

**State of Rhode Island
Public Utilities Commission**

The Narragansett Electric Company	)	
d/b/a Rhode Island Energy	)	
In re: Proposal to Change Rate Accounting	)	Docket No. 25-33-GE
and Issue Bill Credits Relating to a Commitment	)	
to Hold Customers Harmless from an	)	
Acquisition-Related Increase in Rates	)	

**Testimony and Exhibits of
CHIARA TRABUCCHI**

**On Behalf of the
Attorney General of the State of Rhode Island**

Topics:

**Present Value Analysis
Selection and Use of Discount Rates**

Date Filed: October 23, 2025

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1 **I. Witness Identification and Overview**

2 **Q. Ms. Trabucchi, please state your name and business address.**

3 A. My name is Chiara Trabucchi. I am a Principal with Industrial Economics, Incorporated
4 (“IEc”). The firm’s business address is 2067 Massachusetts Avenue, Cambridge, MA 02140.

5 **Q. Would you briefly describe your qualifications.**

6 A. My areas of expertise are corporate finance and economics. I am a recognized expert in
7 financial risk management and the design of financial frameworks and compensation schema
8 for the protection of the public trust. My work often involves the use of present value
9 analysis, including the selection and use of discount rates. I have more than 30 years of
10 consulting experience advising public- and private-sector clients, including litigators and in-
11 house counsel, on matters involving corporate finance and economics.

12 I received a Bachelor’s degree in Government (Comparative Politics) and a Bachelor’s
13 degree in Foreign Languages (French) from Clark University. I received a Master’s degree in
14 Business Administration with a focus in corporate finance from Simmons University. I have
15 delivered presentations on finance and risk management at various professional conferences;
16 I have authored articles in peer-reviewed journals on matters involving finance, risk, and the
17 selection and use of discount rates.

18 I am a member of the American Institute of Certified Public Accountants, and specifically
19 the Forensic and Valuation Services section. I am an Adjunct Professor at the Roger
20 Williams University School of Law. I have testified before the U.S. Senate Committee on
21 Energy and Natural Resources; and, I have offered testimony in various state and federal
22 jurisdictions.

1 My resume is attached as Attachment IEC-1. I am appearing in this proceeding on behalf of
2 the Attorney General of the State of Rhode Island (“RIAG”).

3 I have not previously testified before the Rhode Island Public Utilities Commission (the
4 “Commission”).

5 **Q. Please describe your assignment in this matter.**

6 A. As I understand, in February 2022, the Division of Public Utilities and Carriers (the
7 “DPUC”) approved the transfer of ownership of 100 percent of the outstanding shares of
8 common stock of The Narragansett Electric Company from National Grid USA to PPL
9 Rhode Island Holdings LLC (the “Transaction”).

10 The transfer was conditioned on the requirement that the resulting entity, The Narragansett
11 Electric Company d/b/a Rhode Island Energy (the “Company”), would hold harmless
12 Rhode Island’s customers from any changes to Accumulated Deferred Income Taxes
13 (“ADIT”) resulting from the Transaction (the “Hold Harmless Commitment”).¹

14 Specifically, per its Hold Harmless Commitment, the Company must ensure that Rhode
15 Island’s customers do not pay higher rates over time due to the elimination of ADIT after
16 the Transaction.²

17 In June 2025, Rhode Island Energy filed a Petition with the DPUC concerning a Hold
18 Harmless Implementation Agreement entered into by and among the Company, PPL
19 Corporation, PPL Rhode Island Holdings, LLC, and the Advocacy Section of the DPUC,

¹ADIT generally acts as a liability that reduces the Company’s rate base. All else equal, eliminating ADIT increases the rate base resulting in increased costs to the customer. *See* Docket No.: D-21-09. Petition of PPL Corporation, PPL Rhode Island Holdings, LLC, National Grid USA, and The Narragansett Electric Company for Authority to Transfer Ownership of The Narragansett Electric Company to PPL Rhode Island Holdings, LLC and Related Approvals, Decision and Order – Hold Harmless Petition. 10 September 2025.

² *Id.*

1 dated June 13, 2025 (“Settlement Agreement”), wherein the Company requested that the
2 DPUC find that the Company’s obligations under its Hold Harmless Commitment would be
3 considered satisfied, if the Company provided “miscellaneous bill credits” to “all of the
4 Company’s electric distribution and gas distribution customers” as outlined in the Settlement
5 Agreement.³

6 On September 10, 2025, following the Division’s decision on the above-referenced Petition,
7 the Commission signaled its intent to evaluate the Company’s credit proposal.⁴ In response
8 to the Commission, the Company made a Tariff Advice Filing on October 2, 2025.⁵

9 As I understand, the mechanism proposed by the Company as part of the Settlement
10 Agreement, and the Tariff Advice Filing, represents a departure from the way in which the
11 Company has carried out its obligations to date under the Hold Harmless Commitment.⁶

12 The RIAG has asked me to review the Company’s use of present value analysis, and
13 specifically whether the use of its Weighted Average Cost of Capital (“WACC”) is fair and
14 reasonable for purposes of discounting the stream of estimated future credits to present
15 value.

