

**COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF PUBLIC UTILITIES**

**NSTAR ELECTRIC COMPANY d/b/a EVERSOURCE ENERGY;
MASSACHUSETTS ELECTRIC COMPANY AND NANTUCKET ELECTRIC
COMPANY, EACH d/b/a NATIONAL GRID; and
FITCHBURG GAS AND ELECTRIC LIGHT COMPANY d/b/a UNITIL**

D.P.U. 24-195 through D.P.U. 24-197

DIRECT TESTIMONY OF

Caroline Palmer and Thanh Nguyen

On behalf of

THE OFFICE OF THE ATTORNEY GENERAL

April 4, 2025

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	ALL EDCs: THIRD-PARTY FUNDING IMPLEMENTATION.....	4
III.	NATIONAL GRID AND EVERSOURCE: REDUCED DCFC EVSE INCENTIVES	6
IV.	NATIONAL GRID: SPECIFIC PROPOSALS	12
A.	Off-Peak Charging Rebate Program	12
B.	Budget Shifting and Incremental P&W Segment Budget Proposals	20
V.	EVERSOURCE: SPECIFIC PROPOSALS	23
A.	Bidirectional Charger Incentive Pilot	23
B.	Residential Managed Charging Program	26
C.	MDHD Fleet Pilot.....	30
VI.	UNITIL: SPECIFIC PROPOSALS	33
A.	EV TOU Rate Requirement	33
B.	Residential Managed Charging Program	33
C.	Public Charging Program Customer Choice Pathway	35
VII.	CONCLUSION.....	36

Exhibits

Exh. AG-CPTN-2

Exh. AG-CPTN-3

1 **I. INTRODUCTION**

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

3 A. **Palmer:** My name is Caroline Palmer. I am a Principal Associate at Synapse Energy
4 Economics, Inc. (“Synapse”), located at 485 Massachusetts Avenue, Suite 3, Cambridge,
5 MA 02139.

6 **Nguyen:** My name is Thanh Nguyen. I am a Senior Associate at Synapse, located at 485
7 Massachusetts Avenue, Suite 3, Cambridge, MA 02139.

8 **Q. Please describe Synapse Energy Economics, Inc.**

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

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

2 A. **Palmer:** I am a Principal Associate at Synapse, where I provide expert witness and
3 consulting services on behalf of public interest clients in regulatory proceedings.
4 Typically, I address matters concerning marginal and embedded cost-of-service studies,
5 revenue allocation, advanced rate design, low-income rate design, load management,
6 decoupling, distributed energy resource (“DER”) interconnection and compensation,
7 electric vehicle (“EV”) infrastructure investments, and pilot frameworks. Prior to joining
8 Synapse I worked at Strategen Consulting for five years performing similar work. I have
9 submitted expert testimony in fourteen dockets across nine jurisdictions.

10 I was awarded a Fulbright Research Fellowship to Greece in 2019 and supported clean
11 energy policy consulting at Meister Consultants Group (now Cadmus) before that. I hold a
12 Master of Public Policy from the Goldman School at UC Berkeley and a Bachelor of
13 Science from Georgetown University. I have 10 years of professional experience. My
14 resume is attached as Exh. AG-CPTN-2.

15 **Nguyen:** I am a Senior Associate at Synapse, where I provide research, analysis, and
16 consulting on a variety of energy and utility regulatory issues, including beneficial
17 electrification, DER, rate design and cost allocation, and energy equity and
18 affordability. Prior to joining Synapse, I was a Senior Analyst at Strategen Consulting,
19 where I also performed similar consulting work for government and nonprofit clients in
20 utility regulatory proceedings. I graduated summa cum laude from Franklin & Marshall

1 College in 2020 with a Bachelor of Arts in Environmental Studies and Economics. My
2 resume is attached as Exh. AG-CPTN-3.

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

4 A. We are testifying on behalf of the Massachusetts Office of the Attorney General (“AGO”).

5 **Q. Have you previously testified before the Massachusetts Department of Public**
6 **Utilities?**

7 A. **Palmer:** Yes. I testified in D.P.U. 21-90 through D.P.U. 21-92 (electric distribution
8 companies’ EV program dockets) as well as D.P.U. 23-150 (National Grid’s electric rate
9 case).

10 I have also assisted the AGO in D.P.U. 19-55 (Inquiry into Distributed Generation
11 Interconnection); D.P.U. 20-75 (Investigation into DER Planning and Assignment and
12 Recovery of Costs for the Interconnection of Distributed Generation), and 23-84/-85
13 (Eversource and National Grid petitions for approval to offer Optional EV Time-of-Use
14 Rates).

15 **Nguyen:** No. However, I assisted the AGO in D.P.U. 20-145 (Solar Massachusetts
16 Renewable Tariffs or “SMART”), D.P.U. 21-90 through D.P.U. 21-92 and D.P.U. 23-150.

17 **Q. Have you testified before other state or provincial regulatory bodies?**

18 A. **Palmer:** Yes. I have sponsored testimony before the Connecticut Public Utilities
19 Regulatory Authority, New Hampshire Public Utilities Commission, Missouri Public
20 Service Commission, New York Public Service Commission, Maine Public Utilities

1 Commission, Oklahoma Corporation Commission, North Carolina Utilities Commission,
2 and Nova Scotia Utility and Review Board. I have also assisted with testimonies and
3 regulatory analyses in numerous other jurisdictions.

4 **Nguyen:** No. However, I have supported the development of testimony before several
5 other commissions, including the Colorado Public Utilities Commission, New Mexico
6 Public Regulation Commission, North Carolina Public Utilities Commission, Regulatory
7 Commission of Alaska, Connecticut Public Utilities Regulatory Authority, Illinois
8 Commerce Commission, and Maine Public Utilities Commission.

9 **Q. What is the purpose of your testimony?**

10 A. We address the EV Infrastructure Program mid-term modification filings from the electric
11 distribution companies (“EDCs”): NSTAR Electric Company, doing business as
12 Eversource Energy (“Eversource”); Massachusetts Electric Company and Nantucket
13 Electric Company, doing business as National Grid (“National Grid”); and Fitchburg Gas
14 & Electric Light Company, doing business as Unitil (“Unitil”).

15 **II. ALL EDCs: THIRD-PARTY FUNDING IMPLEMENTATION**

16 **Q. Please summarize the EDCs’ proposal related to third-party funding implementation.**

17 A. The EDCs propose to modify the third-party funding rules such that: (1) any third-party
18 funds that customers receive for Electric Vehicle Supply Equipment (“EVSE”) will not be
19 deducted from utility incentives for make-ready infrastructure or networking; (2) third-
20 party funds for make-ready infrastructure will not be deducted from utility incentives for

1 EVSE or networking; and (3) third-party funds for networking will not be deducted from
2 utility incentives for EVSE or make-ready infrastructure.¹ Customers will still be required
3 to seek funding from state and federal funding sources, and the total funding amount
4 (including utility and third-party funds) cannot exceed 100 percent of the total actual and
5 eligible customer costs for: (i) make-ready infrastructure, (ii) EVSE, and (iii) networking.²

6 **Q. How many projects have been cancelled due to the third-party funding requirement?**

7 A. According to the EDCs, the current third-party funding rule has resulted in the cancellation
8 of numerous Level 2 (“L2”)³ charging projects:

- 9 • National Grid reports that 73 L2 projects (including 53 workplace, 18 public, and two
10 Multi-Unit Development [“MUD”]) were cancelled due to the requirement;⁴
- 11 • Eversource reports that four L2 projects (including three public and one MUD) were
12 cancelled due to the requirement;⁵ and

¹ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 18; *Eversource*, D.P.U. 24-196, Exh. ES-EV-MTM-1, at 16; *Unitil*, D.P.U. 24-197, Exh. FGE-CCTP-1 at 10.

