment target that is below the national average. In addition, a PIM should be
12 structured so that it encourages the utility to take action above and beyond what it would
13 do under the normal course of business. Therefore, a target of 10 percent is justified
14 given that it is closer to the high end of achievable customer enrollment.

15 **Q Should Liberty be entitled to receive a higher financial incentive for meeting a more**
16 **aggressive TOU enrollment target?**

17 **A** Perhaps. In return for more aggressive enrollment targets, a higher basis point reward
18 may be warranted. However, it is not possible to determine what the appropriate reward
19 should be because Liberty does not provide an estimate of the anticipated peak demand

⁵⁷ Faruqui, A., Hledik, R., and Sergici, S. (2019), *A Survey of Residential Time-Of-Use (TOU) Rates*, The Brattle Group, Slide 5.

⁵⁸ U.S. Department of Energy (2016), *Customer Acceptance, Retention, and Response to Time-Based Rates from the Consumer Behavior Studies*, Smart Grid Investment Grant Program, pg. vi. Available at: https://www.energy.gov/sites/prod/files/2016/12/f34/CBS_Final_Program_Impact_Report_Draft_20161101_0.pdf.

1 reduction from TOU enrollment or the resulting monetized avoided costs from the
2 reduction in demand.

3 To establish the appropriate financial incentive, it is important that the reward is large
4 enough to capture the utility management's attention to provide sufficient motivation to
5 reach the target. However, that reward should not be disproportional to the costs and
6 benefits associated with meeting the target. To determine the appropriate size of the TOU
7 PIM, Liberty should estimate the total demand reduction associated with 10 percent of
8 customers enrolling in the TOU rate and the associated monetized benefits from that peak
9 reduction. The financial reward should be sized so that customers retain the majority of
10 the benefits.

11 **Liberty's Proposed Interconnect PIM**

12 **Q Please summarize the Company's proposal for an Interconnect PIM.**

13 **A** Liberty proposes an incentive-only PIM to reward the Company for reducing the time to
14 complete Supplemental Reviews for interconnection applications for DERs between 10
15 kilovolts-ampere (kVA) and 100 kVA in size.⁵⁹ Under the Company's proposal, it would
16 receive an incentive payment if the interconnection time is shorter than the time currently
17 required in Section 52 of the Electric Delivery Service Tariff, which requires that a
18 Supplemental Review be completed within 40 days.⁶⁰ Specifically, Liberty proposes to

⁵⁹ Menard Direct Testimony, pg. 24, lines 8-14.

⁶⁰ *Id.*, pg. 24, lines 1-15.

1 earn an incentive equal to 10 basis points for any year in which the average time to
2 process Supplemental Reviews is 25 days or less.⁶¹

3 **Q Has Liberty’s historical average time to process Supplemental Reviews been better**
4 **than its proposed Interconnect PIM target?**

5 **A** Yes. Over the past five years, Liberty’s average time to process Supplemental Reviews
6 has been less than its proposed PIM target of 25 days as shown in Table 6 below.

7 **Table 5. Historical Time to Process Supplemental Reviews (Business Days)**

Calendar Year	2018	2019	2020	2021	2022
Supplemental Review Time	18	20	17	20	24

8 *Source: Liberty Response OCA 1-40(c).*

9 This performance means that if the Company’s proposed Interconnect PIM had been
10 implemented between 2018 and 2022, the Company would have received the financial
11 reward, for each year.⁶²

12 **Q If Liberty is already meeting its proposed interconnection target, why is it proposing**
13 **the PIM?**

14 **A** It is not clear. When asked how it developed the targets for the Interconnect PIM, the
15 Company states that it “reviewed its past performance with respect to reviewing timelines
16 for interconnection applications along with applicable PUC requirements and determined
17 the proposed target.”⁶³

18 While one could assume that it may become more difficult for Liberty to maintain its
19 average time to process Supplemental Reviews should it experience a dramatic increase

⁶¹ *Id.*, pg. 25, lines 5-8.

