



The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC UTILITIES

D.P.U. 21-90

December 30, 2022

Petition of NSTAR Electric Company d/b/a Eversource Energy for approval of its Phase II Electric Vehicle Infrastructure Program and Electric Vehicle Demand Charge Alternative Proposal.

D.P.U. 21-91

Petition of Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, for approval of its Phase III Electric Vehicle Market Development Program and Electric Vehicle Demand Charge Alternative Proposal.

D.P.U. 21-92

Petition of Fitchburg Gas and Electric Light Company d/b/a Unitil for approval of its Electric Vehicle Infrastructure Program, Electric Vehicle Demand Charge Alternative Proposal, and Residential Electric Vehicle Time-of-Use Rate Proposal.

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I. INTRODUCTION AND PROCEDURAL HISTORY

On July 14, 2021, NSTAR Electric Company d/b/a Eversource Energy (“NSTAR Electric”), Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid (“National Grid”), and Fitchburg Gas and Electric Light Company d/b/a Unitil (“Unitil”) (collectively “Companies”; individually, “company”) each filed for approval by the Department of Public Utilities (“Department”) an electric vehicle (“EV”) charging infrastructure program proposal and a EV demand charge alternative (“DCA”) proposal. Additionally, in D.P.U. 21-92, Unitil proposed a residential EV time-of-use (“TOU”) rate. The Companies submitted these filings pursuant to Grid Modernization – Phase II, D.P.U. 20-69-A (2021). The Department docketed these matters as D.P.U. 21-90, D.P.U. 21-91, and D.P.U. 21-92, respectively.¹

On July 28, 2021, the Attorney General of the Commonwealth of Massachusetts (“Attorney General”) filed a notice of intervention pursuant to G.L. c. 12, § 11E(a) in all three dockets. Additionally, the Department granted full party intervenor status to each of the following entities: (1) the Massachusetts Department of Energy Resources (“DOER”) (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (2) the Conservation Law Foundation (“CLF”) (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (3) Tesla, Inc. (“Tesla”) (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (4) ChargePoint, Inc. (“ChargePoint”) (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (5) Global Partners LP (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (6) FreeWire Technologies, Inc. (“FreeWire”) (D.P.U. 21-90; D.P.U. 21-91;

¹ These cases have not been consolidated and remain separate proceedings.

D.P.U. 21-92); (7) Green Energy Consumers Alliance (“GECA”) (D.P.U. 21-90; D.P.U. 21-91); (8) Natural Resources Defense Council, the Sierra Club, and Union of Concerned Scientists (“CEP”) (D.P.U. 21-90; D.P.U. 21-91); (9) Electrify America (D.P.U. 21-90; D.P.U. 21-91); (10) EVgo Services LLC (“EVgo”) (D.P.U. 21-90; D.P.U. 21-91); (11) Zeco Systems, Inc. d/b/a Shell EV Charging Solutions Americas (“Shell”)² (D.P.U. 21-90; D.P.U. 21-91); (12) Cape Light Compact JPE (“Compact”) (D.P.U. 21-90); (13) Low-Income Weatherization and Fuel Assistance Program Network (D.P.U. 21-91). The Department also allowed the following entities to participate as limited participants: (1) National Grid (D.P.U. 21-90; D.P.U. 21-92), and (2) NSTAR Electric (D.P.U. 21-91; D.P.U. 21-92).

On September 9, 2021, the Department bifurcated its investigation of the Companies’ filings into two separate, parallel tracks. The Department designated Track 1 to review the EV charging infrastructure program and associated cost recovery proposals and Track 2 to review the DCA rate proposals and Unitol’s residential EV TOU rate proposal.

D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Procedural Notice at 2, 4 (September 9, 2021).³

Pursuant to notices duly issued, the Department conducted a joint public hearing and procedural conference in these proceedings on September 14, 2021. On October 12, 2021, pursuant to notice duly issued, the Department held a second public hearing in D.P.U. 21-92.

During the course of the Track 1 investigation, each company sponsored witness testimony. In D.P.U. 21-90, NSTAR Electric sponsored the testimony of the following

² At the time Shell was granted intervenor status in these proceedings, Shell conducted business as Greenlots.

³ The Department addresses issues raised in Track 1 and Track 2 in this Order.

Eversource Energy Service Company (“ESC”) employees: (1) Kevin Boughan, Manager, Research and Business; (2) Richard Chin, Manager, Rates; and (3) Robert Frank, Director, Revenue Requirements. In D.P.U. 21-91, National Grid sponsored the testimony of the following National Grid USA Service Company, Inc. (“NGSC”) employees: (1) Rishi Sondhi, Manager, Clean Transportation Team; (2) Julia Gold, Principal Policy and Strategy Analyst, Clean Transportation Team; (3) Jake Navarro, Director, Clean Transportation Team; (4) Sharon Daly, Lead Analyst, U.S. Retail Regulatory Strategy Group; (5) Thomas Chorman, Senior Engineer, Clean Transportation Team; (6) Scott McCabe, Manager, New England Pricing Group; (7) Theresa Burns, Director, New England Pricing Group; (8) Mindy Rosen, Lead Analyst, New England Pricing Group; (9) Stephanie Briggs, Director, Revenue Requirements; and (10) Jared Goldfarb, Director, New England Financial Planning and Analysis. In D.P.U. 21-92, Unitil sponsored the testimony of the following Unitil Service Corporation (“USC”) employees: (1) Cindy Carroll, Vice President, Customer Energy Solutions; (2) Carleton Simpson, Regulatory Counsel; (3) Carol Valianti, Vice President, Communications and Public Affairs; and (4) Christopher Goulding, Director, Rates and Revenue Requirements. In addition, Unitil sponsored the testimony of John Taylor, Managing Partner, Atrium Economics LLC.

The Attorney General sponsored the testimony of the following witnesses in each proceeding: (1) Ron Nelson, Senior Director, Strategen Consulting, and (2) Caroline Palmer, Senior Regulatory Consultant, Strategen Consulting. Additionally, the following intervenors sponsored witness testimony in each proceeding as follows: (1) DOER sponsored the testimony of Joanna Troy, Director of Energy Policy, DOER; (2) ChargePoint sponsored the testimony of Kevin Miller, Director of Public Policy, ChargePoint; (3) FreeWire sponsored the testimony of

Peter Olmsted, Director of Regulatory Affairs, FreeWire; and (4) CLF sponsored the testimony of Layne Benton, Lead Environmental Justice Organizer, GreenRoots, Inc. In D.P.U. 21-90 and D.P.U. 21-91, GECA sponsored the testimony of the following witnesses: (1) Larry Chretien, Executive Director, GECA; (2) Anna Vanderspek, Electric Vehicle Program Director, GECA; (3) Mal Skowron, Transportation Policy & Program Coordinator, GECA; (4) Alexis Walls, Assistant Campaign Director, Massachusetts Public Health Association; (5) Elizabeth Stanton, Director, Applied Economics Clinic; and (6) Joshua Castigliero, Researcher, Applied Economics Clinic. Also, in D.P.U. 21-90 and D.P.U. 21-91, the following intervenors sponsored witness testimony as follows: (1) EVgo sponsored the testimony of Carine Dumit, Director of Market Development and Public Policy, EVgo; (2) Electrify America sponsored the testimony of Tyler Stoff, Government Affairs and Public Policy Lead, Electrify America; (3) Shell sponsored the testimony of Thomas Ashley, Vice President of Policy and Market Development, Shell; (4) CEP sponsored the testimony of Kathleen Harris, Clean Vehicles and Fuels Advocate, Natural Resources Defense Council; and (5) Tesla sponsored the testimony of William Ehrlich, Senior Policy Advisor for EV Charging Policy and Rates, Tesla.

From March 21, 2022 to March 24, 2022, the Department held four days of joint evidentiary hearings for Track 1 issues. On April 15, 2022, initial briefs were filed by: (1) the Attorney General (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (2) DOER (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (3) ChargePoint (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (4) FreeWire (D.P.U. 21-90; D.P.U. 21-91); (6) CLF (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (7) GECA (D.P.U. 21-90; D.P.U. 21-91); (8) EVgo (D.P.U. 21-90; D.P.U. 21-91); (9) Electrify America (D.P.U. 21-90; D.P.U. 21-91); (10) Shell (D.P.U. 21-90;

D.P.U. 21-91); (11) CEP (D.P.U. 21-90; D.P.U. 21-91); (12) Tesla (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); and (13) the Compact (D.P.U. 21-90). On May 2, 2022, NSTAR Electric and National Grid filed a joint initial brief in D.P.U. 21-90 and D.P.U. 21-91, and Unitil filed an initial brief in D.P.U. 21-92.

On May 18, 2022, reply briefs were filed by: (1) the Attorney General (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (2) ChargePoint (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (3) FreeWire (D.P.U. 21-90; D.P.U. 21-91); (4) CLF (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (5) EVgo (D.P.U. 21-90; D.P.U. 21-91); (6) Electrify America (D.P.U. 21-90; D.P.U. 21-91); (7) Shell (D.P.U. 21-90; D.P.U. 21-91); (8) CEP (D.P.U. 21-90; D.P.U. 21-91); (9) Tesla (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); and (10) the Compact (D.P.U. 21-90). On May 25, 2022, NSTAR Electric and National Grid filed a joint reply brief in D.P.U. 21-90 and D.P.U. 21-91, and Unitil filed a reply brief in D.P.U. 21-92.

Each company also sponsored witness testimony in Track 2 of these proceedings. In D.P.U. 21-90, NSTAR Electric sponsored the testimony of Richard Chin, Manager, Rates, ESC. In D.P.U. 21-91, National Grid sponsored the testimony of the following NGSC employees: (1) Thomas Chorman, Lead Engineer, Clean Transportation Team; (2) Scott McCabe, Manager, New England Pricing Group; (3) Theresa Burns, Director, New England Regulation Department; and (4) Sharon Daly, Lead Analyst, U.S. Retail Regulatory Strategy Group. In D.P.U. 21-92, for Track 2, Unitil sponsored the testimony of the following USC employees: (1) Cindy Carroll, Vice President, Customer Energy Solutions, and (2) Christopher Goulding, Director, Rates and Revenue Requirements. In addition, Unitil sponsored the testimony of John Taylor, Managing Partner, Atrium Economics LLC.