16 **Q. How is the balance of your testimony organized?**

17 A. My testimony is organized as follows. This section provides a summary of my qualifications,
18 a description of the assignment I was asked to undertake, and a statement of my
19 conclusions. Section II provides an explanation of present value analysis. Section III offers

³ *Id.*

⁴ See Commission Docket No. 25-33-GE – The Narragansett Electric Company d/b/a Rhode Island Energy Proposal to Change Rate Accounting and Issue Bill Credits Relating to a Commitment to Hold Customers Harmless from and Acquisition-Related Increase in Rates (“Docket 25-33-GE”), Notice Commencing Review of Bill Credit Proposal. 10 September 2025.

⁵ See Docket 25-33-GE, The Narragansett Electric Company d/b/a Rhode Island Energy Tariff Advice Filing – Hold Harmless Bill Credits for Electric and Gas Customers. 02 October 2025.

⁶ *Supra* note 4.

1 my opinion regarding the rate used by the Company in its present value calculations; and, the
2 alternative rates identified by the Commission.

3 **Q. What did you conclude?**

4 A. As I understand, the objective of the Hold Harmless Commitment is to ensure that the
5 Company's customers do not pay higher rates resulting from the elimination of ADIT after
6 the Transaction.

7 Assuming the customers prefer to receive a dollar now rather than at a future date, the use
8 of present value analysis is appropriate to translate the Hold Harmless Commitment into a
9 total amount that is available to them today.

10 Given that elimination of ADIT leads to an increase in *the Company's* rate base, and by
11 extension *the Company's* revenue requirements; and, absent intervention, it is these elements
12 that give rise to Rhode Island's customers paying higher rates, I believe it is appropriate to
13 use the Company's WACC to estimate the glide path of future credits necessary to offset the
14 impact of higher rates to customers.

15 However, I disagree with the use of the WACC as the rate by which these credits are
16 discounted to present value. The purpose of the discounting exercise should be to assess the
17 present value of the stream of credits from the perspective of the customers. Given that the
18 goal of the future credits is to hold the *customers* harmless, the rate at which the stream of
19 future credits is discounted should be consistent with the expected return on a financial asset
20 of comparable risk to the *customers*, not to the Company. To do otherwise understates what
21 is owed to customers to satisfy the Hold Harmless Commitment.

1 In my view, of the rates identified by the Commission in its Data Request,⁷ either the
2 customer deposit rate or the 10-year constant maturity U.S. Treasury rate is best suited to
3 achieve this goal. Either option represents a risk-adjusted rate that the customers can
4 reasonably and safely expect to earn today.

5 Relying on a *corporate* discount rate, such as the Company's WACC, yields a present value
6 biased in favor of the Company. Importantly, my examination reveals that use of the
7 WACC for purposes of discounting to present value erases a sizable share of the value of the
8 future stream of credits to which the customers are entitled; specifically, when benchmarked
9 against the customer deposit rate or the 10-year constant maturity U.S. Treasury rate, I find
10 that use of the WACC erases approximately \$37 million or \$39 million in value associated
11 with the Hold Harmless Commitment, respectively.

12 **II. Present Value Analysis**

13 **Q. What is Present Value Analysis?**

14 A. Present value analysis is based on the expectation that funds invested today can grow over
15 time to match the expected need and timing for funds in the future. This concept is referred
16 to as the Time Value of Money; that is, money available today is worth more than the same
17 amount in the future, because of its potential to earn a return on investment.

18 The process of calculating the present value of a future stream of cash flows is called
19 discounting.

20 A precept of financial theory is that nominal cash flows must be discounted at a nominal
21 rate; and real cash flows must be discounted at a real rate. The difference between nominal

⁷ See Docket 25-33-GE, Public Utilities Commission's First Set of Data Requests Directed to the Narragansett Electric Company d/b/a Rhode Island Energy (Company). PUC 1-9 at p. 2-3. 10 September 2025.

1 and real rates relates to the impact of inflationary pressure – a real rate is a nominal rate
2 adjusted for inflation.

3 Depending on the circumstance, it may be appropriate to use one measure to determine
4 future value, and a different measure to discount future value to present value. As long as
5 both rates are consistent in terms of their treatment of inflation, the use of different rates is
6 not baseless.

7 **Q. How should one select a discount rate for purposes of determining present value?**

8 A. The discount rate of a project (or stream of future cash flows) should reflect the expected
9 return on a financial asset of comparable risk.⁸

10 When considering the selection of a discount rate, financial practitioners generally begin with
11 the *risk-free* rate as a measure of baseline returns. The risk-free rate often is measured by
12 financial instruments with minimal default risk issued by the U.S. Treasury.

13 Next, the practitioner assesses whether a *risk premium* exists – increased risk of default or
14 non-payment associated with the financial asset under consideration. The greater the risk of
15 default or non-payment, the greater the risk premium attached to the risk-free rate. It is the
16 combination of these two elements that inform the discount rate.