² *Id.*

³ As the Department describes:

EVSE equipment is generally divided into three types: Level I, Level II, and direct current fast chargers. Level 2 chargers rely on a 240-volt connection and are capable of fully charging most existing EVs in approximately eight hours or less depending on battery capacity. DCFC chargers use direct current and are the fastest method for charging an EV. Level 1 chargers plug directly into a standard 120-volt AC outlet and are the slowest method for charging an EV.

Electric Vehicle Program Dockets, D.P.U. 21-90 through D.P.U. 21-92, at 11 (citations omitted).

⁴ *National Grid*, D.P.U. 24-196, Exh. AG-1-3.

⁵ *Eversource*, D.P.U. 24-195, Exh. AG-1-3.

- 1 • Unitil has only received one application so far, but another customer stated they will
2 not submit an application unless third-party funding can be stacked with utility rebates.⁶

3 No direct-current fast charging (“DCFC”) projects have been canceled due to the third-
4 party funding requirement.⁷

5 **Q. Do you recommend that the Department approve the EDCs’ proposed modification**
6 **to the third-party funding requirement?**

7 A. Yes. Since L2 deployment has been significantly lower than expected—as discussed in
8 Section III—and the proposed modification to the third-party funding requirement only
9 impacts L2 projects, the EDCs’ proposal is a reasonable adjustment to try to increase L2
10 deployment.

11 **III. NATIONAL GRID AND EVERSOURCE: REDUCED DCFC EVSE INCENTIVES**

12 **Q. Describe National Grid and Eversource’s proposal to reduce DCFC EVSE incentives.**

13 A. National Grid and Eversource currently offer the DCFC EVSE incentives listed in Table 1,
14 below.⁸ Each site⁹ may contain multiple ports, and is subject to a total EVSE cost cap of

⁶ Unitil, D.P.U. 24-197, Exh. AG-1-2.

⁷ National Grid, D.P.U. 24-196, Exh. AG-1-3; Eversource, D.P.U. 24-195, Exh. AG-1-3; Unitil, D.P.U. 24-197, Exh. AG-1-2.

⁸ National Grid, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 28.

⁹ A “site” is “property owned or controlled by the Site Host located within the Company’s electric service territory.” *Electric Vehicle Charger Site Host Agreement*, D.P.U. 20-90, Exh. ES-KB-10, at 1.

1 \$400,000.¹⁰

2 *Table 1: Current DCFC EVSE Rebate Levels for Publicly Accessible Projects*

	Public DCFC ports between 50 kW and 149 kW	Public DCFC ports 150 kW and above
Environmental Justice Communities (“EJCs”) (any criteria)	100% of cost cap Up to \$40,000/port	100% of cost cap Up to \$80,000
Non-EJCs	100% of cost cap Up to \$40,000/port	50% of cost cap Up to \$40,000/port

3 The EDCs propose to lower DCFC EVSE rebate levels for all segments, per Table 2, below.
4 Make-ready incentives will remain at the current levels.¹¹ The EDCs, however, did not
5 indicate whether they intend to adjust the per site cost cap to reflect the new incentive
6 levels.

7 *Table 2: EDCs’ Proposed DCFC EVSE Rebate Levels for Publicly Accessible Projects*

	Public DCFC ports between 50 kW and 149 kW	Public DCFC ports 150 kW and above
EJCs (any criteria)	50% of cost cap Up to \$20,000/port	50% of cost cap Up to \$40,000/port
Non-EJCs	No EVSE rebate offered	No EVSE rebate offered

8 Eversource and National Grid treat the new, lower thresholds slightly different. Eversource

¹⁰ https://www.eversource.com/content/docs/default-source/about/ma-ev-commercial-rebates-table.pdf?sfvrsn=a0262c0d_6; https://www.nationalgridus.com/media/pdfs/bus-ways-to-save/ev/ev-infrastructure-brochure-public_workplace_ada-ma.pdf.

¹¹ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 34; *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 22–23.

1 indicates that these new thresholds are maximums,¹² while National Grid considers them
2 to be minimums.¹³

3 **Q. How do National Grid and Eversource justify lowering DCFC EVSE rebates?**

4 A. The Companies explain that customer demand for DCFCs has been significantly higher
5 than anticipated, both relative to demand for L2 chargers and relative to initial DCFC
6 deployment estimates. National Grid and Eversource originally sized their programs based
7 on a 30:1 projected ratio of L2 to DCFC ports, but the Companies' current pipeline of
8 projects is closer to 1:2.¹⁴

9 Eversource has received applications for over 2,400 DCFC ports and has approved 633
10 DCFC ports, compared to the 152 DCFC ports Eversource initially forecasted installing
11 based on the target set in D.P.U. 21-90.¹⁵ At the same time, Eversource has received
12 applications for 5,113 L2 ports and has approved 2,839 L2 ports, compared to the
13 forecasted 6,114 L2 ports.¹⁶ Meanwhile, National Grid has paid for or committed to fund

¹² “The Company is proposing flexibility to adjust DCFC EVSE incentives down to zero percent from fifty percent, and down to fifty percent from the current maximum of 100 percent[.]” *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 39.

¹³ “The Company is proposing flexibility to be able to adjust DCFC EVSE incentives from zero percent up to the current maximum of 50-100 percent[.]” *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 34; *see* Exh. AG-2-2.

¹⁴ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1 at 29; *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 15.

¹⁵ *Eversource*, D.P.U. 21-90, Order (Dec. 30, 2022).

¹⁶ *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1 at 36.

1 1,210 DCFC ports as of December 2, 2024, compared to the target of 212 ports set in
2 D.P.U. 21-91.¹⁷ At the same time, National Grid has paid for or committed to fund 670 L2
3 ports as of December 2, 2024, compared to the forecasted 7,174 ports.¹⁸

4 **Q. Have both Companies exceeded their EV Program DCFC projections?**

5 A. Yes. Both Companies have greatly exceeded their DCFC projections. Eversource has
6 already approved 4.2 times the initial target number of public DCFC ports,¹⁹ while National
7 Grid has already approved 5.7 times its initially approved number of public DCFC ports.²⁰

8 **Q. Is it appropriate to reduce incentives for public DCFCs given deployment to date?**

9 A. Yes. Deployment has significantly exceeded the Companies' DCFC targets, and
10 accordingly, as recognized by Eversource and National Grid, DCFC projects do not need
11 the high level of support approved in D.P.U. 21-90 through D.P.U. 21-92. Further, both
12 utilities have deployed significant portions of Public and Workplace ("P&W") projects in
13 EJCs, and the proposed incentive levels still maintain differentiation between EJC and non-
14 EJC projects.²¹ Thus, reducing funding would be reasonable for both segments.