Additionally, in each proceeding, the following intervenors sponsored witness testimony for Track 2 as follows: (1) the Attorney General sponsored the testimony of Ron Nelson, Senior Director, Strategen Consulting; (2) DOER sponsored the testimony of Joanna Troy, Director of Energy Policy, DOER; (3) ChargePoint sponsored the testimony of Matthew Deal, Manager of Utility Policy, ChargePoint; and (4) CLF sponsored the testimony of Christopher Villarreal, President, Plugged In Strategies. Further, in D.P.U. 21-90 and D.P.U. 21-91, (1) GECA sponsored the testimony of Larry Chretien, Executive Director, GECA and Joshua Castigliero, Researcher, Applied Economics Clinic, (2) CEP sponsored the testimony of Melissa Whited, Senior Principal, Synapse Energy Economics, (3) Tesla sponsored the testimony of William Ehrlich, Senior Policy Advisor of EV Charging Policy and Rates, Tesla, (3) EVgo sponsored the testimony of R. Thomas Beach, Principal Consultant, Crossborder Energy, and (4) Electrify America sponsored the testimony of Jigar Shah, Manager, Electrify America.

From August 1, 2022 to August 3, 2022, the Department held three days of joint evidentiary hearings on Track 2 issues. On September 15, 2022, initial briefs were filed by (1) NSTAR Electric and National Grid jointly (D.P.U. 21-90; D.P.U. 21-91); (2) Unitol (D.P.U. 21-92); (3) the Attorney General (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92) (4) DOER (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (5) ChargePoint (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (6) CLF (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (7) FreeWire (D.P.U. 21-90; D.P.U. 21-91); (8) Electrify America (D.P.U. 21-90; D.P.U. 21-91); (9) CEP (D.P.U. 21-90; D.P.U. 21-91); (10) Tesla (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (11) GECA (D.P.U. 21-90; D.P.U. 21-91); (12) EVgo (D.P.U. 21-90; D.P.U. 21-91); and (13) Shell (D.P.U. 21-90; D.P.U. 21-91). On September 30, 2022, reply briefs were filed by

(1) NSTAR Electric and National Grid jointly (D.P.U. 21-90; D.P.U. 21-91); (2) Unitil (D.P.U. 21-92); (3) the Attorney General (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (4) FreeWire (D.P.U. 21-90; D.P.U. 21-91); (5) CLF (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92); (6) EVgo (D.P.U. 21-90; D.P.U. 21-91); (7) Electrify America (D.P.U. 21-90; D.P.U. 21-91); (8) CEP (D.P.U. 21-90; D.P.U. 21-91); and (9) Tesla (D.P.U. 21-90; D.P.U. 21-91; D.P.U. 21-92).

The evidentiary record in each docket includes the company's initial filing exhibits, corresponding revisions to those exhibits, company and intervenor testimony from both Track 1 and Track 2, responses to all information requests issued during these proceedings, and record request responses from both Track 1 and Track 2 evidentiary hearings.⁴ The record in D.P.U. 21-90 includes responses to 391 information requests and twelve record requests. The record in D.P.U. 21-91 includes responses to 426 information requests and twelve record requests. The record in D.P.U. 21-92 includes responses to 138 information requests and nine record requests.

II. BACKGROUND

In 2014, the Department adopted a vision of a cleaner, more efficient and reliable electric grid, which would empower customers to manage and reduce their energy costs. Grid Modernization, D.P.U. 15-120/D.P.U. 15-121/D.P.U. 15-122, at 1, citing Modernization of the Electric Grid, D.P.U. 12-76-B (2014). The Department's vision of the modern grid includes

⁴ During the Track 2 evidentiary hearings, all exhibits filed in each docket were moved into the evidentiary record for that docket (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 8, at 1386-1387).

support for emerging technologies such as EVs. Modernization of the Electric Grid, D.P.U. 12-76, at 3-4 (2013). In Electric Vehicles, D.P.U. 13-182-A (2013), the Department established a regulatory construct governing the Department's review of an electric distribution company's EV infrastructure program proposal. Since then, the Department has reviewed and approved EV program proposals by NSTAR Electric and National Grid. NSTAR Electric Company and Western Massachusetts Electric Company, D.P.U. 17-05, at 501-503 (2017); Massachusetts Electric Company and Nantucket Electric Company, D.P.U. 17-13, at 62 (2018); Massachusetts Electric Company and Nantucket Electric Company, D.P.U. 18-150, at 384-394 (2019).

On July 2, 2020, in D.P.U. 20-69-A, the Department directed each electric distribution company to submit an EV proposal consistent with the Department's directives. Specifically, the Department required each company to file an EV proposal consisting of: (1) any new or expanded EV charging infrastructure proposal, and (2) a commercial EV rate design proposal addressing alternatives to demand charges as required by An Act Authorizing and Accelerating Transportation Investment, St. 2020, c. 383, § 29 ("Transportation Act"). D.P.U. 20-69-A at 40-41, 49. In developing a new or expanded EV charging infrastructure program proposal, the Department required the Companies to: (1) incorporate lessons learned from existing EV charging infrastructure programs to increase the accessibility of EV chargers in environmental justice ("EJ") communities; (2) ensure a consistent approach for host recruitment and incentives; (3) avoid duplication with other EV charging infrastructure build-out incentive programs offered in the Commonwealth (e.g., the Massachusetts EV Incentive Program ("MassEVIP"), Volkswagen settlement-funded incentive programs, municipal rebate programs for EV charging

infrastructure, etc.); (4) include proposals to mitigate barriers that impeded the recruitment of DCFC site hosts for strategic locations in the Commonwealth; (5) incorporate analyses of traffic and EV charging patterns to identify priority locations for future public EV charging stations; and (6) coordinate and propose statewide and company-specific performance metrics associated with their EV charging infrastructure programs. D.P.U. 20-69-A at 46-48. Additionally, to avoid any potential overlap between the EV programs and other programs, the Department required each company to coordinate and streamline its EV charging incentive offerings.

D.P.U. 20-69-A at 49.

Regarding the commercial EV rate design proposal addressing alternatives to demand charges, the Department directed the Companies to consider: (1) converting kW-based charges to kilowatt-hour-based charges; (2) off-peak charging demand charge rebates or discounts; and (3) sliding scale demand charges based on the load factor of the EV charging site.

D.P.U. 20-69-A at 42. Moreover, the Department stated that all DCA rate proposals should be based on EV charging data collected through: (1) smart chargers or networked chargers; (2) EV telematics; or (3) interval meters installed at the request of the customer. D.P.U. 20-69-A at 42-43. To the extent feasible, the Department required the Companies to coordinate the development of their DCA rate proposals for commercial and industrial (“C&I”) EV customers to facilitate a consistent EV charging experience across service territories and to identify a timeline and approach to transition all proposed DCA rates to the future demand charge rate designs that would be enabled through the full deployment of AMI meters. D.P.U. 20-69-A at 43. In addition, the Department held that any proposed tariff included as part of the Companies’ DCA rate proposals must be filed as an exemplar tariff. D.P.U. 20-69-A at 43.

Further, the Department encouraged Unitil to propose a residential EV TOU rate as part of its EV proposal to provide appropriate price signals to encourage customer behaviors that will contribute to reducing peak demand. D.P.U. 20-69-A at 44. The Department determined that Unitil's metering infrastructure and supporting systems were capable of accommodating simple time-varying rates ("TVRs") for EV customers without major expenditures. D.P.U. 20-69-A at 44.

Finally, the Department sought to establish a level of consistency in charging experiences for EV customers as they travel across utility service territories within the Commonwealth. D.P.U. 20-69-A at 41. Accordingly, the Department directed the Companies to coordinate their EV proposals for consistency and uniformity across service territories to the greatest extent practicable. D.P.U. 20-69-A at 41.

III. ELECTRIC VEHICLE PROGRAM PROPOSALS

A. Description of the Proposals

1. NSTAR Electric

a. Overview

NSTAR Electric proposes a four-year Phase II EV program with an associated budget of approximately \$191.9 million (D.P.U. 21-90, Exh. ES-KB-2). The company's Phase II EV program proposal consists of three components: (1) make-ready⁵ and EV supply equipment

⁵ Generally, EV charging make-ready infrastructure includes the electrical infrastructure between the utility grid interconnection and the EVSE (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 36; see also D.P.U. 17-05, Exhibit ES-GMBC-1, at 91).

(“EVSE”) incentive proposal;⁶ (2) two equity pilot proposals; and (3) other supporting proposals, including funding for additional employees, a marketing and outreach plan, supporting system upgrades, and a joint workforce development and electrician training proposal (D.P.U. 21-90, Exh. ES-KB-1, at 7-8). Last, the company seeks budget flexibility to shift program funds and adjust program components, as well as the ability to initiate a mid-term review for review of EV program modifications (D.P.U. 21-90, Exh. ES-KB-1, at 89-90).

b. Make-Ready and EVSE Incentive Proposal

The company’s make-ready and EVSE incentive proposal seeks to support the deployment of Level 2 EV chargers and direct current fast chargers (“DCFCs”) by providing financial incentives for their installation and includes three components: (1) a public and workplace offering; (2) residential offering; and (3) a fleet offering (D.P.U. 21-90, Exh. ES-KB-1, at 6). For its public and workplace offering, the company proposes a budget of approximately \$109.1 million, consisting of: (1) \$85.0 million for make-ready incentives; (2) \$17.2 million for EVSE rebates; (3) \$1.2 million for networking incentives; and (4) \$5.6 million for DCFC hubs in EJ communities (D.P.U. 21-90, Exh. ES-KB-2). The company proposes financial incentives for its public and workplace offering as follows:

⁶ EVSEs are the charging equipment that provide electric power to the vehicle and use that to recharge the vehicle’s batteries. EVSE equipment is generally divided into three types: Level I, Level II, and direct current fast chargers (“DCFC”). 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. D.P.U. 17-05, at 472 n.234. DCFC chargers use direct current and are the fastest method for charging an EV. D.P.U. 17-05, at 472 n.233. Level 1 chargers plug directly into a standard 120-volt AC outlet and are the slowest method for charging an EV (D.P.U. 17-05, Exhibit ES-GMBC-1, at 97; D.P.U. 17-13, Exhibit KAB/BJC-1, at 15).