17 The rational investor will accept a lower rate in return for less volatility (payment certainty);
18 and, they will demand a higher rate to compensate for increased volatility – risk of delayed
19 payment or default (non-payment).⁹

⁸ See Ross, Stephen A. (et al). (1999) Corporate Finance (Fifth Edition). Irwin/McGraw Hill. Part III. Risk at p. 293.

⁹ *Id.* Part III Risk at p. 219.

1 **Q. How does the discount rate affect present value?**

2 A. The size of the discount rate directly impacts the amount of the present value. The higher
3 the rate used to discount a stream of future values to present value, the lower the resulting
4 present value.

5 **III. Selection and Use of Discount Rates**

6 **Q. Do you agree with the Company's use of the WACC to estimate the stream of future**
7 **nominal credits?**

8 A. Yes.

9 **Q. Why?**

10 A. As I understand, the objective of the Hold Harmless Commitment is to ensure that the
11 Company's customers do not pay higher rates due to the elimination of ADIT after the
12 Transaction. As I further understand, the process by which the Company complies with its
13 Hold Harmless Commitment must ensure that "RI Energy customers receive at least the full
14 value they would have gained if they had continued to implement the Hold Harmless
15 Commitment in the same manner as has been satisfied to date."¹⁰

16 Given that elimination of ADIT leads to an increase in the Company's rate base, and by
17 extension the Company's revenue requirements; and, absent intervention, it is these elements
18 that give rise to Rhode Island's customers paying higher rates, I believe use of the

¹⁰ *Supra* note 1 at p. 6.

1 Company's WACC is appropriate to derive the glide path of future credits necessary to
2 offset the impact of higher rates to the customers.¹¹

3 Specifically, the basis for determining the future nominal value of customer credits should
4 reflect the company's reasonable expectation of the future incremental revenue requirements
5 necessary to respond to changes in the rate base arising from the elimination of ADIT post
6 Transaction. The Company's WACC provides a reasonable measure of the cost of capital
7 necessary to satisfy such changes in revenue requirements.¹²

8 **Q. Do you agree with the use of the WACC as a fair and reasonable discount rate to**
9 **determine the present value of the Hold Harmless Commitment?**

10 A. No.

11 **Q. Why not?**

12 A. The Company affirms that it uses the WACC as its preferred discount rate for purposes of
13 discounting the Hold Harmless Commitment (a public benefit) to present value, because
14 "the WACC represents the Company's overall cost of financing and the return necessary to
15 satisfy the expectations of its investors and lenders."¹³

16 By the Company's own admission, the WACC is a *private* discount rate that represents the
17 rate at which it evaluates its own internal investment decisions.

¹¹ Notably, in calculating *future value*, the Company is not applying the WACC in the traditional sense of compounding forward a stream of cash flows. Rather, it appears the Company is using its WACC to simply derive annualized estimates of the incremental revenue requirement necessary to offset the effect of eliminating ADIT after the Transaction.

¹² The average cost of capital to an entity is a weighting of its cost of capital and its cost of debt, referred to as the weighted average cost of capital (or WACC). *Supra* note 8, Part III at p. 305. *See also*, Docket 25-33-GE, Pre-Filed Direct Testimony of Natalie Hawk. p. 7. 2 October 2025.

¹³ *See* Docket 25-33-GE, Responses to PUC Data Requests – Set 1, 01 October 2025. PUC Request 1-8 at p. 14.

1 Use of the WACC to discount a public benefit to present value presupposes that the
2 Company and the customer act with the same economic motivation, share the same
3 investment goals, and enjoy comparable access to capital markets. This simply is not the
4 case. The Company and the customer are not equal market participants.

5 In my view, the process of discounting the future nominal stream of *customer* credits to
6 present value necessitates consideration of the discount rate at which the *customer* (as
7 beneficiary of the credit) is rendered ‘financially neutral’. To do otherwise is inequitable for
8 Rhode Island’s customers and, in my view, runs counter to the intent of the Hold Harmless
9 Commitment.

10 The Company’s customers are entitled to receive full value of the Hold Harmless
11 Commitment, whether that be as a present value distribution (of credits in calendar years
12 2026 and 2027),¹⁴ or as a series of annual customer credits over a glide path of approximately
13 37 years.¹⁵

14 When present value analysis is performed correctly with the appropriate discount rate, the
15 customer base is indifferent, or neutral, between the total amount of credits offered today
16 and what they otherwise might expect to receive under the Hold Harmless Commitment
17 *absent* the Settlement Agreement and related Tariff Advice Filing (i.e., the *but-for* scenario).

¹⁴ *Supra* note 5. As outlined in the Company’s Tariff Advice Filing, the Company’s credit proposal contemplates a present value distribution that is spread over a series of six credits, three of which will occur in calendar year 2026 and three of which will occur in calendar year 2027.

¹⁵ “The Company calculated the revenue requirement over the next 37 years because the last asset impacted by the elimination of ADIT will not be fully depreciated until 2062.” *See* Docket 25-33-GE, Pre-Filed Direct Testimony of Dwayne T. Bauder, Jr., pp. 4-5. 2 October 2025. *See also, supra* note 12, Pre-Filed Direct Testimony of Natalie Hawk at p. 6.