⁶² Liberty Response to OCA 4-18(a).

⁶³ Liberty Response to OCA 4-18(b).

1 in DER interconnection applications, this does not appear to be the case. Data from
2 Docket DE 22-060 shows that forecasts for solar interconnection during the MYRP
3 period is below, rather than above, recent annual interconnection capacity.⁶⁴ Table 7
4 below summarizes Liberty’s historical and forecasted annual additional solar capacity
5 additions.

6 **Table 6. Forecast Installed Solar Capacity Through 2039**

Year	2022	2023	2024–2031	2032–2039
Additional Solar Capacity (MW)	1.97	1.68	1.59	1.49

7 *Source: Granite State Company, 2023 Electric Peak Forecast 2023-2039, January 2023, Docket*
8 *No. DE 22-060 Attachment 22-060 CENH 1-2.1; pgs. 17, 67.*

9 **Q What is your recommendation regarding Liberty’s proposed Interconnect PIM?**

10 **A** I recommend the Commission reject Liberty’s proposed Interconnect PIM because the
11 Company is already achieving the proposed target without a financial incentive and has
12 not justified that it will become more difficult to meet the target during the MYRP term.
13 Customers should not pay an incentive to Liberty for achieving a target it is already
14 meeting.

15 **Q What PIM should Liberty implement instead to support DERs?**

16 **A** I recommend that Liberty implement an NWA PIM to support the desired outcome of an
17 increased investment in DERs. The PIM would reward Liberty for each cost-effective
18 NWA implemented in its service territory based on the present value of the net benefits
19 from implementing NWAs procured through an open-sourced request for proposals

⁶⁴ Granite State Company, 2023 Electric Peak Forecast 2023-2039, January 2023, Docket No. DE 22-060
Attachment 22-060 CENH 1-2.1; pp. 17, 67.

1 (RFP) in which the solution type has not been pre-selected. The PIM will encourage
2 Liberty to proactively identify all NWA opportunities, seek the least-cost NWA solution,
3 and be rewarded for maximizing ratepayer savings.

4 **Q Does Liberty have a financial disincentive to invest in NWAs?**

5 **A** Yes. Under the current regulatory model, the Company is incentivized to prefer capital
6 investments over operational expenditures as a means to grow its rate base and thereby
7 profits. This is amplified by the MYRP, where the reduction in regulatory lag allows
8 Liberty to recover its costs more quickly. This means that Liberty has a financial
9 incentive to meet a distribution system need with the installation of new substations,
10 transformers, feeders, or utility-owned battery systems, on which it would earn a return,
11 rather than a third-party NWA solution that would be classified as an operational expense
12 with no return. If the Company's capital investments cost more than the NWA, then
13 customers are paying higher costs than necessary.

14 **Q What is your recommendation for an NWA PIM?**

15 **A** I recommend a shared-savings mechanism to support NWA solutions. The shared-
16 savings-based incentive would allow Liberty to retain a portion of the difference between
17 the present value of the traditional wires solution and the NWA. For example, Liberty
18 could be allowed to retain 30 percent of the savings, i.e., the net benefits, relative to the
19 traditional solution. This provides an incentive to the Company while allowing ratepayers
20 to retain the majority of the savings from the NWA. One important advantage of
21 providing the utility with a portion of the net benefits—the difference between costs and
22 benefits—is that it incentivizes the Company to both reduce costs and increase benefits.

1 **Q Should the Commission approve Liberty's MYRP, how would an NWA PIM**
2 **improve outcomes?**

3 **A** An NWA PIM would provide an incentive to the Company to seek cost-effective NWAs
4 that are not owned and operated by the Company. The PIM would help overcome the
5 existing financial disincentive for Liberty to use third-party or customer-facing DER
6 solutions to meet a utility system need. Cost-effective third-party PIMs have the potential
7 to reduce the need for new distribution expenditures thereby significantly reducing costs
8 to customers.

9 **Q Does this conclude your testimony?**

10 **A** Yes, it does.