(1) 100 percent of make-ready costs (i.e., the infrastructure on the utility side of the meter); (2) up to 100 percent of the average installation costs of the infrastructure on the customer side of the meter,⁷ not to exceed actual installation costs; (3) for Level 2 EVSE, 100 percent of the installed costs for up to ten ports in EJ communities, 50 percent of the installed costs for ports three to ten for municipalities, and 50 percent of the installed costs for ports five to ten for all other customers; (4) for public DCFC EVSE in EJ communities, \$40,000 per port, up to \$400,000, for ports between 50 kilowatts (“kW”) and 150 kW, and up to \$80,000 per port for ports 150 kW and above; (5) for public DCFC EVSE outside of EJ communities, \$40,000 per port above 50 kW, with a minimum of 100 kW per site, up to \$400,000; (6) four years of networking at \$480 per port for municipal Level 2 and DCFC customers and any EVSE in EJ communities; and (7) 100 percent of the costs for four to five charging hubs with approximately four 175 kW DCFCs in EJ communities⁸ (D.P.U. 21-90, Exh. ES-KB-1, at 45-47).

For its residential make-ready and EVSE incentive offering, the company proposes a budget of \$52.7 million, comprised of: (1) \$32.9 million for make-ready incentives; (2) \$9.2 million for EVSE rebates; (3) \$1.0 million for networking incentives; (4) \$6.2 million for low-income/EJ communities turnkey installation; (5) \$1.2 million for EV site ready plans;

⁷ To account for certain site-specific characteristics and potential cost-shifts in the industry, the company proposes to provide make-ready incentives for up to 150 percent of the average installation costs of the infrastructure on the customer side of the meter on a case-by-case basis (D.P.U. 21-90, Exh. ES-KB-1, at 43). NSTAR Electric also proposes to periodically recalculate the average customer-side infrastructure costs for each installation type to reflect current market dynamics (D.P.U. 21-90, Exh. ES-KB-1, at 43).

⁸ NSTAR Electric proposes to issue a request for proposals to solicit interested owners/operators of the DCFC charging hubs (D.P.U. 21-90, Exh. ES-KB-1, at 47).

and (6) \$2.1 million for vendor-based administrative costs (D.P.U. 21-90, Exh. ES-KB-2). For customers in one to four-unit properties, NSTAR Electric proposes to provide financial incentives, not to exceed actual costs, of up to: (1) \$700 for customers in one-unit properties; (2) \$1,400 for customers in two to four-unit properties; (3) \$300 per customer for networked Level 2 EVSE; and (4) for low-income customers and customers in EJ communities, 100 percent of Level 2 EVSE costs, \$1,700 for customers in one-unit properties, and \$2,700 for customers in two to four-unit properties (D.P.U. 21-90, Exh. ES-KB-1, at 50, 56-57). NSTAR Electric also proposes to require these residential customers to enroll in the company's managed charging program, ConnectedSolutions, for at least one year, with an option to opt out after the first year (D.P.U. 21-90, Exh. ES-KB-1, at 56-58).

For multi-unit dwellings ("MUDs") with five or more units, NSTAR Electric proposes to provide financial incentives of: (1) 100 percent of the infrastructure on the utility side of the meter; (2) up to 100 percent of the infrastructure on the customer side of the meter, with the ability to provide make-ready incentives of up to 150 percent of the average cost per port on a case-by-case basis; (3) up to 100 percent of the average cost per port for sites in EJ communities, up to \$4,000 per Level 2 port, not to exceed actual costs, and 50 percent of the average cost per port for other sites, up to \$2,000 per Level 2 port, not to exceed actual costs; and (4) \$120 per port per year for four years for networking costs upon request (D.P.U. 21-90, Exh. ES-KB-1, at 50-51, 60-61). For MUDs with 20 or more units, NSTAR Electric proposes to provide financial support of up to \$6,000 for the cost of an EV ready site plan on the long-term infrastructure and equipment approach to installing at least one Level 2 port per residential unit (D.P.U. 21-90, Exh. ES-KB-1, at 51, 61-63).

Turning to the fleet offering, NSTAR Electric proposes a budget of \$2.0 million to support light duty electric fleets as follows: (1) 100 percent of the infrastructure on the utility side of the meter; (2) up to 100 percent of the average installation costs per port of the infrastructure on the customer side of the meter, not to exceed actual costs, with the ability to provide make-ready incentives of up to 150 percent of the average cost per port on a case-by-case basis; and (3) 100 percent of the EVSE costs for fleet customers in EJ communities,⁹ up to \$4,000 per Level 2 port, and 50 percent of the EVSE costs for all other passenger vehicle fleet customers after the first four ports (i.e., excluding the first four ports for which the customer receives no financial assistance), up to \$2,000 per Level 2 port, not to exceed actual costs (D.P.U. 21-90, Exh. ES-KB-1, at 67-68).¹⁰ The company also proposes to provide fleet assessment services for up to 100 private and non-profit fleet customers and to develop online fleet planning and total cost of ownership (“TCO”) tools for fleet customers (D.P.U. 21-90, Exh. ES-KB-1, at 67, 69).¹¹

⁹ For fleets to be eligible for the EJ community level of support, NSTAR Electric proposes that the fleet operators must either be registered in or operate more than 50 percent of the time within census block groups that meet any of the Commonwealth’s EJ community criteria (D.P.U. 21-90, Exh. ES-KB-1, at 68-69).

¹⁰ NSTAR Electric also proposes to periodically recalculate the rebate incentive levels based on station price benchmark changes, the availability of third-party funding, and customer interest in the program (D.P.U. 21-90, Exh. ES-KB-1, at 68).

¹¹ To maintain a consistent customer experience for fleet operators across the state, NSTAR Electric and National Grid propose to collaborate on the development of the online fleet planning and TCO tools for fleet customers and issue a joint RFP to select a single vendor (D.P.U. 21-90, Exh. ES-KB-1, at 69-70).

c. Equity Pilot Proposals

NSTAR Electric proposes two equity pilots: (1) \$2.0 million for a EJ communities car sharing pilot; and (2) \$3.0 million for a medium- and heavy-duty fleet pilot for EJ communities (D.P.U. 21-90, Exhs. ES-KB-1, at 6; ES-KB-2). The company proposes to develop and implement an equity-focused electric car sharing pilot in partnership with other entities, which may include vehicle providers, community-based organizations, carsharing platform operators, municipalities, and other EJ community stakeholders (D.P.U. 21-90, Exh. ES-KB-1, at 72-73). As part of the car sharing pilot, the company proposes to provide financial support for charging infrastructure and other operational and financial support necessary to support the pilot (D.P.U. 21-90, Exh. ES-KB-1, at 72-73).

Regarding the EJ communities medium- and heavy-duty EV fleet pilot, the company proposes to provide financial support for charging infrastructure and EVSE to approximately 120 medium- and heavy-duty fleet vehicles that serve EJ communities, including, but not limited to, school buses, community transport services, and last mile delivery fleets (D.P.U. 21-90, Exh. ES-KB-1, at 73-74).

d. Other Supporting Proposals

To implement its Phase II EV program proposal, NSTAR Electric proposal also includes: (1) \$10.0 million to hire twelve incremental full-time employees to support the expanded Phase II EV program, including a EV implementation manager, a construction lead, a project coordinator, four program managers, three EV account executives, and two analysts; (2) \$10.1 million for a marketing and outreach plan to drive awareness of and participation in the proposed EV offerings through a variety of channels; (3) \$0.3 million for information technology

and back-office system upgrades, including investment in a workflow management platform to manage customer applications to the public and workplace, MUD, and fleet segment offerings and to track and document program deployment progress; and (4) a joint workforce development and electrician training program (D.P.U. 21-90, Exhs. ES-KB-1, at 85-89, 90-93; ES-KB-5).

Regarding the workforce development and electrician training proposal, NSTAR Electric proposes to co-sponsor with National Grid and Unitil a workforce development and electrician training program to: (1) support approximately 75 underrepresented entrants to the EV workforce, and (2) educate approximately 1,000 electricians on electrical work related to EV charging infrastructure (D.P.U. 21-90, Exh. ES-KB-1, at 74-78). More specifically, the Companies propose to partner with a vendor with expertise in workforce development to identify market needs, develop a curriculum, outline a structure to the initiative, and execute the program (D.P.U. 21-90, Exh. ES-KB-1, at 76). Additionally, the Companies propose to coordinate with key partners, such as the International Brotherhood of Electrical Workers, the Massachusetts Clean Energy Center (“MassCEC”), the Massachusetts Clean Cities Coalition, and MassHire, to develop proposed initiatives, avoid duplication with other available workforce development and electrician training initiatives, and ensure consistency (D.P.U. 21-90, Exh. ES-KB-1, at 77). The Companies also propose to explore opportunities to recruit additional sponsors, such as automakers and charging station providers, to expand the initiative’s reach and decrease each sponsor’s costs (D.P.U. 21-90, Exh. ES-KB-1, at 77). NSTAR Electric’s share of the joint workforce development and electrician training proposal is \$1.2 million (D.P.U. 21-90, Exh. ES-KB-1, at 8).

NSTAR Electric also proposes that it be allowed the flexibility to move up to 20 percent of program funds from one segment to another or within each segment without prior Department approval (D.P.U. 21-90, Exh. ES-KB-1, at 89-90). Moreover, the company proposes to have the flexibility to adjust components within the programs, including incentives and rebate levels, customer eligibility requirements, and the distribution of port types (D.P.U. 21-90, Exh. ES-KB-1, at 89-90). Additionally, NSTAR Electric proposes to have the flexibility to initiate a mid-term review at the end of the second year of the Phase II EV program during which the company could propose substantial modifications to the EV program, including EVSE ownership models, pilot program scale and scope, and program administration costs and considerations (D.P.U. 21-90, Exh. ES-KB-1, at 90).