1 **Q. What impact does the use of a higher discount rate for purposes of determining**
2 **present value have on Rhode Island's customers?**

3 A. In the *but-for* scenario, Rhode Island's customers are effectively guaranteed a stream of
4 nominal future credits by virtue of the Hold Harmless Commitment. The default risk (and
5 by extension, risk premium) associated with the stream of nominal future credits is low,
6 which argues in favor of a risk-free discount rate.

7 By using its WACC to discount the stream of future expected credits to present value, the
8 Company is implicitly attaching a risk premium consistent with its own investment and
9 financing preferences. Relying on the WACC – a *private* discount rate – yields a present
10 value biased in favor of the Company. Importantly, use of this higher discount rate erases a
11 sizable share of the value of the future stream of credits to which customers are entitled
12 under the Hold Harmless Commitment.

13 If the Company is allowed to proceed with its use of the WACC for purposes of discounting
14 to present value, I believe Rhode Island's customers will receive less than equivalent (or full)
15 value today when benchmarked against what they otherwise would receive if the Company
16 continues to implement the Hold Harmless Commitment in the manner in which the
17 commitment has been satisfied to date.

18 **Q. If not the WACC, which discount rate do you believe is preferable for purposes of**
19 **determining present value of the Hold Harmless Commitment?**

20 A. Given that the goal of the future credits is to hold the *customers* harmless, the rate at which
21 the stream of future credits is discounted should be consistent with the expected return on a
22 financial asset of comparable risk to the *customers*, not to the Company.

1 The near-certainty with which the customers can expect to receive the future stream of
2 credits argues in favor of a discount rate that is commensurate with a risk-adjusted rate that
3 the customers can reasonably and safely expect to earn today.

4 I believe the customer deposit rate or the 10-year constant maturity U.S. Treasury rate is
5 better aligned with the objectives of the Hold Harmless Commitment and society's rate of
6 time preference.

7 **Q. Have you examined the discount rates suggested in the Commission's Data**
8 **Requests?**

9 A. Yes.

10 **Q. What does your examination reveal?**

11 A. As I understand, the Commission requested that the Company provide a set of alternative
12 calculations for the present value of its Hold Harmless Commitment.¹⁶ In response, the
13 Company provided a spreadsheet that includes present value calculations for three
14 alternative rates – the customer deposit rate (4.21%), the 10-year constant maturity rate of
15 the U.S. Treasury (4.04%), and the Bank of America prime rate (7.25%).¹⁷ These
16 calculations are presented in addition to the present value calculations that rely on the
17 Company's WACC – the Company uses discount rates between 8% and 9% to reflect the
18 WACC by applicable business segment.¹⁸

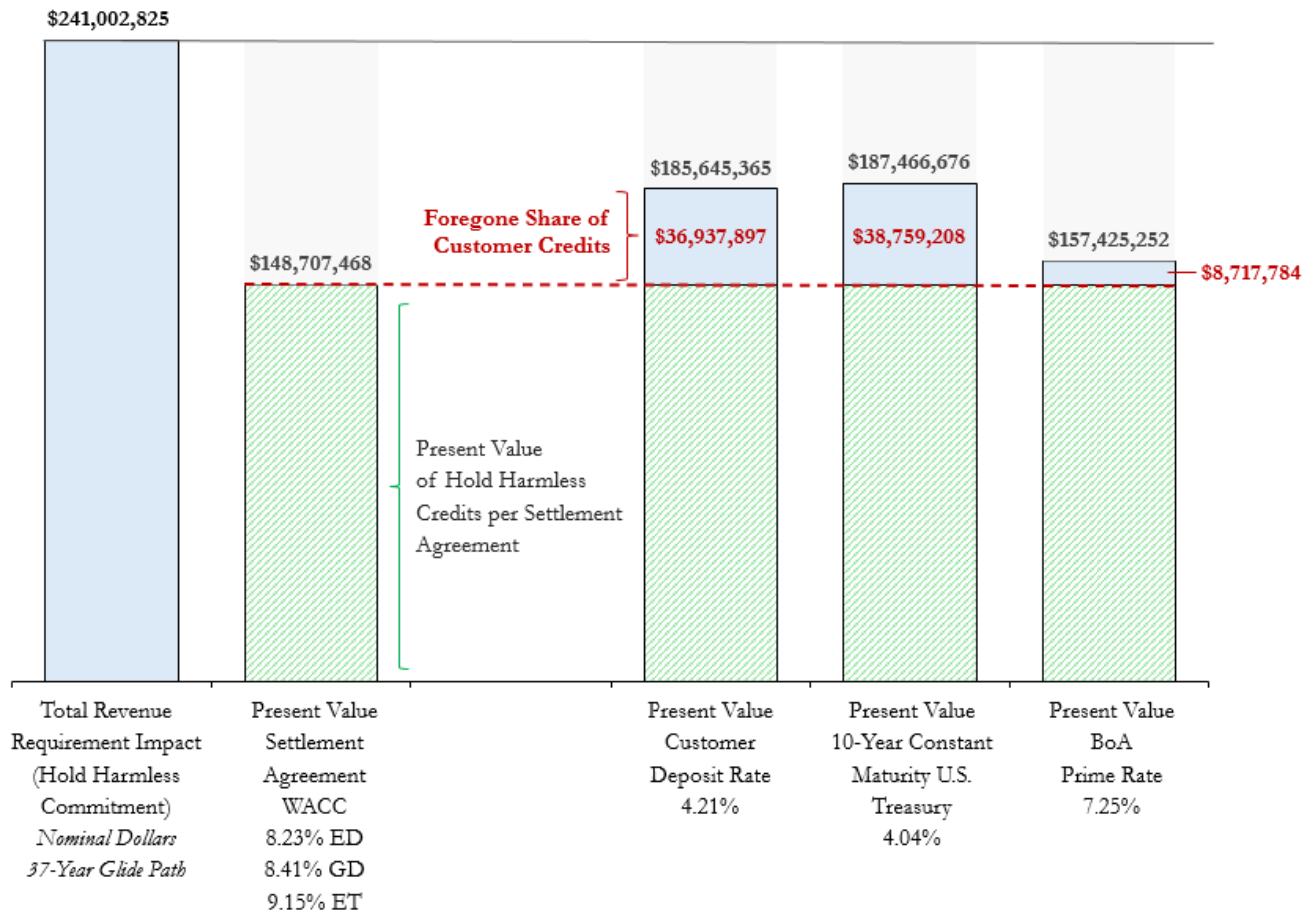
¹⁶ *Supra* note 7 at p. 2. *See also, supra* note 13, PUC Request 1-9 at p. 16.