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PROFESSIONAL EXPERIENCE

Synapse Energy Economics, Inc., Cambridge, MA. *Principal Associate*, September 2022 – Present, *Senior Associate*, November 2019 – September 2022.

Provides consulting and researching services on a wide range of issues related to the electric industry including performance-based regulation, benefit-cost assessment, rate and bill impacts, and assessment of distributed energy resource policies and programs. Develops expert witness testimony in public utility commission proceedings.

National Grid, Waltham, MA. *Growth Management Lead, New England*, May 2019 – November 2019, *Lead Analyst for Rhode Island Policy and Evaluation*, June 2013 – April 2019.

- Portfolio management of product verticals including energy efficiency, demand response, solar, storage, distributed gas resources, and electric transportation, to optimize growth and customer offerings.
- Strategy lead for the Performance Incentive Mechanisms (PIMs) working group.
- Worked with internal and external stakeholders and led the development of National Grid's Annual and Three-Year Energy Efficiency Plans and System Reliability Procurement Plans for the state of Rhode Island.
- Represented energy efficiency and demand response within the company at various Rhode Island grid modernization proceedings.
- Led the Rhode Island Energy Efficiency Collaborative; a group focused on reaching consensus regarding energy efficiency plans and policy issues for demand-side resources in Rhode Island.
- Managed evaluations of National Grid's residential energy efficiency programs in Rhode Island, and benefit-cost models to screen energy efficiency measures.

Citizens for Pennsylvania's Future, Philadelphia, PA. *Senior Energy Policy Analyst*, 2005–2013.

- Played a vital role in several legislative victories in Pennsylvania, including passage of energy conservation legislation that requires utilities to reduce overall and peak demand for electricity (2009); passage of the \$650 million Alternative Energy Investment Act (2008); and important amendments to the Alternative Energy Portfolio Standards law vital to the development of solar energy in Pennsylvania (2007).
- Performed market research and industry investigation on emerging energy resources including wind, solar, energy efficiency and demand response.
- Planned, facilitated and participated in wind energy advocates training meetings, annual partners retreat with members of wind and solar companies, and the PennFuture annual clean energy conference.

Northeast Energy Efficiency Partnerships, Inc., Lexington, MA. *Research and Policy Analyst*, 2004–2005.

- Drafted comments and testimony on various state regulatory and legislative actions pertaining to energy efficiency.
- Tracked energy efficiency initiatives set forth in various state climate change action plans, and federal and state energy regulatory developments and requirements.
- Participated in Regional Greenhouse Gas Initiative (RGGI) stakeholder meetings.
- Analyzed cost-effectiveness of various initiatives within the organization.

EnviroBusiness, Inc., Cambridge, MA. *Environmental Scientist*, July 2000 – May 2001

- Conducted pre-acquisition assessments/due diligence assignments for properties throughout New England. Environmental assessments included an analysis of historic properties, wetlands, endangered species habitat, floodplains, and other areas of environmental concern and the possible impacts of cellular installations on these sensitive areas.

EDUCATION

Tufts University, Medford, MA

Master of Arts; Environmental Policy and Planning, 2004.

Colgate University, Hamilton, NY

Bachelor of Arts; Environmental Geography, 2000, *cum laude*.

PUBLICATIONS

Fortman, N., J. Michals, T. Woolf, C. Lane. 2022. *Benefit-Cost Analysis: What it Can and Cannot Tell us About Distributional Equity of DERs*. E4TheFuture, Synapse Energy Economics. Presented at the 2022 ACEEE Summer Study of Energy Efficiency in Buildings.

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TESTIMONY

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Maryland Public Service Commission (Case No. 9692): Direct and Surrebuttal Testimony of Courtney Lane regarding the application of Baltimore Gas and Electric Company for an Electric and Gas Multi-Year Plan. On behalf of the Maryland Office of People's Counsel. June 20, 2023 and August 25, 2023.