2. National Grid

a. Overview

National Grid proposes a four-year Phase III EV program with associated costs of approximately \$277.8 million (D.P.U. 21-91, Exhs. NG-EVPP-1, at 9, 123; NG-EVPP-2). The proposed Phase III EV program consists of three components: (1) make-ready and EVSE incentive proposal; (2) an expanded off-peak charging rebate offering; and (3) other supporting proposals, including a co-located battery energy storage pilot, funding for additional employees, a marketing and outreach plan, supporting system upgrades, and a joint workforce development and electrician training proposal (D.P.U. 21-91, Exh. NG-EVPP-1, at 10).

b. Make-Ready and EVSE Incentive Proposal

National Grid's make-ready and EVSE incentive proposal includes three segments: (1) a public and workplace offering; (2) a residential offering; and (3) a fleet offering (D.P.U. 21-91,

Exh. NG-EVPP-1, at 31). The proposed public and workplace offering includes a budget of approximately \$96.8 million, consisting of: (1) \$72.85 million for make-ready incentives; (2) \$18.62 million for EVSE rebates; (3) \$1.38 million for networking incentives; (4) \$1.58 million for pole-mounted EVSE; (5) \$0.5 million for DCFC commitments; and (6) \$1.84 million for program management (D.P.U. 21-91, Exhs. NG-EVPP-1, at 52-53, 123; NG-EVPP-2). Through the public and workplace offering, National Grid proposes to provide financial incentives for: (1) 100 percent of the infrastructure costs on the utility side of the meter for proprietary¹² and non-proprietary network EVSE; (2) up to 100 percent of the average installation costs of the infrastructure on the customer side of the meter for non-proprietary network EVSE and 50 percent of the average installation costs of the infrastructure on the customer side of the meter for proprietary network EVSE,^{13,14} not to exceed actual installation costs; (3) for Level 2 EVSE, 100 percent of the installed costs for up to ten ports in EJ communities, 50 percent of the installed costs for ports three through ten for municipalities, and

¹² Proprietary networks either use proprietary hardware or restrict charging access to specific vehicle brands (D.P.U. 21-90, Exh. NG-EVPP-1, at 43).

¹³ To account for certain site-specific characteristics and potential cost-shifts in the industry, the company proposes to provide make-ready incentives for up to 150 percent of the average installation costs of the infrastructure on the customer side of the meter on a case-by-case basis (D.P.U. 21-91, Exh. NG-EVPP-1, at 43). National Grid also proposes to periodically recalculate the average customer-side infrastructure costs for each installation type to reflect current market dynamics (D.P.U. 21-91, Exh. NG-EVPP-1, at 43).

¹⁴ For projects that co-locate proprietary network EVSE with non-proprietary network EVSE at a four to one ratio of proprietary network EVSE ports to non-proprietary network EVSE ports, National Grid proposes to provide financial incentives equal to 65 percent of the average installation costs of the infrastructure on the customer side of the meter (D.P.U. 21-91, Exh. NG-EVPP-1, at 43-44).

50 percent of the installed costs for ports five through ten for all other customers; (4) for public DCFC EVSE in EJ communities, \$40,000 per port for ports between 50 kW and 150 kW, up to \$400,000, and up to \$80,000 per port for ports 150 kW and above; (5) for public DCFC EVSE outside of EJ communities, \$40,000 per port above 50 kW, with a minimum of 100 kW per site, up to \$400,000; and (6) four years of networking at \$480 per port for public Level 2 chargers and any Level 2 chargers in EJ communities (D.P.U. 21-91, Exh. NG-EVPP-1, at 43-45).

Additionally, for sites with access to long-dwell time parking, National Grid proposes to provide make-ready incentives for up to 500 Level 1 chargers (D.P.U. 21-91, Exh. NG-EVPP-1, at 40).

National Grid also proposes to install, own, and operate approximately 200 ports on company-owned electric distribution poles in up to ten municipalities over the course of the four-year Phase III EV program (D.P.U. 21-91, Exh. NG-EVPP-1, at 47-48). At the end of the four-year EV program, the company proposes to sell the pole-mounted EVSE to the municipalities in which the electric distribution poles are located or the open market (D.P.U. 21-91, Exh. NG-EVPP-1, at 47).

Additionally, National Grid proposes to build, own, and operate up to 20 150-kw DCFC ports across up to ten pre-identified underserved or high-need EJ communities if gaps in DCFC deployment exist at the mid-point of the EV program (D.P.U. 21-91, Exh. NG-EVPP-1, at 46-47). The company states that it will provide notice to station developers that these gaps in DCFC deployment exist six months prior to DCFC deployment to allow the private market to address these gaps before the company does (D.P.U. 21-91, Exh. NG-EVPP-1, at 46-47).

Turning to the residential program, National Grid proposes a budget of \$64.08 million, comprised of: (1) \$41.86 million for make-ready incentives; (2) \$10.41 million for EVSE

rebates; (3) \$1.0 million for networking incentives; (4) \$3.97 million for low-income/EJ communities turnkey installation; (5) \$1.2 million for EV site ready plans; and (6) \$6.64 million for program management (D.P.U. 21-91, Exh. NG-EVPP-1, at 10, 70, 123). For customers in one to four-unit properties, National Grid proposes to provide EVSE rebates, not to exceed actual costs, of up to: (1) \$700 for customers in one-unit properties; (2) \$1,400 for customers in two to four-unit properties; (3) an additional rebate of \$300 per customer for installation of networked Level 2 EVSE; and (4) 100 percent of Level 2 EVSE costs for low-income customers and customers in EJ communities, \$1,700 for customers in one-unit properties, and \$2,700 for customers in two to four-unit properties (D.P.U. 21-91, Exh. NG-EVPP-1, at 62-64). National Grid also proposes to require these customers to enroll in one of the company's managed charging programs, either the expanded off-peak charging rebate program¹⁵ or the EV demand response program through its energy efficient program,¹⁶ with an option to opt out after the first year (D.P.U. 21-91, Exh. NG-EVPP-1, at 63, 87-91).¹⁷

¹⁵ The expanded off-peak charging rebate proposal incentivizes customers to charge their EVs during off-peak periods, at times when electrical demand on the company's distribution system is low (D.P.U. 21-91, Exh. NG-EVPP-1, at 63). This proposal is a continuation and expansion of the company's off-peak charging rebate program within its Phase II EV program (D.P.U. 21-91, Exh. NG-EVPP-1, at 87-91).

¹⁶ The EV demand response program incentivizes customers to limit EV charging on system peak days (i.e., days with the most electrical demand on the company's distribution system) (D.P.U. 21-91, Exh. NG-EVPP-1, at 63).

¹⁷ The company states that it will consider good cause exceptions to the managed charging enrollment requirement for a portion of customers in two to four-unit properties because these customers have shared parking or do not own or lease an EV (D.P.U. 21-91, Exh. NG-EVPP-1, at 63).

Regarding MUDs with five or more units, National Grid proposes to provide financial rebates of: (1) 100 percent of the infrastructure cost on the utility side of the meter; (2) up to 100 percent of the infrastructure cost on the customer side of the meter, with the ability to provide make-ready incentives of up to 150 percent of the average cost per port on a case-by-case basis; (3) up to 100 percent of the average cost per port for sites in EJ communities, up to \$4,000 per Level 2 port, not to exceed actual costs, and 50 percent of the average cost per port for other sites, up to \$2,000 per Level 2 port, not to exceed actual costs; and (4) \$120 per port per year for four years for networking costs upon request (D.P.U. 21-91, Exh. NG-EVPP-1, at 65-66). For MUDs with 20 or more units, National Grid proposes to provide financial support of up to \$6,000 for the cost of an EV ready site plan on the long-term infrastructure and equipment approach to installing at least one Level 2 port per residential unit (D.P.U. 21-91, Exh. NG-EVPP-1, at 66-67).

For the fleet offering, National Grid proposes a budget of \$98.23 million, consisting of: (1) \$17.81 million for make-ready incentives; (2) \$8.47 million for EVSE rebates; (3) \$3.25 million for fleet assessment services; (4) \$52.5 million for rebates for school buses in EJ communities; (5) \$15 million for utility-side system expansion; and (6) \$1.2 million for program management (D.P.U. 21-91, Exh. NG-EVPP-1, at 10, 82, 123). The proposed fleet offering would provide financial incentives to all fleet types for: (1) 100 percent of all infrastructure costs; (2) for Level 2 EVSE, 100 percent of the EVSE costs for fleet customers in

EJ communities,¹⁸ up to \$4,000 per Level 2 port, and 50 percent of the EVSE costs for all other fleet customers, up to \$2,000 per Level 2 port, not to exceed actual costs; and (3) for DCFC EVSE, 100 percent of the EVSE costs for fleet customers in EJ communities, up to \$80,000 per port, and 50 percent of the EVSE costs for all other fleet customers, up to \$40,000 per port (D.P.U. 21-91, NG-EVPP-1, at 73, 76).¹⁹ National Grid also proposes to: (1) provide fleet assessment services for up to 150 private and non-profit fleet customers;²⁰ (2) conduct an additional 25 public fleet assessments by 2025 through the company's Phase II EV program; and (3) develop online fleet planning and TCO tools for fleet customers (D.P.U. 21-91, Exh. NG-EVPP-1, at 73-74, 76-77, 80).²¹ Additionally, the company proposes to provide approximately 300 rebates to cover the incremental purchase price of electric school buses operating in EJ communities (D.P.U. 21-91, Exh. NG-EVPP-1, at 74, 77-79, 80). National Grid also proposes a utility-side system expansion budget of approximately \$15 million for system

¹⁸ For fleets to be eligible for the EJC level of support, the fleet operators must either be registered in or operate more than 50 percent of the time within census block groups that meet any of the Commonwealth's EJC criteria (D.P.U. 21-91, Exh. NG-EVPP-1, at 80-81).