¹⁷ *See* Docket 25-33-GE, Attachment PUC 1-9-1, "25-33-GE - Attachment PUC 1-9-1 (10-1-2025).xlsx." 01 October 2025.

¹⁸ *See* Docket 25-33-GE, Attachment PUC 1-2, "25-33-GE - Attachment PUC 1-2 (10-1-2025).xlsx." 01 October 2025.

Figure IEc-1 summarizes the present value figures resulting from the alternative rate scenarios, all of which are benchmarked against the *nominal* value of future credits (or *but-for* scenario) and the Company's WACC (the basis for the Tariff Advice Filing).

Figure IEc-1. Present Value of Hold Harmless Commitment



Per the Settlement Agreement, the Company estimates its total revenue requirement impact (the Hold Harmless Commitment value) at \$241 million in nominal dollars.¹⁹ The Company represents that discounting this estimate to present value using its WACCs yields a present value of \$148.7 million.²⁰ The present value when using the customer deposit rate of 4.21%

¹⁹ *Id.* See also, *supra* note 12, Pre-Filed Direct Testimony of Natalie Hawk pp. 5-6. Note, there is a very slight (de minimis) discrepancy between the total nominal values represented in Attachment PUC 1-2 and in Attachment PUC 1-9-1. This difference does not materially impact my findings.

²⁰ *Supra* note 18. Note, the Company's October 2, 2025 Tariff Advice Filing represents a total present value estimate of \$154,974,636. The Company appears to arrive at this estimate by using its WACC to 'compound' a share of the present

and the 10-year constant maturity U.S. Treasury rate of 4.04%, is approximately \$37 million²¹ and \$39 million²² higher, respectively.²³ Even when discounting at the Bank of America prime rate,²⁴ there is approximately \$9 million²⁵ in increased customer value.

Q. Do you have concerns with the use of differential rates for purposes of deriving the stream of future nominal customer credits and reducing this stream to present value terms?

A. No.

Q. Why not?

A. The Company represents that it uses the WACC for purposes of discounting the Hold Harmless Commitment to present value to “maintain consistency and avoid inequity.”²⁶ When a private economic actor is undertaking a capital budgeting exercise to determine whether the expected return of a specific project is greater than that of a financial asset of

value of the Hold Harmless Commitment (\$148,707,468) forward from calendar year 2026 to calendar year 2027. It does so, presumably, because the Tariff Advice Filing contemplates payment of the credits in six tranches spread over two years (2026 and 2027). I believe use of the WACC in this manner is inappropriate. If the purpose of the compounding exercise is to adjust for inflationary pressure or changes in purchasing power arising between calendar years 2026 and 2027, then I believe the Company should apply a rate consistent with the prevailing rate of inflation. If the intent is to return “interest” to the customers for the slip between calendar years 2026 and 2027, then I believe the Company should apply a rate consistent with the customer deposit rate. Notwithstanding, for purposes of my examination, I rely on the underlying present value represented in Attachment PUC 1-9-1.

²¹ \$36,937,897 = \$185,645,365 (Present Value at Customer Deposit Rate) - \$148,707,468 (Present Value at the Company’s WACC).

²² \$38,759,208 = \$187,466,676 (Present Value at 10-Yr Constant Maturity U.S. Treasury Rate) - \$148,707,468 (Present Value at the Company’s WACC).

²³ *Supra* note 17. There appear to be several cell-labeling discrepancies in the worksheets comprising Attachment PUC 1-9-1. However, these labeling discrepancies do not appear to impact the actual present value calculations included therein. As noted previously, there also are very slight (de minimis) differences between the values represented in Attachment PUC 1-2 and in Attachment PUC 1-9-1. These differences do not materially impact my findings.