15 **Q. Do you recommend more significant DCFC rebate reductions than the EDCs**
16 **proposed?**

¹⁷ *National Grid*, D.P.U. 21-91, Order (Dec. 30, 2022).

¹⁸ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-5 (P&W) (Rev. 1).

¹⁹ 633 approved / 152 forecasted = 4.2

²⁰ 1,210 approved / 212 forecasted = 5.7

²¹ *National Grid*, D.P.U. 24-196, Exh. AG 1-1, Att. AG-1-1; *Eversource*, D.P.U. 24-195, Exh. AG-1-1, Att. AG 1-1.

1 A. Yes. Eversource and National Grid have demonstrated that the current DCFC incentive
2 amounts provide more support for DCFC projects than is necessary for achieving their port
3 targets. Thus, both Companies suggest a potential solution aimed at moderating that
4 support.²² However, given that the Companies have already vastly exceeded their intended
5 DCFC targets for their current EV Programs, we recommend further downward DCFC
6 EVSE rebate reductions to 25 percent of cost cap for EJCs. Moreover, the Companies lag
7 far behind their L2 targets, which they and the Department identified when sizing their
8 programs. Further reducing DCFC incentives helps “create a more level playing field
9 across L2 and DCFC projects[,]”²³ as the Companies intend to do with their proposed
10 reductions and is more likely to steer any remaining segment funds toward L2 investments
11 through the end of the current program terms.

12 We also recommend that any reduction in per-port DCFC EVSE incentives accompany a
13 proportional reduction in per-site EVSE cost cap. For EJC DCFC EVSE rebates, at our
14 recommended 25 percent of cost cap, the proportional per-site EVSE cost cap would be
15 \$100,000. Further, we recommend treating these rebate levels as maximums (consistent
16 with Eversource’s proposal), without the flexibility to adjust them upwards as National
17 Grid has proposed, because there is no need for higher incentives when the intended port

²² *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 43; *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1 at 38.

²³ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 35; *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 40.

1 targets have been reached.

2 **Q. Do the EDCs have any budget remaining to pay out these adjusted incentives?**

3 A. It appears that the Companies' original P&W budgets are either depleted or very nearly
4 depleted. National Grid has already paid or committed its entire approved \$94,685,344
5 P&W offering budget, as well as almost all of its planned 10 percent budget increase, which
6 brings its total P&W budget to \$103,721,542.²⁴ In D.P.U. 21-90 through D.P.U. 21-92,
7 the Department allowed the EDCs flexibility to shift spending among and between EV
8 Program segments by up to 15 percent of a segment approved budget or 15 percent of the
9 total approved EV Program budget.²⁵

10 Meanwhile, Eversource estimated in its December 19, 2024, filing that through November
11 2024, approximately 86 percent of the P&W segment had been subscribed.²⁶ However,
12 Eversource's charging rebate website notes that the public DCFC segment was "Fully
13 Subscribed" as of October 9, 2024, while the P&W L2 segments were "Fully Subscribed"
14 as of November 18, 2024.²⁷

²⁴ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-5 (P&W) (Rev. 1).

²⁵ D.P.U. 21-90 through D.P.U. 21-92, Order, at 129–130.

²⁶ *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 36.

²⁷ Eversource committed to "pause approving DCFC projects until a determination on the proposal for reduced incentives is made," but that commitment would not explain closing the L2 segment as well. See *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 43. https://www.eversource.com/content/docs/default-source/about/ma-ev-commercial-rebates-table.pdf?sfvrsn=a0262c0d_6.

1 It is important to note that any newly reduced DCFC EVSE incentives would only be
2 available to customers if: (1) National Grid or Eversource increases its approved segment
3 budget by the allowed 15 percent without exceeding the allowed shift for other segments;
4 (2) funding becomes available for P&W projects through project cancellations and/or
5 reconciling paid funds against committed funds;²⁸ or (3) the Department approves National
6 Grid’s proposed budget increase and/or greater than 15 percent segment budget shift. We
7 discuss National Grid’s proposed budget increase and budget shift in Section IV.B.

8 **IV. NATIONAL GRID: SPECIFIC PROPOSALS**

9 **A. Off-Peak Charging Rebate Program**

10 **Q. Describe National Grid’s proposed Off-Peak Charging Rebate Program changes.**

11 A. National Grid proposes to remove the existing enrollment caps to allow unlimited
12 participation in its Off-Peak Charging Rebate Program through the end of its EV Program
13 in 2026.²⁹ The current enrollment limits are 11,000 for residential customers, and 1,000
14 for fleet vehicles.³⁰ National Grid justifies the expansion by stating that: (1) it wants to
15 “ensure that Off-Peak Charging Rebate Program can continue to grow throughout the EV
16 Program period;”³¹ (2) its forecast indicates a strong likelihood of exceeding the current

28 *See National Grid*, D.P.U. 24-196, Exh. AG-2-1.

29 *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 23.

30 *Id.*

31 *Id.*

1 program limit of 11,000 residential customers prior to the end of 2026; and (3) it can
2 accommodate increased fleet participation within the existing budget.³²

3 National Grid also proposes to extend the off-peak rebate time period to include weekends
4 and holidays, thereby providing an incentive for off-peak charging between 9:00 p.m. to
5 1:00 p.m. every day.³³ National Grid asserts that the change will reduce customer
6 confusion and encourage charging behavior that benefits the electric grid.³⁴ As a result of
7 the off-peak rebate period extension, National Grid projects that participating customers
8 will receive an annual rebate of \$132 per customer, compared with the current annual
9 rebate of \$94 per customer, due to the addition of hours that are eligible for the rebate.³⁵

10 **Q. Does National Grid need a budget shift above 15 percent to implement its proposals?**

11 A. Yes. National Grid seeks to increase its Off-Peak Charging Rebate Program budget by \$5
12 million to meet the increased participation and associated costs, and to deliver an additional
13 year of the program through 2026.³⁶ According to National Grid, extending the off-peak
14 rebate time period to include weekends and holidays requires no budget increase above the
15 previously estimated budget, as weekend off peak charging was already included in the

³² *Id.* at 24. National Grid states that it has over 6,000 participating EVs in the residential program, and that it will be launching the fleet program shortly. *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 23.

³³ *Id.* at 23, 25.

³⁴ *Id.* at 25.

³⁵ *National Grid*, D.P.U. 24-196, Exh. AG-2-5-h.

³⁶ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 26.