¹⁹ The company proposes to target 40 percent of its fleet make-ready funding in EJs (D.P.U. 21-91, Exh. NG-EVPP-1, at 13, 73, 80).

²⁰ National Grid proposes to target 40 percent of its 150 fleet assessments in EJs (D.P.U. 21-91, Exh. NG-EVPP-1, at 13, 80).

²¹ To maintain a consistent customer experience for fleet operators across the state, National Grid and NSTAR Electric propose to collaborate on the development of the online fleet planning and TCO tools for fleet customers and issue a joint RFP to select a single vendor (D.P.U. 21-91, Exh. NG-EVPP-1, at 77).

upgrades to accommodate estimated large-scale fleet loads (D.P.U. 21-91, Exh. NG-EVPP-1, at 83).

c. Expanded Off-Peak Charging Rebate Proposal

National Grid proposes a budget of \$3.8 million comprised of: (1) \$1.6 million for its off-peak charging rebate program for up to 1,000 medium- and heavy-duty electric vehicles, such as trucks and buses; and (2) \$2.2 million to continue the residential off-peak rebate program through 2025 (D.P.U. 21-91, Exh. NG-EVPP-1, at 74, 79, 84-87, 93-94, 123).²² In addition, the company proposes to offer customers the ability to opt-in to an automated, flexible scheduling EV charging service through a third-party implementation vendor that would allow the vendor to schedule their charging to help maximize their off-peak charging rebates (D.P.U. 21-91, Exh. NG-EVPP-1, at 87-89).

d. Other Supporting Proposals

National Grid proposes a co-located energy storage pilot with a \$2.0 million budget (D.P.U. 21-91, Exh. NG-EVPP-1, at 123). National Grid proposes to provide financial support for DCFC and energy storage integrated technologies at up to five project sites where current distribution system capacity may be insufficient to support DCFCs without costly system upgrades (D.P.U. 21-91, Exh. NG-EVPP-1, at 51-52).

National Grid also proposes a budget of: (1) \$9.17 million to hire seventeen incremental full-time employees, including ten employees for program management roles and seven for

²² In D.P.U. 18-150 as part of the company's Phase II EV program, the Department approved National Grid's off-peak charging rebate program, which provides rebates of three or five cents per kWh for EV charging during off-peak hours (i.e., between 9:00 pm and 1:00 pm) (D.P.U. 21-90, Exh. NG-EVPP-1, at 85).

dedicated support roles due to the expansion of the previous EV programs; (2) \$5.6 million for a marketing and outreach plan to increase awareness of and participation in the proposed EV offerings through a variety of channels; (3) \$1.78 million for information technology and back-office system upgrades, including the development of a web portal to accept and manage customer applications; and (4) \$1.51 million for its share of the joint workforce development and electrician training proposal described in Section III.A.1.d, above (D.P.U. 21-91, Exhs. NG-EVPP-1, at 97-98, 112-117, 119-123; NG-EVPP-4).

In addition, National Grid proposes to have the flexibility to move up to 20 percent of program funds from one program segment to another or within each segment without prior Department approval (D.P.U. 21-91, Exh. NG-EVPP-1, at 118). The company also proposes to have the flexibility to adjust components within the programs, including incentives and rebate levels, customer eligibility requirements, and the distribution of port types (D.P.U. 21-91, Exh. NG-EVPP-1, at 118). Further, National Grid proposes to have the flexibility to initiate a mid-term review at the end of the second year of the Phase III EV program during which the company could propose substantial modifications to the EV program (D.P.U. 21-91, Exh. NG-EVPP-1, at 118).

National Grid also requests a waiver of the transformer surcharge associated with the company's general service rate for small C&I customers, Rate G-1, because the company's proposed public and workplace program would provide rebates for the costs the transformer

surcharge was designed to recover (D.P.U. 21-91, Exh. NG-EVPP-1, at 95).²³ The company also proposes certain revisions to its approved General Service – Small C&I G-1 tariff (M.D.P.U. No. 1471 (proposed)).

3. Unitil

a. Overview

Unitil proposes a five-year EV program with an associated budget of approximately \$1.02 million (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 32-33, 40, 56). Unitil's proposed EV program consists of: (1) a make-ready and EVSE incentive proposal; and (2) other supporting proposals, including a marketing, communications, and education plan and a joint workforce development and electrician training proposal (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 5).

b. Make-Ready and EVSE Incentive Proposal

Unitil's make-ready and EVSE incentive proposal includes two components: (1) a public EV infrastructure offering, and (2) a residential offering (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 32). For the public EV infrastructure offering, Unitil proposes a budget of approximately \$538,000 to cover all infrastructure costs for five Level 2 sites and one DCFC site (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 36, 38). Customers participating in the company's public EV infrastructure offering would be required to provide a minimum of two of their own EVSEs with non-proprietary charging plugs and networked functionality (D.P.U. 21-92, Exh. CSVG-1 (Rev.)

²³ The transformer surcharge recovers the capital expense associated with the installation of a larger transformer than is typically needed for a small C&I customer (D.P.U. 21-91, Exh. NG-EVPP-1, at 95).

at 36-38). All customers enrolled in the company's public EV infrastructure offering would be eligible to enroll in the company's DCA program (D.P.U 21-92, Exh. CSVG-1 (Rev.) at 42).

Regarding the residential offering, Unitil proposes a budget of \$300,000 (D.P.U 21-92, Exh. CSVG-1 (Rev.) at 32-33). For customers in one to four-unit properties, Unitil proposes to provide rebates of up to: (1) \$700 for the installation of Level 2 chargers; (2) an additional \$300 rebate for the procurement of smart, managed Level 2 chargers; and (3) for low-income customers, 100 percent of the installation and procurement costs for smart, managed Level 2 EVSE chargers, up to \$1,700 (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 32). The company also proposes to require these customers to enroll in the company's residential EV TOU rate (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 32).²⁴

c. Other Supporting Proposals

Unitil's EV program proposal also includes: (1) a budget of approximately \$160,000 for an EV and TOU marketing, communications, and education plan to increase consumer awareness, interest in and adoption of EVs, EV charging infrastructure, and EV/TOU rates, and (2) \$23,000 for Unitil's share of the joint workforce development and electrician training proposal described in Section III.A.1.d, above (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 43-50, 52-54, 56).

²⁴ Unitil states that it intends to assess EVSE alternative metering capabilities via data collected through its residential EV program (D.P.U 21-92, Exh. CSVG-1 (Rev.) at 33-35). Further, the company states that it will submit an annual report to the Department outlining the number of residential customer participants in the program, incentives distributed, third-party partners within the program, and periodic findings related to embedded EVSE meters and future use cases (D.P.U 21-92, Exh. CSVG-1 (Rev.) at 35).

B. Positions of the Parties

1. Introduction

Intervenors generally support the Companies' EV charging infrastructure proposals (see e.g., D.P.U. 21-90, Attorney General Track 1 Brief at 8; D.P.U. 21-91, Attorney General Track 1 Brief at 11; D.P.U. 21-92, Attorney General Track 1 Reply Brief at 1; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 5, 16, 19; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Brief at 4, 35-36; D.P.U. 21-90, CEP Track 1 Brief at 1, 11-16; D.P.U. 21-92, ChargePoint Track 1 Brief at 1; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Brief at 1-2; D.P.U. 21-91, Electrify America Track 1 Brief at 4-5; D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 3-4, 16; D.P.U. 21-90/D.P.U. 21-91, FreeWire Track 1 Reply Brief at 3; D.P.U. 21-90/D.P.U. 21-91, Shell Track 1 Brief at 1-2, 8-13, 16-22; D.P.U. 21-90, Compact Track 1 Brief at 1-2). Nevertheless, many intervenors recommend modifications to the Companies' proposals, as summarized below.

2. Make-Ready and EVSE Incentive Proposal

a. General Issues

i. Program Funding Prioritization

(A) Attorney General

The Attorney General urges the Department to reprioritize the Companies' proposed make-ready and EVSE incentive offerings in order to maximize public benefits and to target spending towards segments with the most barriers to transportation electrification and those least likely to be served by the competitive market (D.P.U. 21-90, Attorney General Track 1 Brief at 11-12; D.P.U. 21-91, Attorney General Track 1 Brief at 13-14). Specifically, the Attorney

General recommends that the Department direct the Companies to adopt the following general prioritization framework: (1) the highest level of funding is targeted at load management and EV energy management systems (“EMS”),²⁵ low-income and income-qualified customers in EJ communities, and mass transit fleet electrification; (2) a high level of funding is focused on publicly accessible public charging; (3) a medium level of funding is targeted at publicly accessible workplace and multi-unit dwellings, restricted access public charging, one to four-unit income-qualified residential customers, state and local government fleets, and small business fleets operating in EJ communities; (4) a low level of funding is focused on restricted access workplaces and multi-unit dwellings; and (5) the lowest level of funding is targeted at private fleets and proprietary networks (D.P.U. 21-90, Attorney General Track 1 Brief at 11-12; D.P.U. 21-91, Attorney General Track 1 Brief at 13-14).

The Attorney General maintains that her proposed prioritization recommendations takes into account the following factors: (1) the broad public benefits, irrespective of individual program participation, from load management and EV EMS programs; (2) the availability of state and federal funding in addition to private investment for transportation electrification efforts and the need for financial incentives for higher-income individuals and large private fleets, given that transportation electrification is becoming an increasingly cost-effective and beneficial option; and (3) the widespread benefits from targeting underserved market segments and those with the most barriers to EV adoption (D.P.U. 21-90, Attorney General Track 1 Brief at 8-9, 12-14, 27; D.P.U. 21-91, Attorney General Track 1 Brief at 11-12, 15-17;

²⁵ EV EMS is a means of controlling on-site EV loads to minimize infrastructure costs (D.P.U. 21-90, Exh. ES-KB-1, at 61; D.P.U. 21-91, Exh. NG-EVPP-1, at 67).