California Public Utilities Commission (Application Nos. 22-05-015/22-05-01): Prepared Testimony of Eric Borden and Courtney Lane regarding Quantitative Risk Analysis Issues in Sempra's 2024 Test Year General Rate Case. On behalf of The Utility Reform Network. March 27, 2023.

New Mexico Public Regulation Commission (Case No. 22-00058-UT): Direct Testimony of Courtney Lane regarding the application of Public Service Company of New Mexico's for authorization to implement grid modernization. On behalf of the New Mexico Office of Attorney General. January 27, 2023.

Illinois Commerce Commission (Dockets 22-0432/22-0442 (Consol.): Direct and Rebuttal Testimony of Courtney Lane and Eric Borden regarding the petition of Commonwealth Edison Company for Approval of Beneficial Electrification Plan Under the Electric Vehicle Act. On behalf of the People of the State of Illinois. September 22, 2022 and November 16, 2022.

Illinois Commerce Commission (Docket No. 22-0431/22-0443): Direct and Rebuttal Testimony of Courtney Lane and Eric Borden regarding the petition of Ameren Illinois Company for Approval of Beneficial Electrification Pursuant to Section 45 of the Electric Vehicle Act. On behalf of the People of the State of Illinois. September 15, 2022 and November 7, 2022.

New Mexico Public Regulation Commission (Case No. 21-00178-UT): Direct Testimony of Courtney Lane regarding the application of Southwestern Public Service Company's for authorization to implement grid modernization. On behalf of the New Mexico Office of Attorney General. October 11, 2022.

Public Service Commission of Wisconsin (Docket 5-UR-110): Direct and Surrebuttal Testimony of Courtney Lane regarding the Joint Application of Wisconsin Electric Power Company and Wisconsin Gas, LLC for Authority to Adjust Electric, Natural Gas, and Steam Rates. On behalf of Clean Wisconsin. September 9, 2022 and October 3, 2022.

Maryland Public Service Commission (Case No. 9681): Direct Testimony of Courtney Lane regarding the application of Delmarva Power & Light Company for an Electric Multi-Year Plan. On behalf of the Maryland Office of People’s Counsel. August 19, 2022.

New Mexico Public Regulation Commission (Case No. 21-00269-UT): Testimony of Courtney Lane in Support of Unopposed Comprehensive Stipulation regarding the Application of El Paso Electric Company for Approval of a Grid Modernization Project to Implement an Advanced Metering System. On behalf of the New Mexico Office of Attorney General. May 11, 2022.

Public Utilities Commission of New Hampshire (Docket No. DG 21-104): Direct Testimony of Courtney Lane and Ben Havumaki regarding Northern Utilities, Inc.’s request for change in rates. On behalf of the Office of Consumer Advocate. April 1, 2022.

Public Utilities Commission of New Hampshire (Docket No. DE 20-092): Direct Testimony of Courtney Lane and Danielle Goldberg regarding the 2021-2023 Triennial Energy Efficiency Plan. On behalf of the Office of Consumer Advocate. April 19, 2022.

Maryland Public Service Commission (Case No. 9655): Direct and Surrebuttal Testimony of Courtney Lane regarding the application of Potomac Electric Company for a Multi-Year Plan and Performance Incentive Mechanisms. On behalf of the Maryland Office of People’s Counsel. March 3, 2021 and April 20, 2021.

Pennsylvania Public Utility Commission (Docket No. M-2020-3020830): Direct testimony of Alice Napoleon and Courtney Lane regarding PECO Energy Company’s proposed Act 129 Phase IV Energy Efficiency and Conservation Plan. On behalf of the Natural Resources Defense Council. January 14, 2021.

Maryland Public Service Commission (Case No. 9645): Direct and Surrebuttal Testimony of Courtney Lane regarding the Application of Baltimore Gas and Electric Company for an Electric and Gas Multi-Year Plan. On behalf of the Maryland Office of People’s Counsel. August 14, 2020 and October 7, 2020.