1 program estimate. Similarly, increased fleet participation does not require a budget
2 increase.³⁷

3 To effectuate this \$5 million budget increase, National Grid plans to implement allowed
4 budget shifting of \$575,000 from the Residential segment, which represents 15 percent of
5 the Off-Peak Charging Rebate Program budget and less than 1 percent of the Residential
6 segment budget.³⁸ The remaining \$4.4 million of the budget increase, National Grid
7 proposes, will be achieved by shifting an additional 115 percent (above the allowed 15
8 percent) to the Off-Peak Charging Rebate segment from the Residential segment surplus.³⁹

9 **Q. Why is managed charging important?**

10 A. EV charging load, especially home charging, is highly flexible and can be managed such
11 that charging occurs outside of peak periods, thereby minimizing the contribution to peak
12 demand. This load shifting can help avoid high energy prices, reduce capacity costs, and
13 mitigate distribution investments, helping to ensure that the addition of EV charging load

³⁷ The existing budget estimates did not exclude any EV charging taking place on weekends or holidays and the resulting rebate value aligns with the annual rebate value that has been estimated since the inception of the offering. *See National Grid*, D.P.U. 24-196, Exhs. AG-2-5-c, AG-2-5-h, AG-2-5-d.

³⁸ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 47.

³⁹ *Id.* at 50. The initial Off-Peak Charging Rebate program budget was \$3.8 million (\$2.25 million for the Residential program and \$1.58 million for the Fleet program, *id.* at 27, 42), so under National Grid's proposal, the new budget would be \$8.8 million. *Id.* at 50. The Company explains that the Residential segment has a forecasted surplus of \$7.1 million for 1-4 unit dwellings segment due to EV Program participation rates being lower than forecasted, and a surplus of \$19.2 million for the multi-unit dwelling segment due to implementation challenges and lower participation than expected. *Id.* at 55.

1 to the grid puts downward pressure on rates by spreading fixed costs across higher volumes
2 of sales. Rates and programs that incentivize managed charging also allow EV owners to
3 reduce fueling costs by shifting their charging load to lower-cost off-peak periods and
4 avoiding higher-cost on-peak charging.

5 On the other hand, unmanaged charging means that EV load may occur mainly during peak
6 hours, potentially raising supply, transmission, and distribution costs and driving rate
7 increases, which also pose a barrier to EV adoption by increasing EV fueling costs.

8 **Q. Do you object to the proposed Off-Peak Charging Rebate Program changes?**

9 A. We generally do not object to the proposed changes. Given that National Grid does not
10 currently offer time-varying rates or other managed charging programs,⁴⁰ it is reasonable
11 to extend the program through 2026. However, we do recommend reducing the proposed
12 budget shift to align with National Grid’s 2026 participation estimates, as discussed below.

13 We do not object to extending the off-peak period as it might reduce customer confusion
14 and increase charging during off-peak times as National Grid claims.⁴¹ While a shorter
15 peak period is generally preferable for a time-of-use (“TOU”) rate, the longer on-peak
16 period is appropriate for this managed charging program since the program should also

⁴⁰ The Department is currently considering proposed EV TOU rates in D.P.U. 23-84 and 23-85, but the proposed rates may not appeal to customers if they must procure a second meter to participate.

⁴¹ Although weekends and holidays are technically entirely off-peak, National Grid explained why it would be challenging and costly to reflect this cost causation at this time. *See National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 25 & n.10.

1 incentivize participants to charge outside of hours that would be considered a “shoulder”
2 or “mid-peak” period under a three-period TOU rate. Additionally, because managed
3 charging participants are not charged higher rates for charging their EVs during on-peak
4 periods, they should not receive the off-peak credit for charging during the shoulder period
5 hours captured in the program’s peak period.

6 **Q. Could National Grid continue its proposed Off-Peak Charging Rebate Program**
7 **without the proposed budget increase?**

8 A. Not without participation limits. National Grid estimates that it cannot implement its
9 proposed changes without a budget shift significantly over the permitted 15 percent. In
10 fact, even without eliminating the 11,000-participant cap, National Grid would require a
11 total budget of \$4,474,000 (or an additional \$2,222,000) to continue the program at
12 forecasted participation rates through 2025 and 2026.⁴² This estimated increase is almost
13 equal to the approved residential off-peak rebate budget of \$2.25 million and cannot be
14 met with the \$575,000 allowed budget shift. There are currently approximately 6,000
15 participants in the program, and National Grid estimates that it can enroll a total of 16,500
16 customers by the end of 2026, assuming the current participation rate.⁴³ However, National
17 Grid’s requested incremental budget of \$5 million is designed to support 21,000
18 participants.⁴⁴

⁴² *National Grid*, D.P.U. 24-196, Exh. AG-1-6.

⁴³ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 23-24.

⁴⁴ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-8.

1 **Q. Do you support National Grid’s proposed incremental budget of \$5 million for 21,000**
2 **Off-Peak Charging Rebate Program participants?**

3 A. No; we do not support the proposed budget increase, which is designed for 21,000
4 participants. However, we do not object to: (1) increasing the participation limit to 16,500,
5 which reflects National Grid’s estimated 2026 participation level; and (2) shifting the Off-
6 Peak Charger Rebate program budget above 15 percent to enable the 16,500 participation
7 limit. Without adjusting administrative costs, the cost to expand the participant limit to
8 16,500 participants is \$4.2 million, compared to National Grid’s requested \$5 million to
9 accommodate 21,000 participants.⁴⁵ The incremental budget required to accommodate
10 16,500 participants by the end of 2026 should be lower than this level.⁴⁶

11 **Q. Do you recommend requiring a benefit-cost analysis (“BCA”) of the program?**

12 A. Yes. While in theory managed charging can provide benefits to ratepayers and the grid,
13 National Grid’s managed charging program also comes with costs, both for program
14 administration (including vendor costs) and program incentives, compared to other options
15 (e.g., TOU rates) to encourage managed charging. Assessing whether the program results
16 in a *net* benefit to ratepayers requires comparing program benefits and costs. It is currently
17 unclear whether the program benefits outweigh the costs. To date, the evaluations consider

⁴⁵ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-8. Changing Cell E12 to 16,500 results in a value of \$4,215,000 in Cell F30. However, this workbook includes fixed administrative costs instead of scaling administrative costs depending on the participation level.

⁴⁶ *See National Grid*, D.P.U. 24-196, Exh. AG 1-6, which estimates lower administrative costs to continue the program at the current 11,000 cap compared to a 21,000 cap.

1 charging patterns, such as percentage of on-peak versus off-peak charging,⁴⁷ but the
2 evaluations do not demonstrate that the program provides quantified benefits—such as
3 avoided energy costs, generation capacity, and transmission and distribution capacity—
4 that outweigh program costs. Analyzing the benefits of the program in terms of avoided
5 energy costs and capacity costs would allow for a direct comparison to program
6 implementation costs (both incentives and administration costs).

7 We recommend that the Department require National Grid to conduct a full BCA of the
8 program after Phase III and before requesting an extension of the Off-Peak Charging
9 Rebate beyond 2026. The BCA should enable a comprehensive evaluation of whether the
10 program provides net benefits to ratepayers or whether it can be expected to provide net
11 benefits to ratepayers in the long term. When conducting such BCA, National Grid should
12 model different participation levels to assess long-term cost-effectiveness.