D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 4-5; D.P.U. 21-92, Attorney General Track 1 Brief at 8-12). The Attorney General also contends that her proposed prioritization framework provides a meaningful level of protection for low-income ratepayers that is absent from the Companies' proposals (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 6-7; D.P.U. 21-92, Attorney General Track 1 Reply Brief at 4). In addition to her general prioritization framework, the Attorney General also proposes specific prioritization recommendations for each component of the Companies' make-ready and EVSE incentive proposals. For the public and workplace program proposals, the Attorney General recommends the following prioritization framework: (1) the highest level of incentives to publicly accessible EV charging sites located in EJ communities; (2) a high level of incentives to publicly accessible EV charging sites located in non-EJ communities; (3) a high level of incentives to restricted access EV charging sites in EJ communities; and (4) a medium level of incentives to restricted access EV charging sites in non-EJ communities (D.P.U. 21-90, Attorney General Track 1 Brief at 35; D.P.U. 21-91, Attorney General Track 1 Brief at 38; D.P.U. 21-92, Attorney General Track 1 Brief at 26).

For the purposes of prioritizing EV charging infrastructure at publicly accessible locations, the Attorney General urges the Department to adopt the New York Public Utilities Commission's ("NY PUC") definition of "publicly accessible" EV charging stations²⁶ because it

²⁶ The NY PUC defines "publicly accessible" EV charging stations as those that are accessible to the public without an access fee or restricted access, except for paid municipal parking. New York Public Service Commission, Order Establishing Electric Vehicle Infrastructure Make-Ready Program and Other Programs, No. 18-E-0138, at 41-42 (2020).

would: (1) maximize the public interest by prioritizing the most widely available and accessible parking locations for utility-funded rebates; (2) incentivize program participants to make their parking facilities free to the public for charging; and (3) eliminate unnecessary and redundant financial incentives to private program participants (D.P.U. 21-90, Attorney General Track 1 Brief at 28-29; D.P.U. 21-91, Attorney General Track 1 Brief at 32-33; D.P.U. 21-92, Attorney General Track 1 Brief at 20). While the Attorney General recommends an increased level of incentive funding for program participants that meet the NY PUC's definition of publicly accessible, she does not advocate entirely eliminating financial incentives to program participants that do not meet this definition (D.P.U. 21-90, Attorney General Track 1 Brief at 29; D.P.U. 21-91, Attorney General Track 1 Brief at 32; D.P.U. 21-92, Attorney General Track 1 Brief at 21).

The Attorney General opposes adoption of the definition of "public electric vehicle charging station" contained in G. L. c. 25A, § 16 as recommended by ChargePoint because: (1) the statute was neither debated nor designed with ratepayer-funded utility incentives, or the equitable distribution thereof, in mind; (2) the definition includes all private site hosts, irrespective of access fees; and (3) the definition's "temporal flexibility" could allow private parties to collect ratepayer-funded subsidies without making their facilities publicly available (D.P.U. 21-90, Attorney General Track 1 Brief at 31-32; D.P.U. 21-91, Attorney General Track 1 Brief at 33-34; D.P.U. 21-92, Attorney General Track 1 Brief at 21-23). The Attorney General, therefore, requests that the Department adopt a definition of publicly accessible that limits the extent to which private program participants can take advantage of ratepayer subsidies while also restricting access to their facilities with either exorbitant parking rates, temporal restrictions, or

both (D.P.U. 21-90, Attorney General Track 1 Brief at 32; D.P.U. 21-91, Attorney General Track 1 Brief at 34; D.P.U. 21-92, Attorney General Track 1 Brief at 23).

Finally, to ensure success in prioritization of investments in EJ communities, the Attorney General argues that the Companies should be required to incorporate community and stakeholder input and to prioritize EVSE deployment in locations that have stakeholder and community support to avoid unintended consequences related to EV charger siting and to ensure that the EV chargers provide the intended benefits and meet the particular needs of that community (D.P.U. 21-90, Attorney General Track 1 Brief at 26; D.P.U. 21-91, Attorney General Track 1 Brief at 30; D.P.U. 21-92, Attorney General Track 1 Brief at 18).

Turning to the residential offerings, the Attorney General recommends the following prioritization framework for the residential offerings: (1) a medium to high level of incentives for low-income customers in one to four-unit households (i.e., four-person household income of up to \$105,001 annually); (2) a medium level of incentives for moderate-income customers in one to four-unit households (i.e., four-person household income up to \$157,502 annually); (3) no incentives to non-income qualified customers in one to four-unit households; (3) a medium to high level of incentives for publicly accessible MUDs, MUDs located in EJ communities, or MUDs that are an affordable housing facility or have at least 50 percent of households that are low- or moderate-income households; (4) a medium level of incentives to publicly accessible MUDs in non-EJ communities; (5) a low level of incentives for restricted access MUDs in EJ communities; and (6) a low level of incentives for restricted access MUDs in non-EJ communities (D.P.U. 21-90, Attorney General Track 1 Brief at 42; D.P.U. 21-91, Attorney General Track 1 Brief at 48; D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief

at 10; D.P.U. 21-92, Attorney General Track 1 Brief at 30; D.P.U. 21-92, Attorney General Track 1 Reply Brief at 8-9). According to the Attorney General, this prioritization framework would maximize the public interest and effectively target spending toward customers that are least likely to be served by the competitive market and with the most barriers to EV adoption (D.P.U. 21-90, Attorney General Track 1 Brief at 34, 41; D.P.U. 21-91, Attorney General Track 1 Brief at 37; D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 11-12; D.P.U. 21-92, Attorney General Track 1 Brief at 19; D.P.U. 21-92, Attorney General Track 1 Reply Brief at 2, 6-8). Even if the Department does not adopt her recommended residential prioritization framework, the Attorney General recommends, at a minimum, that the Department direct the Companies to limit program funding to customers who own or lease a new or used EV with a purchase price of less than \$50,000 (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 12; D.P.U. 21-92, Attorney General Track 1 Reply Brief at 9).

Finally, for NSTAR Electric's and National Grid's fleet proposals, the Attorney General recommends the following prioritization framework: (1) a high level of incentives for mass transit; (2) a medium level of incentives for state and local government-owned fleets; (3) a medium level of incentives for small fleets operating in EJ communities;²⁷ and (4) no incentives for private fleets in non-EJ communities (D.P.U. 21-90, Attorney General Track 1 Brief at 47; D.P.U. 21-91, Attorney General Track 1 Brief at 52; D.P.U. 21-90/D.P.U. 21-91, Attorney

²⁷ To define small fleets, the Attorney General recommends using the definition in the energy efficiency programs, which defines small and micro businesses as businesses with account consumption of less than 1.5 gigawatt-hours (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 13, citing Three Year Energy Efficiency Plans, D.P.U. 21-120 through D.P.U. 21-129, Exhibit DPU-Comm 2-8, Att. (c) at 15 (2021)).

General Track 1 Reply Brief at 12-13). Moreover, the Attorney General argues that the Department should deny NSTAR Electric's and National Grid's proposed fleet assessment services offering because: (1) they offer nothing unique from fleet assessment services offered by public and private vendors, and (2) they could interfere with the competitive market (D.P.U. 21-90, Attorney General Track 1 Brief at 46; D.P.U. 21-91, Attorney General Track 1 Brief at 51).

(B) Other Intervenors

Several intervenors object, in whole or in part, to the Attorney General's prioritization framework. CLF opposes the Attorney General's recommendation to prioritize funding for publicly accessible MUD sites because: (1) MUD parking lots are likely to be used almost exclusively by residents and their visitors; and (2) MUDs are often located in EJ communities (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Reply Brief at 7-8). CLF also urges the Department to reject the Attorney General's recommendation to restrict incentives for one to four-unit residential sites to low- and moderate-income customers because limiting the residential rebates to only a small subset of customers would unnecessarily delay the Commonwealth's achievement of its transportation electrification goals (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Reply Brief at 8). CLF, however, urges the Department to approve the proposed size and scale of the Companies' EV charging infrastructure programs because a reduction to the proposed program budgets could prevent the Commonwealth from achieving its greenhouse gas ("GHG") emissions reduction mandates and interim transportation electrification goals in Chapter 8 of the Acts of 2021, An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy ("2021 Climate Act")

(D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Brief at 4-5, 31, 35, 36; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Reply Brief at 2-4).

ChargePoint maintains that the Attorney General's proposed prioritization framework: (1) diminishes the importance of certain program segments in abating transportation emissions and would deprive low-income ratepayers of the benefits from broad EV adoption under the Companies' EV program proposals; (2) limits participation to a narrow subset of customers and reduces the number of customers that would modify EV charging behavior and participate in the Companies' managed charging programs; and (3) restricts access to the benefits of the EV charging infrastructure programs, which should be allocated to all sectors and customer classes that contribute to EV program funding (D.P.U. 21-90, ChargePoint Track 1 Brief at 1, 8-10; D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 3-4; D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 15-17; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 3-4; D.P.U. 21-92, ChargePoint Track 1 Brief at 1, 11-12; D.P.U. 21-92, ChargePoint Track 1 Reply Brief at 3). Further, Electrify America argues that the Attorney General's recommended prioritization matrix: (1) introduces complexity into the EV programs; (2) is unworkable and internally contradictory; (3) underestimates the dynamism of the competitive market and its responsiveness to financial incentives (D.P.U. 21-90, Electrify America Track 1 Brief at 5-8, 12; D.P.U. 21-91, Electrify America Track 1 Brief at 5-9, 15; D.P.U. 21-90/D.P.U. 21-91, Electrify America Track 1 Reply Brief at 5-6, 9).