²⁴ The prime rate is the Federal Reserve’s base rate for consumer loans. This is the rate at which lending institutions base consumer borrowing rates. In my view, the prime rate is not a reasonable proxy for a rate of time preference for a public benefit; and, as such, I do not believe it is an appropriate discount rate to derive the present value of the Hold Harmless Commitment.

²⁵ \$8,717,784 = \$157,425,252 (Present Value at BoA Prime Rate) - \$148,707,468 (Present Value at the Company’s WACC).

²⁶ *Supra* note 13, Response to PUC Request 1-8 at p. 14.

1 comparable risk, then the use of the same (or consistent) hurdle rate – the minimum rate
2 necessary for an investor to accept a project – is appropriate to estimate the project's future
3 value and present value.

4 The current circumstances, however, are not akin to a private capital budgeting exercise.
5 Rather, the Company has agreed to a Hold Harmless Commitment for the benefit of the
6 public, and specifically, its ratepayers. The basis for determining the future nominal value of
7 this benefit should reflect the company's reasonable expectation of the future incremental
8 revenue requirements necessary to respond to changes in the rate base arising from the
9 elimination of ADIT post Transaction. The Company's WACC provides a reasonable and
10 appropriate measure of the cost of capital necessary to satisfy such changes in revenue
11 requirements.

12 As previously noted, however, if the goal of the future credits is to hold the *customers*
13 harmless, then the rate at which the stream of future credits is discounted should be
14 consistent with the expected return on a financial asset of comparable risk *to the customers*, not
15 to the Company.

16 Two economic actors participating in the same market will not necessarily enjoy the same
17 access to capital markets. For example, the customer cannot reliably and consistently enjoy
18 *risk-free* returns comparable to the Company's WACC. As a result, Rhode Island's customers
19 cannot be assured that a future value discounted to present value using the Company's
20 WACC will return a value commensurate with the full value of the Hold Harmless
21 Commitment.

22 For the avoidance of doubt, the WACC is appropriate to determine the stream of credits, in
23 timing and amounts owed to customers. However, a *risk-free* discount rate is appropriate to

1 translate these future credits into a present value that assures customers are held harmless.

2 The risk-free rate appropriately reflects society's rate of time preference given the financial
3 assurances made to Rhode Island's customers per the Hold Harmless Commitment.

4 **Q. Wouldn't Rhode Island's customers receive more money over time by staying with**
5 **the 37-year glide path?**

6 A. Perhaps. But, in the interest of defraying rising energy costs in the near term, there may be a
7 societal preference to receive lump-sum payments now rather than later. In so doing, the
8 customers are afforded immediate relief.

9 With this preference in mind, the question remains: What amount of credits today
10 adequately compensates the customers for the foregone benefit of receiving a near-certain
11 stream of future credits? Selecting the appropriate rate for purposes of discounting to
12 present value is essential to ensure that the customers are held harmless.

13 Relying on a *private* discount rate, specifically, the WACC, which is the rate at which the
14 Company evaluates its own internal investment decisions, yields a present value biased in
15 favor of the Company. Importantly, as shown in Figure IEc-1, use of the WACC for
16 purposes of discounting to present value erases a sizable share of the value of the future
17 stream of credits to which the customers are entitled under the Hold Harmless
18 Commitment.

19 Therefore, as it pertains to this matter, I do not believe that use of the Company's WACC
20 for purposes of discounting to present value is fair or reasonable. I believe a discount rate
21 that mirrors the customer deposit rate or the 10-year constant maturity U.S. Treasury rate –
22 risk-adjusted rates that the customer can reasonably and safely expect to earn today – is fair

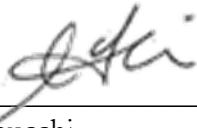
1 and reasonable. In my view, these rates also are better aligned with society's rate of time
2 preference and the objectives underpinning the Hold Harmless Commitment.

3 **Q. Does this conclude your testimony?**

4 A. Yes.

CERTIFICATION

I hereby certify under oath that the foregoing testimony is true and correct to the best of my knowledge, and that this declaration has been executed on this 23rd day of October 2025 in Cambridge, MA.

By:  _____
Chiara Trabucchi
Principal
Industrial Economics, Incorporated

ATTACHMENT IEc-1

Resume for Chiara Trabucchi

Ms. Trabucchi's areas of expertise are corporate finance and economics. She is a nationally recognized expert in financial risk management and the design of financial frameworks and compensation schemas tailored for the protection of the public trust.

An expert in evaluating the financial integrity of business, non-profit, and governmental organizations, Ms. Trabucchi has 30 years of consulting experience assessing financial damages arising from mass torts and class action matters, lost profits, property diminution, economic benefit of noncompliance, fraudulent conveyance, and natural resource injuries. As a consultant to public- and private-sector clients, including litigators and in-house counsel, she regularly applies her expertise in the context of rigorous verification and auditing standards. Ms. Trabucchi has been qualified as an expert in financial management design and implementation of trusts to fund organizations in perpetuity by the Superior Court of the District of Columbia

Congressional Testimony & Hearings

U.S. SENATE PERMANENT SUBCOMMITTEE ON INVESTIGATIONS, COMMITTEE ON HOMELAND SECURITY & GOVERNMENTAL AFFAIRS. Wall Street Bank Involvement with Physical Commodities. November 2014.