13 **Q. Do utilities in other jurisdictions file similar BCAs?**

14 A. Yes. Utilities in Maryland file full BCAs when seeking approval for their EV programs,
15 including managed charging programs. For example, Potomac Electric Power Company
16 and Delmarva Power & Light's recent Phase II EV Portfolio filing includes BCA results

⁴⁷ *National Grid*, D.P.U. 22-63, Exh. NG-MM-10, at 20; *National Grid*, D.P.U. 24-64, Exh. NG-MMJG-1, at 110.

1 for the utilities' proposed Smart Charge Management and EV TOU programs.⁴⁸ The BCA
2 found that the proposed managed charging programs are not cost-effective at expected
3 enrollment levels (meaning they result in net costs to ratepayers), but will become cost-
4 effective at higher numbers of participants.⁴⁹ The same kind of analysis of National Grid's
5 managed charging program would allow the Department to determine if the program is
6 cost-effective or can be expected to become cost-effective in the future.

7 **Q. Have the EDCs performed BCAs for other types of programs in Massachusetts?**

8 A. Yes. The EDCs already perform BCAs for their energy efficiency programs.⁵⁰ National
9 Grid and Eversource's previous EV load management programs were under the energy
10 efficiency portfolios and were included in the utilities' 2022–2024 Energy Efficiency Plan
11 BCAs.⁵¹ The same methodology can be applied to National Grid's existing managed
12 charging program.

⁴⁸ *Application of Potomac Electric Power Company and Delmarva Power and Light for Approval of the Phase II Electric Vehicle Portfolio*, Maryland Public Service Commission Case No. 9478, App. A, at 3 (filed Dec. 18, 2024). <https://webpscxb.psc.state.md.us/DMS/case/9478>.

⁴⁹ Maryland Public Service Commission Case No. 9478, App. A, at 4–5.

⁵⁰ Massachusetts Energy Efficiency Advisory Council, *Plans and Updates*. <https://ma-eeac.org/plans-updates/>. National Grid, 2025-2027 Energy Efficiency Plan BC Model, https://ma-eeac.org/wp-content/uploads/2025-27_NG_Filing_Model_Electric_04.24-Excel.xlsx; Eversource, 2025-2027 Energy Efficiency Plan BC Model, <https://ma-eeac.org/wp-content/uploads/2025-27-Plan-BC-Model-NSTAR-Electric-Final-for-Filing-Excel.xlsx>; Unitil, 2025-2027 Energy Efficiency Plan BC Model, https://ma-eeac.org/wp-content/uploads/2025-27-Plan-BC-Model-Electric_Unitil_03.29-Final-Excel.xlsx.

⁵¹ Massachusetts Energy Efficiency Advisory Council, *Plans and Updates*. National Grid, 2022-2024 Energy Efficiency Plan BC Model (BCR Measure ID “EA2e005” and “EA2e006”),

1 **B. Budget Shifting and Incremental P&W Segment Budget Proposals**

2 **Q. Describe National Grid’s incremental P&W budget increase and budget shifting**
3 **proposals.**

4 A. National Grid proposes to increase the P&W segment budget by an additional \$32 million
5 beyond the total approved \$206 million EV Program budget.⁵² National Grid also proposes
6 to shift funds within the existing approved budget but beyond 15 percent of the segment
7 totals for two segments,⁵³ as follows:

- 8 • **Off-Peak Charging Rebate**: The National Grid forecasts requiring an additional
9 \$5 million⁵⁴ to operate the Off-Peak Charging Rebate with unconstrained
10 participation through 2026, forecasting that participation could reach 13,000
11 customers by the end of 2025 and 21,000 customers by the end of 2026.⁵⁵ National
12 Grid can shift \$575,000 within the 15 percent budget increase, leaving \$4.4 million
13 needed, which it proposes to shift from the surplus Residential segment budget. If
14 approved, the Off-Peak Charging Rebate would exceed the 15 percent maximum
15 by 115 percent. The Residential segment would exceed the 15 percent maximum
16 shift by 26 percent, including other proposed shifts.

<https://ma-eeac.org/wp-content/uploads/Exh-5-2022-2024-Plan-BC-Model-NG-Electric-4-1-22.xlsx>; Eversource, 2022–2024 Energy Efficiency Plan BC Model (BCR Measure ID “EA2e005” and “EA2e006”), <https://ma-eeac.org/wp-content/uploads/D.P.U.-21-125-Exhibit-NSTAR-Gas-5-Revised-4-1-22-BC-Model.xlsx>.

⁵² *National Grid*, D.P.U. 24-196, Exh. AG 3-2.

⁵³ National Grid originally also requested an additional \$2.2 million for its IT and back-office systems budget to support investment in a technology system it calls Clean Energy 2.0. However, National Grid has since withdrawn its proposal to increase the IT budget by \$2.2M, calling it unnecessary. *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 42; *National Grid*, D.P.U. 24-196, Exh. AG 3-2.

⁵⁴ Approximately \$3.5 million for additional residential customer rebates and incentives and approximately \$1.4 million for residential program administration.

⁵⁵ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 42.

1 • **P&W segment:** As described in Section III, the unanticipated high customer
2 interest in DCFCs has led to National Grid to essentially fully commit its P&W
3 segment budget as of December 2024, well before the end of the program. National
4 Grid forecasts a shortfall of approximately \$55 million on the \$150 million that it
5 forecasts “is needed to continue the [P&W segment] through the end of the EV
6 Program term.”⁵⁶ National Grid can shift \$9 million (10 percent of the P&W
7 segment) before exceeding the 15 percent budget limit for other segments. National
8 Grid proposes shifting \$12.3 million from the surplus Residential segment budget.
9 If approved, the P&W segment would exceed the 15 percent maximum by 7.5
10 percent. The Residential segment would exceed the 15 percent maximum shift by
11 26 percent, when you consider the other proposed shifts previously discussed.

12 **Q. Do you support the \$32 million incremental P&W budget proposal?**

13 A. No. National Grid expects that the requested incremental budget will enable it to support
14 additional L2 and DCFC ports.⁵⁷ For the same reasons discussed below in opposition to
15 extra P&W segment budget shifting, we also do not support any budget increase beyond
16 the total approved EV Program budget.

17 **Q. Do you support National Grid’s requested budget shift to support the Off-Peak**
18 **Charging Rebate Program?**

19 A. In part. Given that there are no other managed charging options available and participation
20 in the Off-Peak Charging Rebate Program is a requirement of receiving ratepayer-funded
21 incentives to install home chargers, it seems reasonable to shift the needed budget to allow
22 the program to continue through 2026 and to expand the participation limit from 11,000 to

⁵⁶ *Id.* at 44-45.

⁵⁷ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 58.

1 16,500 participants (National Grid estimates 16,500 participants based on the current rate
2 of enrollment).⁵⁸ Any budget shifts should only be to accommodate 16,500 participants.