Additionally, GECA and CEP argue that access to residential EV charging is critical to EV adoption (D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 3-4, 7-9; D.P.U. 21-90, CEP Track 1 Brief at 2, 16-18; D.P.U. 21-91, CEP Track 1 Brief at 2, 18-19). CEP therefore requests

that the Department approve the size and scale of the Companies' proposed residential make-ready programs (D.P.U. 21-90, CEP Track 1 Brief at 2, 16-18; D.P.U. 21-91, CEP Track 1 Brief at 2, 18-19). Further, GECA contends that limiting residential customer participation to low- and moderate-income customers would exclude many households from participating in the EV programs while targeting customers that are less likely to participate in the programs due to EV ownership costs and diminishing the effectiveness of the Companies' proposal to require customers to enroll in a load management program (D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 3-4, 7-9). ChargePoint, however, supports modified incentive levels based on income for residential participants, but with a minimum 50 percent rebate for qualified EVSE, to ensure customers purchase smart EVSE solutions and enroll in the Companies' managed charging programs (D.P.U. 21-92, ChargePoint Track 1 Brief at 12). Finally, FreeWire asks the Department to reject the Attorney General's recommended prioritization framework with respect to DCFCs because it would likely reduce the number of DCFC ports installed through the EV programs (D.P.U. 21-90, FreeWire Track 1 Brief at 7-8; D.P.U. 21-91, FreeWire Track 1 Brief at 7-8).

Turning to the fleet segment, DOER recommends that the Department approve NSTAR Electric's and National Grid's proposed fleet assessment services proposals and direct them to coordinate with MassCEC on program implementation (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 24-25). EVgo urges the Department to reject the Attorney General's prioritization framework with respect to make-ready incentives for private fleets because commercial vehicles contribute significantly to GHG emissions and, therefore, their enrollment in the EV programs is necessary to achieve the Commonwealth's climate goals

(D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Brief at 10, 12; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Reply Brief at 6-7, 8). Additionally, CLF recommends that the Department direct National Grid to dedicate at least 50 percent of its proposed fleet offering budget to supporting public transit fleets that operate primarily in EJ communities because residents of EJ communities are less likely to own their vehicles and, therefore, rely more on public transit than other communities (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Brief at 18-19, 36).

Several intervenors take issue with the Attorney General's recommended definition of publicly accessible and prioritizing publicly accessible sites. GECA opposes the Attorney General's recommendation to distinguish incentives between publicly accessible and non-publicly accessible EV chargers in the residential and workplace segments because doing so would create confusion, limit program participation, and limit the flexibility of site hosts that wish to provide EV charging for customers, employees, or residents (D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 14). ChargePoint, EVgo, and Electrify America assert that the Attorney General's proposed definition of publicly accessible parking contradicts the statutory definition of "public electric vehicle charging station" in G. L. c. 25A, § 16 (D.P.U. 21-90, ChargePoint Track 1 Brief at 1, 10-11; D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 2-3; D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 17-19; D.P.U. 21-92, ChargePoint Track 1 Brief at 1, 13-14; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 2-3; D.P.U. 21-92, ChargePoint Track 1 Reply Brief at 2; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Brief at 11-12, 13; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Reply Brief at 7-8; D.P.U. 21-90, Electrify America Track 1 Brief at 5-8, 12; D.P.U. 21-91, Electrify America Track 1 Brief at 5-9, 15; D.P.U. 21-90/D.P.U. 21-91, Electrify America Track 1 Reply Brief at 5-6, 9).

Further, ChargePoint contends that the Attorney General's recommended definition of publicly accessible: (1) eliminates all privately-owned public parking from EV program eligibility and is too restrictive; (2) adds unnecessary complexity into the programs that could confuse customers about incentive level eligibility; and (3) would eliminate program participants' flexibility to offer public access to charging during various times of the day (D.P.U. 21-90, ChargePoint Track 1 Brief at 1, 10-11; D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 2-3; D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 17-19; D.P.U. 21-92, ChargePoint Track 1 Brief at 1, 13-14; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 2-3; D.P.U. 21-92, ChargePoint Track 1 Reply Brief at 2). ChargePoint recommends that the Department adopt a more neutral definition of publicly accessible parking that would allow for more nuanced and efficient utilization of EV chargers (D.P.U. 21-90, ChargePoint Track 1 Brief at 12; D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 19; D.P.U. 21-92, ChargePoint Track 1 Brief at 14).

(C) NSTAR Electric and National Grid

NSTAR Electric and National Grid argue that the Attorney General's recommended prioritization framework should be rejected because: (1) the recommendations are arbitrary and impede the companies' ability to assist the Commonwealth in reaching its transportation electrification goals; (2) make-ready incentives and EVSE rebates are necessary to incentivize the development of EV chargers and overcome existing EV market barriers; (3) the Attorney General did not offer specific alternative program targets to those proposed by the companies; (4) the companies require flexibility to implement their programs to reach new market segments that continue to face barriers to EV charging station deployment based on lessons learned

through their respective Phase I EV programs; (5) the Attorney General's prioritization framework is incomplete and, in some categories, inconsistent in its treatment of similar investments; and (6) the distinction between publicly accessible and non-publicly accessible workplaces and MUDs is confusing and would be difficult to administer (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 20-23, 36-38; D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Reply Brief at 8, 10-12).

NSTAR Electric and National Grid also urge the Department to reject the Attorney General's recommended definition of publicly accessible because: (1) it contradicts the statutory definition in G. L. c. 25A, § 16; (2) it excludes sites that are open to the public but charge a fee for parking; and (3) the Attorney General failed to make a compelling argument for departing from the statutory definition of publicly accessible in G. L. c. 25A, § 16 (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 23-26, 37). NSTAR Electric and National Grid, therefore, request that the Department reject the Attorney General's recommended definition of publicly accessible (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 26).

In response to the Attorney General's residential offering prioritization framework, NSTAR Electric and National Grid urge the Department to reject the Attorney General's recommendation to limit participation in the residential program to low- and middle-income customers and reduce incentives for MUDs that are not publicly accessible, located in EJ communities, or in an affordable housing facility or are comprised of at least 50 percent low- or moderate-income residents because it would: (1) add a layer of complexity into the programs;

(2) limit the effectiveness of the programs by excluding a significant portion of the customers in the companies' service territories; (3) slow the adoption of EVs in the Commonwealth because customers are highly influenced by the availability of incentives, and the availability of at-home charging is critical to EV adoption; (4) the companies' proposals are sized to serve only 15 percent of one to four-unit residences in their respective service territories; (5) MUD charging stations mainly serve their residents and their guests; (6) MUDs are often located in EJ communities and serve low-income customers; (7) the Attorney General did not provide analyses to support its recommended rebate and incentive levels or produce evidence to suggest that her recommendations are more cost effective; and (8) the Attorney General's description of program-eligible MUDs is vague and its recommended tiered incentive levels for MUDs is vague and unworkable (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 44-47; D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Reply Brief at 9-10). For these reasons, NSTAR Electric and National Grid request that the Department approve the residential programs as proposed (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 47-48).

NSTAR Electric and National Grid also oppose the Attorney General's recommendation to exclude all private fleets except small private fleets operating in EJ communities from participation in the companies' fleet programs (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 51). NSTAR Electric and National Grid contend that private fleets should be eligible to participate in the companies' fleet programs because: (1) private fleets represent the vast majority of fleets operating in the Commonwealth and emit the most GHGs; (2) the electrification of more fleets benefits all residents of the Commonwealth;

(3) excluding private fleets from eligibility in the program will hamper the Commonwealth's ability to achieve its climate goals; (4) only thirteen percent of the Commonwealth's commercial vehicles are registered to government fleets; and (5) focusing the program primarily on mass transit unfairly excludes rural communities without significant mass transit options that rely on smaller fleets for transportation (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 51-52). NSTAR Electric and National Grid, therefore, urge the Department to reject the Attorney General's recommendation to exclude private fleets from participation in the companies' fleet programs (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 54).

NSTAR Electric and National Grid also encourage the Department to reject the Attorney General's recommendation to deny the fleet assessment services offerings because: (1) the companies are uniquely positioned to perform fleet assessment services because of their experience with distribution and transmission planning; (2) the companies can better plan for their own transmission and distribution upgrades if they are able to gain information and insight on the electrification of private fleets in their respective service territories; (3) the companies have a preexisting relationship with these customers and can assist them throughout the process of transitioning to an electric fleet; and (4) the companies' fleet assessment services offerings will simplify information gathering for all fleet operators, standardize the methodology for the companies' internal tracking, design, and planning, and accelerate the deployment of EV charging infrastructure projects (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 53-54). For these reasons, NSTAR Electric and National Grid request that the Department reject the Attorney General's recommendation to deny the fleet assessment

services offerings (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 54).

(D) Unitil

Unitil contends that its EV program should be approved as proposed because: (1) current EV charging infrastructure investment is not on pace to achieve the Commonwealth's environmental mandates or transportation electrification goals; (2) the Attorney General's position is based on data that provides no useful or relevant evidence about the EV market in the company's service territory; (3) Unitil's EVI-Pro Lite tool assumptions are reasonable because, for planning purposes, EV owners will seek to maximize their electric usage and minimize their gasoline usage if there is sufficient EV charging infrastructure in place; (4) in the absence of a territory-specific vehicle-type forecast, it was reasonable for the company to use the default values in the EVI-Pro Lite model; (5) the size of the proposed EV program is modest relative to the projected need in the company's service territory; and (6) the Attorney General's assertion that the EV program will primarily benefit wealthy homeowners to the detriment of low-income ratepayers is unsubstantiated (D.P.U. 21-92, Unitil Track 1 Brief at 23-30; D.P.U. 21-92, Unitil Track 1 Reply Brief at 6-8).

Unitil also argues that the Department should reject the Attorney General's recommendation to differentiate incentive levels by location because: (1) the Attorney General did not provide analyses to support the assertion that differentiation of incentive levels by location will produce more equitable outcomes, a more efficient or cost-effective program, or generate greater customer benefits, and (2) the Attorney General's recommendation would

increase the complexity of the program, confuse customers, and may increase the cost to administer the program (D.P.U. 21-92, Unitil Track 1 Brief at 36).