U.S. SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES. SENATE BILL 699, Department of Energy Carbon Capture and Sequestration Program Amendments Act of 2011. May 2011.

U.S. SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES. SENATE BILL 1013, Department of Energy Carbon Capture and Sequestration Program Amendments Act of 2009. May 2009.

Hearings before the **U.S. FEDERAL INTERAGENCY TASK FORCE ON CARBON CAPTURE AND STORAGE** established by President Obama on issues related to financial investment, indemnification, and financial responsibility. May 2010.

Invited expert on financial risk management related to the deployment of climate mitigation technologies before the **US SENATE ENERGY & NATURAL RESOURCES COMMITTEE** and the **US SENATE COMMERCE, SCIENCE, AND TRANSPORTATION COMMITTEE.** June 2010.

Expert Witness Support (Depositions and Testimony)

New Jersey Department of Environmental Protection, et al., v. E.I. du Pont de Nemours and Company, et al. Civil Action No. 1:19-cv-14766. 2025.

Water Works and Sewer Board of the Town of Centre v. 3M Company, et al. Case No. Civil Action No. 31-CV-2017-900049.00. 2023.

Water Works and Sewer Board of the City of Gadsden v. 3M Company, et al. Civ. No. 31-CV-2016-900676.00. 2022.

David Back, et al. v. Bayer Cropscience LP (Hold Service), et al. No. 18SL-CC03530, Division No.: 18. 2020.

In Re: Entergy Nuclear Operations, Inc., et al., Indian Point Nuclear Generating Station, Docket Nos.: 50-3, 50-247, 50-286, 72-051. 2019.

United States / New Mexico Environment Department v. Chevron Mining, Inc., D.N.M., Civ. No. 1:16-cv-00904-WPL. 2017.

Environmental & Recycling Services, Inc. v. Commonwealth of Pennsylvania, Department of Environmental Protection No. 350 M.D. 2005. Settlement lodged 2016.

Arbona et al. v. Trustees of the Corcoran Gallery of Art CA 0003745B. 2014.

Selected Consulting Engagements

- Providing expert advisory services to the Endo Public Opioid Trust, resulting from In re: Endo International plc and its Affiliated Debtors' under Chapter 11 of the Bankruptcy Code. Trust assets in excess of \$250 million, involving 45 states and all trust territories.
- Providing expert advisory services to the National Opioid Abatement Trust II, resulting from In re: Mallinckrodt plc and its Debtor Affiliates under Chapter 11 of the Bankruptcy Code. Trust assets in excess of \$330 million, involving 50 states and all trust territories.
- Provided expert advisory services to the Ad Hoc Committee of Governmental and Other Contingent Litigation Claimants established in connection with the matter captioned In re: Purdue Pharma L.P., et al., Debtors, Jointly Administered Case No. 19-23649 (RDD).
- Provided expert financial analysis to the New York State Attorney General. Assessing the allocation structure and trust framework arising from settlement with national distributors and Janssen in connection with opioid product liability claims. Expert support involves trust assets in excess of \$1.5 billion.
- Providing expert financial analysis to a team of federal attorneys in a litigation matter associated with unjust enrichment and illegal competitive advantage involving the sale of after-market emissions defeat devices. Analyses involve assessment of illegal competitive advantage, economic benefit of noncompliance, unjust enrichment, and restitution by disgorgement of excess profits, and ability-to-pay.
- Provided expert advisory services in a private litigation involving the design and implementation of a claims-based compensation fund for commercial fisheries impacted by the construction, operation, and decommissioning of offshore wind farms.
- Provided expert support to the U.S. Attorneys Office involving the audit of internal controls and administrative subaccounts underpinning a bankruptcy trust arising from a multi-district litigation involving a chemical manufacturer. Trust assets in excess of \$1 billion, involving 31 states.
- Provided expert financial analysis to the New York State Attorney General. Assessing the allocation structure and attendant impact of market volatility on the performance of a perpetual trust in the nuclear decommissioning space with assets in excess of \$2 billion.
- Provided expert support to a financial institution serving as Custodial Administrator to a revocable mitigation trust with assets in excess of \$50 million. Support involves audit of allocation algorithms underpinning trust payments involving 568 federally-recognized Indian Tribes.
- Provided expert support to the New York State Attorney General, and by extension the National Association of Attorneys General. Designed the administrative framework for two revocable trusts (568 federally-recognized Indian Tribes, 50 states plus trust territories) with total assets in excess of \$2.5 billion arising from *United States of America v. Volkswagen AG, et al.* Engagement involved the design and administration of an independent procurement process for the selection of the Custodial Administrator and Directed Trustee.
- For public- and private-sector clients directed the review of approximately 1,500 financial instruments associated with statutory and legislative financial assurance proposals. Reviews spanned 40 states, myriad federal agencies, and approximately 1,000 corporate entities for an estimated total face value of \$6.2 billion in financial exposure across numerous sectors, including chemical manufacturing, waste management, energy and utility, air travel, auto manufacturing, oil and gas, pulp and paper, pharmaceutical, mining, lumber and wood products, agricultural, and metals mining.
- Provided expert analysis in a private, civil litigation involving the design of a perpetual endowment trust to support the operation of the Corcoran Gallery of Art.