3 **Q. Do you support the P&W segment budget shift?**

4 A. No. We do not support any budget shift to the P&W segment beyond the 15 percent
5 allowed shift for each segment. Although National Grid warns that if the increased P&W
6 segment budget is not approved, it could not support up to 180 L2 and 200 DCFC currently
7 forecasted ports,⁵⁹ National Grid has already significantly exceeded its original public
8 DCFC port projections and fallen far short on its L2 target.⁶⁰ Yet National Grid has not
9 proposed any changes aimed specifically at ensuring progress towards this L2 target (for
10 example, by limiting additional funding to supporting L2 chargers).

11 We also note that National Grid seemingly did not take the same steps Eversource took
12 when it became apparent that the number of DCFC projects would rapidly deplete the
13 segment budget at current incentive levels. Eversource, for its part, paused DCFC
14 incentive approvals and intends to apply the reduced incentives to any project contracted
15 after November 30, 2024.⁶¹ Moreover, despite Eversource experiencing a similarly
16 unexpected and rapid drawdown of its P&W segment budget due to high uptake for DCFC

⁵⁸ *Id.* at 24.

⁵⁹ *National Grid*, D.P.U. 24-196, Exh. NG-EV-MTM-1, at 52.

⁶⁰ *See* Section III of this testimony.

⁶¹ *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 42–43.

1 projects, Eversource does not propose to shift extra budget to P&W from other segments.
2 Conversely, National Grid states that it “will begin applying the reduced rebates to any
3 project that receives a Commitment Letter after the date of the Department’s order.”⁶²

4 **V. EVERSOURCE: SPECIFIC PROPOSALS**

5 **A. Bidirectional Charger Incentive Pilot**

6 **Q. Please summarize Eversource’s Bidirectional Charger Incentive Pilot proposal.**

7 A. Eversource proposes to launch a new program to provide incentives to cover the
8 incremental costs of bidirectional chargers for Medium-Duty and Heavy-Duty (“MDHD”)
9 fleet customers, primarily at school bus sites, with a budget of \$500,000 to support 25
10 bidirectional chargers.⁶³ According to Eversource, vehicle-to-grid (“V2G”) technology
11 can enable the batteries in school buses and other EVs to help balance the intermittency of
12 renewable energy resources, provide peak demand shaving capabilities, and reduce energy
13 costs associated with owning and operating EV fleets.⁶⁴

14 **Q. Does the proposed pilot include any requirements for customers to provide grid**
15 **services using V2G technology?**

16 A. No. The pilot does not include a requirement for participants to enroll in

⁶² *National Grid*, D.P.U. 24-196, Exh. AG-2-1-b.

⁶³ *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 31–32.

⁶⁴ *Id.* at 29.

1 ConnectedSolutions⁶⁵ or any other grid services program. grid. However, Eversource has
2 not designed an alternative program to support the V2G use case.⁶⁶

3 **Q. Does Eversource propose to test or track metrics related to V2G capabilities under**
4 **the pilot?**

5 A. No. Eversource does not provide any indication that it will test V2G capabilities or track
6 any metrics related to how V2G affects fleets (such as fleet operations or potential
7 revenues from V2G exports) or the grid (such as any infrastructure upgrades to
8 accommodate bidirectional power flow or system benefits resulting from V2G exports).
9 Even though Eversource claims that it will use information from this pilot to inform the
10 structure of a future grid services program,⁶⁷ the only metric Eversource proposes to track
11 are the number of rebates issued and the incremental cost of installing bidirectional
12 charging equipment.⁶⁸

13 **Q. Do other V2G pilots include the use of V2G capability for grid services?**

14 A. Yes. Eversource lists examples of V2G pilots, all of which include the utilization of V2G
15 capabilities for grid services:

- 16 • Pacific Gas & Electric's V2X Pilot requires participants to enroll in the Emergency
17 Load Reduction Program, which provides performance incentives for participation in

⁶⁵ Eversource explains that ConnectedSolutions is designed to reduce behind-the-meter load, not for exporting energy to the grid, and that "a different programmatic construct is necessary in order to ensure that dispatch events generate system benefits and do not cause reliability issues on the local grid." *Eversource*, D.P.U. 24-195, Exh. AG-1-6-c.

⁶⁶ *Eversource*, D.P.U. 24-195, Exh. AG-1-6-e.

⁶⁷ *Eversource*, D.P.U. 24-195, Exh. AG-1-6-c.

⁶⁸ *Eversource*, D.P.U. 24-195, Exh. AG-1-6-f.

- 1 demand response events;⁶⁹
- 2 • The school bus V2G project in Beverly, Massachusetts is participating in National
3 Grid’s ConnectedSolutions program;⁷⁰
 - 4 • The Massachusetts Clean Energy Center’s V2X Pilot, which will deploy 100
5 bidirectional chargers at different types of customer sites across the state, will leverage
6 bidirectional charging technology for backup power, self-consumption, as well as
7 participation in ConnectedSolutions grid events;⁷¹ and
 - 8 • NV Energy’s School Bus V2G Pilot, which provides a credit for energy discharged
9 from the batteries back to the grid.⁷²

10 **Q. Is it concerning that Eversource’s pilot does not test V2G capabilities?**

11 A. Yes. V2G technology can only provide grid benefits (such as peak demand reduction) and
12 help fleets reduce costs if it is leveraged to export energy to the grid under a program that
13 compensates fleets for the exported energy or for allowing the utility to dispatch the
14 batteries. Since Eversource’s pilot only involves providing additional funds to cover the
15 incremental costs of bidirectional chargers and no other activity, the deployed bidirectional
16 chargers’ V2G capabilities will not provide any benefits to the grid or for participating
17 fleets. Additionally, the pilot will not produce useful data or lessons that can inform the

⁶⁹ Pacific Gas & Electric, Vehicle-to-Everything (V2X) pilot program. <https://www.pge.com/en/clean-energy/electric-vehicles/getting-started-with-electric-vehicles/vehicle-to-everything-v2x-pilot-programs.html>.

Pacific Gas & Electric, Emergency Load Reduction Program. <https://elrp.olivineinc.com/>.

⁷⁰ Eversource, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 30.

⁷¹ Martucci, Brian. *Massachusetts to deploy 100 bidirectional EV chargers in first-of-its-kind ‘V2X’ pilot*. UTILITY DIVE (Mar. 4, 2025). <https://www.utilitydive.com/news/massachusetts-bidirectional-ev-chargers-v2g-v2x/741525/>.

⁷² NV Energy, Schedule No.ESB-V2G, Electric School Bus Vehicle-to-Grid Trial. https://www.nvenergy.com/publish/content/dam/nvenergy/brochures_arch/about-nvenergy/rates-regulatory/electric-schedules-north/ESB-V2G_Electric_North.pdf.

1 design of a V2G grid services program in the future. For these reasons, we do not view
2 Eversource's proposal as a responsible use of ratepayer funds.