Maryland Public Service Commission (Case No. 9619): Comments of Maryland Office of People’s Counsel Regarding Energy Storage Pilot Program Applications, attached Synapse Energy Economics Report. June 23, 2020.

Public Service Commission of the District of Columbia (Formal Case No. 1156): Direct, Rebuttal, Surrebuttal, and Supplemental Testimony of Courtney Lane regarding the Application of Potomac Electric Power Company for Authority to Implement a Multiyear Rate Plan for Electric Distribution Service in the District of Columbia. On behalf of the District of Columbia Government. March 6, 2020, April 8, 2020, June 1, 2020, and July 27, 2020.

Rhode Island Public Utilities Commission (Docket No. 4888): Oral testimony of Courtney Lane regarding the Narragansett Electric Co. d/b/a National Grid - 2019 Energy Efficiency Program (EEP). On behalf of National Grid. December 11, 2018.

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Rhode Island Public Utilities Commission (Docket No. 4755): Oral testimony of Courtney Lane regarding the Narragansett Electric Co. d/b/a National Grid - 2018 Energy Efficiency Program (EEP). On behalf of National Grid. December 13, 2017.

Rhode Island Public Utilities Commission (Docket No. 4684): Oral testimony of Courtney Lane regarding the RI Energy Efficiency and Resource Management Council (EERMC) Proposed Energy Efficiency Savings Targets for National Grid's Energy Efficiency and System Reliability Procurement for the Period 2018-2020 Pursuant to §39-1-27.7. On behalf of National Grid. March 7, 2017.

Rhode Island Public Utilities Commission (Docket No. 4684): Oral testimony of Courtney Lane regarding National Grid's 2018-2020 Energy Efficiency and System Reliability Procurement Plan. On behalf of National Grid. October 25, 2017.

Rhode Island Public Utilities Commission (Docket No. 4654): Oral testimony of Courtney Lane regarding the Narragansett Electric Co. d/b/a National Grid - 2017 Energy Efficiency Program Plan (EPPP) for Electric & Gas. On behalf of National Grid. December 8, 2016.

Rhode Island Public Utilities Commission (Docket No. 4580): Oral testimony of Courtney Lane regarding the Narragansett Electric Co. d/b/a National Grid - 2016 Energy Efficiency Program Plan (EPPP) for Electric & Gas. On behalf of National Grid. December 2, 2015.

Pennsylvania Public Utility Commission (Docket No. P-2012-2320369): Direct testimony of Courtney Lane regarding the Petition of PPL Electric Utilities Corporation for an Evidentiary Hearing on the Energy Efficiency Benchmarks Established for the Period June 1, 2013 through May 31, 2016. On behalf of PennFuture. October 19, 2012.

Pennsylvania Public Utility Commission (Docket No. P-2012-2320334): Direct testimony of Courtney Lane regarding the Petition of PECO Energy for an Evidentiary Hearing on the Energy Efficiency Benchmarks Established for the Period June 1, 2013 through May 31, 2016. On behalf of PennFuture. September 20, 2012.

Pennsylvania Public Utility Commission (Docket No. I-2011-2237952): Oral testimony of Courtney Lane regarding the Commission's Investigation of Pennsylvania's Retail Electricity Markets. On behalf of PennFuture. March 21, 2012.

Committee on the Environment Council of the City of Philadelphia (Bill No. 110829): Oral testimony of Courtney Lane regarding building permitting fees for solar energy projects. On behalf of PennFuture. December 5, 2011.

Pennsylvania Public Utility Commission (Docket No. M-00061984): Oral testimony of Courtney Lane regarding the En Banc Hearing on Alternative Energy, Energy Conservation, and Demand Side Response. On behalf of PennFuture. November 19, 2008.

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Lane, C. 2011. "Pennsylvania's Model Wind Ordinance." Presentation at Harvesting Wind Energy on the Delmarva Peninsula, September 14, 2011.

Lane, C. 2011. "Electric Retail Competition and the AEPS." Presentation at the Villanova Law Forum, November 4, 2011.

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