- Provided expert support to the US Department of Justice on the design of a long-term financial management framework involving a phosphate fertilizer company in Chapter 11. Financial exposure in excess of \$100 million.
- Directed an assessment of the economic impacts associated with the Securities and Exchange Commission's proposed proxy access rule for the CFA Institute. Analyzed the degree to which proxy access reform would be beneficial to market performance, stock performance, and board performance.
- Provided expert support, including the design of a long-term compensation trust, in support of settlement negotiations involving the phosphate and nitrogen fertilizer industries for the US Department of Justice. Financial exposure span claims in Florida and Louisiana in excess of \$2 billion. Engaged in the design and administration of an independent procurement process for the selection of a Custodial Administrator. Providing beneficiaries with ongoing accounting and internal controls review of assets held in trust.
- Provided expert support in a private litigation associated with lost profit damages arising from tort claims in the Gulf Coast region arising from *United States v. BP Exploration & Prod., Inc. (In re Oil Spill by the Oil Rig "Deepwater Horizon")*. Designed a claims-based compensation model to address financial injuries suffered by claimants in the commercial fishing sector and support activities for the oil and gas operations sector.
- Directed a compliance and improper payments audit related to funds appropriated under the American Recovery and Reinvestment Act. Efforts involved designing and implementing a compliance audit framework to validate and verify management integrity and fiscal accountability associated with \$7.18 billion in activities funded under ARRA. Structured audit verification protocols to align with audit objectives focused on identifying areas of fraud, waste and abuse with respect to appropriated funds across federally funded programs.

Professional Societies/Affiliations

- Adjunct Professor of Law, **ROGER WILLIAMS UNIVERSITY, SCHOOL OF LAW**
- Member, **AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS**, Forensic and Valuation Services
- Director, **MASSACHUSETTS COLLEGE OF ART AND DESIGN**, Foundation Board, Retired
- Member, **U.S. EPA'S ENVIRONMENTAL FINANCIAL ADVISORY BOARD (EFAB)**, Retired

Selected Publications (2010 to 2024)

Trabucchi, Chiara, Ian Havercroft. "Long-Term Stewardship and Liability: A Balanced Approach to Legal Certainty and Site Transfer for Geologic CO₂ Storage," Global CCS Institute, September 2024.

Eames, F., C. Trabucchi and D. McGarvey. "Online Feature: CCUS: Dispelling Myths about Risk," Hydrocarbon Processing, December 2022.

Trabucchi, Chiara, Michael Donlan, Vadim Spirt, Scott Friedman and Richard Esposito. "Application of a Risk-Based Probabilistic Model (CCSvt Model) to Value Potential Risks from Carbon Capture and Storage," Energy Procedia, Volume 63, 12th International Conference on Greenhouse Gas Control Technologies, GHGT-12 (2014) Pages 7608-7618, doi:10.1016/j.egypro.2014.11.795.

Trabucchi, Chiara, Ellen Fitzgerald, Matthew Orsagh, Robert W. Dannhauser, James Allen. "Proxy Access in the United States: Revisiting the Proposed SEC Rule." CFA Institute. Vol. 2014. No. 9. August 2014.

Trabucchi, Chiara, Michael Donlan, Michael Huguenin, Matthew Konopka and Sarah Bolthrunis. "Valuation of Potential Risks Arising from a Model, Commercial-Scale CCS Project Site." Global CCS Institute. June 2012.

Donlan, Michael and Chiara Trabucchi, Valuation of Consequences Arising from CO2 Migration at Candidate CCS Sites in the U.S., Energy Procedia, Volume 4, Proceedings of the 10th International Conference on Greenhouse Gas Control Technologies (GHGT-10) (2011) Pages 2222-2229.

Dooley JJ, C Trabucchi, and L Patton. 2010. "Design Considerations for Financing a National Trust to Advance the Deployment of Geologic CO2 Storage and Motivate Best Practices." International Journal of Greenhouse Gas Control 4(2):381-387. doi:10.1016/j.ijggc.2009.09.009.

Trabucchi C, M Donlan, and S Wade. 2010. "A Multi-Disciplinary Framework to Monetize Financial Consequences Arising from CCS Projects and Motivate Effective Financial Responsibility." International Journal of Greenhouse Gas Control 4(2):388-395. doi:10.1016/j.ijggc.2009.10.001.

Professional Experience

Industrial Economics, Incorporated, 1995-Present

Fiori, LLC, 2022-Present

The Cadmus Group, 1991-1995

Education

Masters Business Administration with Honors, Simmons University, 1999

Bachelor of Arts, Cum Laude, Clark University, 1991