3 **Q. Do you recommend that the Department reject Eversource's proposed Bidirectional**
4 **Charger Incentive Pilot?**

5 A. Yes. Nevertheless, a well-designed V2G program and compensation mechanism does have
6 the potential to deliver the benefits that Eversource discussed. The Department should
7 require that Eversource develop a compensation mechanism for V2G grid services, either
8 by incorporating V2G into its existing programs (e.g., ConnectedSolutions) or creating a
9 new program specifically for V2G. Any incentives for V2G equipment should be
10 conditional upon participation in a grid services program.

11 **B. Residential Managed Charging Program**

12 **Q. Please summarize Eversource's proposed Residential Managed Charging Program.**

13 A. Eversource's proposed Residential Managed Charging Program includes both a passive
14 managed charging component and an active managed charging component. The passive
15 managed charging program, Off-Peak Rewards, provides participants with an enrollment
16 incentive of \$50 and a participation incentive of \$10 per month if 90 percent of their
17 charging that month occurs outside the on-peak window (1 pm-9 pm every day).⁷³
18 Eversource states that it determined the 90 percent threshold based on its experience with
19 Eversource's residential managed charging program in Connecticut, where most customers

⁷³ *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 33.

1 routinely meet the program's 80 percent off-peak charging threshold.⁷⁴ The incentive
2 levels and on-peak and off-peak windows are aligned with National Grid's existing
3 residential off-peak charging program.⁷⁵

4 The active managed charging component, called Scheduled Charging, will be offered as a
5 complementary service to customers who consistently miss the off-peak charging target
6 under the passive managed charging program.⁷⁶ Under Scheduled Charging, Eversource
7 will control participants' charging, subject to each participant's required state of charge
8 (whether a participant requires a complete charge, or, for example, is amenable to a partial
9 charge) and the time at which they would like to have their EV at that state of charge.
10 Participants are eligible for the same \$10 per month participation incentive if they do not
11 override their charging schedule and charge during on-peak hours more than twice a
12 month.⁷⁷

13 The costs to implement the proposed program are estimated at approximately \$3 million
14 for the period from early 2025 through 2026 (funded by shifting funds from the Residential
15 segment), targeting 9,000 enrolled customers by the end of 2026.⁷⁸ Eversource states that
16 it will encourage residential customers receiving wiring rebates to accommodate a 240-volt

⁷⁴ *Id.*

⁷⁵ *Eversource*, D.P.U. 24-195, Exhs. AG-1-7-b; AG-2-1.

⁷⁶ *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 33.

⁷⁷ *Eversource*, D.P.U. 24-195, Exh. AG-1-7-b.

⁷⁸ *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 34.

1 L2 charger to participate in the managed charging program if they own an EV or EVSE
2 that allows Eversource to view their charging data.⁷⁹

3 **Q. Do you have concerns with the design of Eversource’s proposed Residential Managed**
4 **Charging Program?**

5 A. No. As discussed in Section IV.A., managed charging is crucial to ensure that EV charging
6 does not exacerbate peak demand and cause rate increases for ratepayers. It is beneficial
7 for Eversource to offer a managed charging program to residential customers, given that
8 TOU rates are not yet available. In this case, it is reasonable for Eversource to align the
9 incentive levels as well as on-peak and off-peak periods with National Grid’s managed
10 charging program to ensure consistency across the Commonwealth. As discussed in
11 Section IV.A., regarding National Grid’s proposed modifications to its residential managed
12 charging program, we do not object to Eversource’s long on-peak period for this managed
13 charging program, though a shorter peak period is generally preferable for a TOU rate.

14 **Q. Do you have concerns with any aspect of Eversource’s proposed Residential Managed**
15 **Charging Program?**

16 A. Yes. Customers receiving wiring and charger rebates are not required to participate in the
17 managed charging program. Managed charging is crucial for ensuring that EV charging
18 load is shifted to off-peak periods and does not contribute to peak demand, helping to put
19 downward pressure on rates. Therefore, residential customers receiving ratepayer-funded
20 incentives to install home chargers should be required to participate in managed charging.

⁷⁹ *Id.* at 33.

1 In addition, there is a lack of information on how Eversource will evaluate the success of
2 the program and what metrics it will track.

3 **Q. What are your recommendations?**

4 A. We recommend that the Department approve Eversource's proposed Residential Managed
5 Charging Program and require residential customers receiving wiring and charger rebates
6 from Eversource to enroll in the managed charging program.⁸⁰ Consistent with National
7 Grid's program, these customers should not be eligible for the \$50 enrollment incentive,
8 and customers should only be eligible for wiring and charger rebates if they have a charger
9 or vehicle compatible with the managed charging program.⁸¹ In addition, Eversource
10 should encourage customers who previously received wiring and charger rebates to enroll
11 in the new managed charging program. Lastly, the Department should require Eversource
12 to collect and track the same data and metrics as National Grid's residential managed
13 charging program and require Eversource to conduct a BCA for the program before
14 extending it beyond 2026.

⁸⁰ This requirement should not apply to residential customers who already received wiring and charger rebates before the managed charging program is available.

⁸¹ National Grid, EV Charging Upgrade Program. <https://www.nationalgridus.com/electric-vehicle-hub/Programs/Massachusetts/EV-Charging-Upgrade-Program>.

1 **C. MDHD Fleet Pilot**

2 **Q. Summarize Eversource’s proposed MDHD Fleet Pilot.**

3 A. Eversource proposes a new MDHD Fleet Pilot to replace the fully subscribed MDHD EJC
4 Fleet Pilot. Eversource states that the proposed MDHD Fleet Pilot will support EV
5 charging infrastructure for private and publicly owned fleets, including those within and
6 outside of EJCs.⁸² Eversource’s proposed incentive levels are modeled after National
7 Grid’s Fleet Program as shown in Table 3, below:⁸³

8 *Table 3. Eversource Proposed MDHD Fleet Pilot Incentive Levels*

Customer Type	Utility-Side Make-Ready	Customer-Side Make-Ready	EVSE
Private	Up to 100%	Up to 100%	None
Public (non-EJC)			Up to 50%
Public (EJC)			Up to 100% (income criteria) Up to 75% (other criteria)

9 Further, Eversource proposes the same cost containment caps for customer-side make-
10 ready and EVSE incentives as National Grid’s Fleet Program.⁸⁴ The program is expected

⁸² *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 20–21.

⁸³ *Id.* at 21.

⁸⁴ *Id.* at 22.

1 to support approximately six additional fleets at a budget of \$5 million, which requires
2 additional funds beyond the approved EV Program budget.⁸⁵

3 **Q. Do you have concerns with the design of Eversource’s proposed MDHD Fleet Pilot?**

4 A. No. Eversource’s program design is consistent with National Grid’s Fleet Program that
5 was approved by the Department. Mass transit vehicles (including school buses) provide
6 clean transportation for a wide segment of the public, including those who do not own
7 personal vehicles, and can significantly reduce carbon emissions as well as other local air
8 pollutants by replacing diesel-fueled MDHD vehicles. The proposed MDHD Fleet Pilot
9 ensures that the electrification of this critical segment receives continued support,
10 contributing to meeting the Commonwealth’s climate and EV adoption goals as well as
11 improving air quality in EJCs.

12 **Q. Do you have concerns with the MDHD Fleet Pilot’s proposed funding source?**

13 A. Yes. Eversource proposes a budget increase of \$5 million beyond the approved EV
14 Program budget for the MDHD Fleet Pilot.⁸⁶ However, Eversource has not demonstrated
15 why an incremental budget is necessary, given that the Company is forecasting significant
16 budget surplus for other programs. For example, the Residential segment is forecasted to
17 have a \$30.2 million surplus, of which Eversource is authorized to shift up to \$7.9 million

⁸⁵ *Id.* at 26.

⁸⁶ *Id.*

1 to other segments based on the 15 percent budget flexibility limit.⁸⁷ Accounting for the \$3
2 million requested for the Residential Managed Charging Program, as discussed in Section
3 V.B., \$4.9 million remains that can be shifted to support the MDHD Fleet Pilot, which is
4 approximately the same as Eversource’s proposed \$5 million budget.

5 **Q. Should Eversource develop and offer a managed charging program for fleets?**

6 A. Yes. Fleets are well-suited for rates and programs that incentivize managed charging,
7 given that fleet vehicles tend to have more coordinated charging schedules compared to
8 personal vehicles and potentially more advanced technical capabilities for managed
9 charging. The larger battery capacity in MDHD EVs also means that their potential for
10 load reductions is greater if managed appropriately, as is their potential to increase peak
11 demand and grid costs if charging load is unmanaged. Additionally, managed charging
12 offerings that enable fleets to reduce charging costs can help improve the total cost of
13 ownership of EVs compared to gas or diesel vehicles, making it more financially feasible
14 and attractive for fleets to electrify. For these reasons, Eversource should develop and offer
15 a managed charging program for fleet vehicles.

16 **Q. What do you recommend?**

17 A. We recommend that the Department approve Eversource’s proposed MDHD Fleet Pilot
18 structure but reject the requested additional budget beyond the approved EV Program
19 budget. Funding for the MDHD Fleet Pilot should be achieved under the allowed budget

⁸⁷ *Eversource, D.P.U. 24-195, Att. AG-2-5.*

1 shifting flexibility. Additionally, the Department should require Eversource to propose a
2 fleet managed charging program in its Phase III EV Program proposal.

3 **VI. UNITIL: SPECIFIC PROPOSALS**

4 **A. EV TOU Rate Requirement**

5 **Q. Summarize Unitil’s proposal related to the EV TOU rate requirement.**

6 A. Unitil proposes to suspend the requirement that residential EV Program participants enroll
7 in the EV TOU rate until Unitil can resolve the cost barrier associated with an additional
8 meter socket.⁸⁸ According to Unitil, the \$2,000 cost for an additional meter socket has
9 been a barrier to participation, resulting in no residential participation in the EV Program
10 or the EV TOU rate.⁸⁹

11 **Q. What do you recommend?**

12 A. Given the lack of residential participation in Unitil’s EV Program and EV TOU rate and
13 the financial barrier posed by the requirement for a second meter, it is reasonable to suspend
14 the requirement that residential EV Program participants enroll in the EV TOU rate.

15 **B. Residential Managed Charging Program**

16 **Q. Please summarize Unitil’s proposed residential managed charging program.**

17 A. Unitil’s proposed program is the same as Eversource’s Off-Peak Rewards program,
18 providing participants with an enrollment incentive of \$50 and a participation incentive of

⁸⁸ *Unitil*, D.P.U. 24-197, Exh. FGE-CCTP-1, at 13.

⁸⁹ *Id.* at 12–13.

1 \$10 per month if 90 percent of their charging that month occurs outside the on-peak
2 window (1 pm-9 pm every day).⁹⁰ The estimated total cost of the program for a three-year
3 period is \$101,000 for 100 participants, funded by the approved Residential EV Program
4 budget.⁹¹ Similar to Eversource, Unital will encourage residential customers receiving
5 wiring and charger rebates to participate in the managed charging program if they own an
6 EV or EVSE that allows the utility to access their charging data.⁹²

7 **Q. Do you have concerns about Unital's proposed program?**

8 A. Yes. While managed charging is generally beneficial for the grid and for EV owners, the
9 significant cost of Unital's program does not justify its implementation at this time. For
10 comparison, Eversource's \$3 million budget for 9,000 customers over two years equates
11 to a cost of \$167 per customer per year,⁹³ while Unital's \$101,000 budget for 100 customers
12 over three years equates to a cost of \$337 per customer per year, approximately double the
13 estimated cost of Eversource's program on a per customer per year basis.

14 The lower cost of Eversource's program is likely a result of the higher expected level of
15 enrollment, which allows Eversource to spread fixed program start-up costs among a larger

⁹⁰ *Id.* at 14.

⁹¹ *Id.*

⁹² *Id.*

⁹³ *Eversource*, D.P.U. 24-195, Exh. ES-EV-MTM-1, at 34.

1 number of participants. In contrast, the low expected enrollment for Unitil's program
2 means that the costs per customer are significantly higher.

3 **Q. What do you recommend?**

4 A. We recommend that the Department reject Unitil's proposed residential managed charging
5 program at this time. However, Unitil should continue to assess its ability to implement a
6 managed charging program at lower cost to ratepayers and can propose such a program in
7 the future.

8 **C. Public Charging Program Customer Choice Pathway**

9 **Q. Please summarize Unitil's proposed Customer Choice pathway for the Public**
10 **Charging Program.**

11 A. Unitil proposes to add a Customer Choice pathway to its Public Charging Program to allow
12 customers' contractors to conduct customer-side make-ready, similar to what the other
13 EDCs currently offer in their EV Programs.⁹⁴ The Customer Choice pathway would
14 provide the same incentive level as the existing turnkey pathway, under which Unitil and/or
15 its contractors conduct both utility-side and customer-side make-ready work.⁹⁵
16 Additionally, Unitil proposes to allow customers to install one charger at a site instead of
17 a minimum of two chargers, as currently required, provided the customer has a reasonable
18 justification.⁹⁶ Unitil states that the existing requirement may disqualify smaller customers

⁹⁴ *Unitil*, D.P.U. 24-197, Exh. FGE-CCTP-1, at 17.

⁹⁵ *Unitil*, D.P.U. 24-197, Exh. AG-1-4.

⁹⁶ *Unitil*, D.P.U. 24-197, Exh. FGE-CCTP-1, at 17.

1 with budget limitations or other constraints that prevent them from being able to install two
2 chargers.⁹⁷

3 **Q. What do you recommend?**

4 A. We recommend that the Department approve Unitil's proposals related to its Public
5 Charging Program. Given the lack of participation in Unitil's EV Program thus far, these
6 proposals will likely encourage more charging infrastructure deployment in the Company's
7 service territory.

8 **VII. CONCLUSION**

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

10 A. Yes.

⁹⁷ *Id.* at 18.