Turning to the Attorney General's recommended definition of publicly accessible, Unitil contends that the Attorney General's proposed definition should be rejected because the definition of "publicly available parking space" in G.L. c. 25A, § 16, appears in the same section as the codification of the standard of review applicable in these proceedings and is controlling in these proceedings, whereas the Attorney General's proposed definition of publicly accessible would unduly restrict eligibility for participation in the company's EV program and render the EV program unnecessarily complex and confusing (D.P.U. 21-92, Unitil Track 1 Brief at 37-38).

Unitil also urges the Department to reject the Attorney General's recommendation to limit participation in the residential program to low-income and moderate-income customers because: (1) Unitil already prioritizes income-eligible customers by offering them larger rebates; (2) the Department directed the company in D.P.U. 20-69-A to consider appropriate measures to decrease barriers to EV adoption in all communities across its service territory; (3) market data indicates that 80 percent of EV charging will occur at home; (4) limiting the residential program to only low- and moderate-income customers would impede the Commonwealth's ability to achieve its climate and transportation electrification goals; (5) EV adoption benefits all customers regardless of location because EVs produce cleaner air; (6) the residential program as proposed will encourage customers to install charging equipment that can be actively managed, which benefits all customers; and (7) requiring income-verification would increase the administrative costs of the program (D.P.U. 21-92, Unitil Track 1 Brief at 39-41; D.P.U. 21-92, Unitil Track 1 Reply Brief at 8-10). For these reasons, Unitil requests that the Department reject

the Attorney General's recommendation to limit participation in the residential program to only low- and moderate-income customers (D.P.U. 21-92, Unitil Track 1 Brief at 41; D.P.U. 21-92, Unitil Track 1 Reply Brief at 10).

Unitil also requests that the Department reject the Attorney General's recommendation to limit residential incentives to customers with vehicles with a purchase price of less than \$50,000 because: (1) the Attorney General did not provide sufficient justification for this requirement; (2) the additional eligibility requirement would likely increase the administrative costs and complexity of the residential program with no corresponding benefit; and (3) the eligibility requirement would likely delay program implementation and deter customer participation in the residential program (D.P.U. 21-92, Unitil Track 1 Brief at 42, 46-47).

ii. Program Term

(A) Attorney General

The Attorney General asserts that a three-year program term is a more appropriate term for the EV programs and that the budgets should be reduced accordingly because: (1) the EV industry has experienced tremendous growth that is likely to continue in the near term; (2) technology continues to change, improve, and provide new flexibility for how EVs are charged and batteries utilized; and (3) state and federal funding is becoming increasingly available to support EV adoption (D.P.U. 21-90, Attorney General Track 1 Brief at 25; D.P.U. 21-91, Attorney General Track 1 Brief at 28-29; D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 15; D.P.U. 21-92, Attorney General Track 1 Brief at 17). At the conclusion of the three-year program term, the Attorney General argues that the Companies could propose additional program offerings that are tailored to the changes that occurred in the

EV market over the previous three years (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 15; D.P.U. 21-92, Attorney General Track 1 Brief at 17-18). Further, the Attorney General contends that a three-year program term is preferable to a longer program term with annual reporting and a mid-term review (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 15).

(B) Other Intervenors

DOER requests that the Department reject the Attorney General's recommendation to limit the EV programs to three-year terms (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 14-15). Instead, DOER recommends that the Department direct the Companies to include recommendations for the fourth year in the annual report at the end of the third year of the EV programs, including recommendations for future EV program development or a reduction in the current EV program incentive levels if competitive market conditions have substantially improved (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 15-16). Shell recommends that the Department leverage the proposed mid-term review to consider potential modifications to or expansion of the companies' EV programs (D.P.U. 21-90/D.P.U. 21-91, Shell Track 1 Brief at 22).

(C) NSTAR Electric and National Grid

NSTAR Electric and National Grid argue that the Attorney General's recommendation to eliminate the fourth year of the EV programs should be rejected because: (1) the companies based the duration of their EV programs on reasonable assumptions and forecasts of the number of EV charging stations needed in each market segment to support the Commonwealth's decarbonization goals while the Attorney General did not analyze the impacts of its

recommendations on the Commonwealth's ability to meet its decarbonization goals; (2) the GHG emissions reduction benefits of EV adoption is shared by all residents; (3) the companies' EV programs are designed to prioritize EV charging where it is needed the most to address barriers to EV adoption; (4) it is unlikely that the need for EV charging incentives will materially diminish over the four-year terms of the EV programs; (5) removing the fourth year of the EV programs would introduce a significant gap between available funding and the Commonwealth's 2025 decarbonization goals, which the private market is unlikely to fill without utility funding; (6) a four-year program term provides longer-term certainty for industry partners, vendors, and customers as they plan EV charging investments and purchasing decisions; (7) a three-year program term would limit the companies' ability to make meaningful mid-term modifications to the EV programs after the first two years of the programs; and (8) the Attorney General has not presented evidence demonstrating that the fourth year of the EV programs will be unnecessary (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 16-19; D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Reply Brief at 8).

(D) Unitil

Unitil contends that the Department should reject the Attorney General's recommendation to reduce the EV program term from five years to three years because: (1) it is arbitrary and not supported by any evidence or analysis; (2) an arbitrary cap on the EV program term will significantly impede the company's ability to make a meaningful contribution to stimulating EV adoption in its service territory; and (3) a five-year program would provide a more significant commitment to entice potential customers, vendors, and other industry stakeholders to participate in the EV program (D.P.U. 21-92, Unitil Track 1 Brief at 31-32).

iii. Budget Flexibility(A) Attorney General

The Attorney General asserts that the Department should prohibit NSTAR Electric and National Grid from shifting EV program budgets within and between program segments, altering customer eligibility criteria, or modifying rebate incentive levels and port target distributions without Department oversight or opportunity for stakeholder review because: (1) NSTAR Electric and National Grid could provide additional EV program funding to one program or segment at the expense of another, which could disproportionately benefit high-income customers, and (2) any changes to customer eligibility criteria, rebate incentive levels, or port target distributions could have significant consequences for the EV programs (D.P.U. 21-90, Attorney General Track 1 Brief at 20-23; D.P.U. 21-91, Attorney General Track 1 Brief at 22-26).

(B) Other Intervenors

DOER recommends that the Department allow NSTAR Electric and National Grid to propose budget shifting between market segments in their annual reports to the Department with appropriate demonstration of program utilization, changing market trends, or other customer preferences (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 8).

(C) NSTAR Electric and National Grid

NSTAR Electric and National Grid oppose the Attorney General's recommendation to reject the companies' program management proposal because the nascent and evolving EV market requires flexibility to respond to the market and customers' needs and the flexibility requested is limited to shifting no more than 20 percent of the proposed budget between program

segments (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 76). Further, the companies argue that their commitment to low-income customers and customers in EJ communities will not change as a result of the requested budget flexibility but that the flexibility will ensure that the companies can prioritize EJ community investments as the market demands and where the benefits are maximized for communities and EJ community residents (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 76).

iv. Eligibility Requirements

(A) Attorney General

The Attorney General recommends that the Companies: (1) require all applicants to apply for MassEVIP funding and any other applicable state or federal funding, and to certify that they did so as a prerequisite to participation in the Companies' EV programs; (2) reduce the rebate and incentive level received through the EV programs by the amount received from external funding sources; (3) ensure that all incentives received by the program participant do not exceed the program participants' actual infrastructure and EVSE costs; and (4) coordinate with state agencies to monitor available external funding sources and track program participant usage of such funding (D.P.U. 21-90, Attorney General Track 1 Brief at 24; D.P.U. 21-91, Attorney General Track 1 Brief at 27; D.P.U. 21-92, Attorney General Track 1 Brief at 16). The Attorney General also recommends that the Department deny cost recovery for EV program rebates or incentives paid to program participants that fail to apply for available external funding prior to applying for funding through the EV programs (D.P.U. 21-90, Attorney General Track 1 Brief at 24; D.P.U. 21-91, Attorney General Track 1 Brief at 27).

(B) Other Intervenors

Several intervenors oppose the Attorney General's recommendation to require EV program applicants to certify that they applied for MassEVIP or other applicable funding prior to applying for funding through the EV programs (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 13; D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 4; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 4; D.P.U. 21-92, ChargePoint Track 1 Reply Brief at 3-4; D.P.U. 21-90, Electrify America Track 1 Brief at 10, 12; D.P.U. 21-91, Electrify America Track 1 Brief at 12, 14; D.P.U. 21-90/D.P.U. 21-91, Electrify America Track 1 Reply Brief at 8, 9). These intervenors argue that the Attorney General's recommendation would add to the administrative burden of the Companies' EV programs and disincentivize EV adoption, is overly prescriptive and could delay or eliminate viable projects, may deter potential applicants from enrolling in the EV programs due to a delay in the receipt of external program funding, or would create uncertainty regarding the available program incentives (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 13; D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 4; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 4; D.P.U. 21-92, ChargePoint Track 1 Reply Brief at 3-4; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Brief at 4-5, 12; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Reply Brief at 1-4, 8; D.P.U. 21-90, Electrify America Track 1 Brief at 10, 12; D.P.U. 21-91, Electrify America Track 1 Brief at 12, 14; D.P.U. 21-90/D.P.U. 21-91, Electrify America Track 1 Reply Brief at 8, 9). Electrify America argues that EV program applicants should be given the choice to apply for either all available financial incentives or only financial incentives for utility-side work, customer-side work, or EVSE

(D.P.U. 21-90, Electrify America Track 1 Brief at 10, 12; D.P.U. 21-91, Electrify America Track 1 Brief at 11, 14).

Additionally, to maximize administrative efficiency, ChargePoint argues that the EV programs should operate independently from other incentive programs (D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 4; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 4; D.P.U. 21-92, ChargePoint Track 1 Reply Brief at 4). Further, ChargePoint disagrees with the Attorney General's recommendation that, in aggregate, the combined financial incentives between the EV programs and outside funding should not exceed the program participant's actual project costs (D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 4; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 5; D.P.U. 21-92, ChargePoint Track 1 Reply Brief at 4).

(C) NSTAR Electric and National Grid

NSTAR Electric and National Grid oppose the Attorney General's recommendation for the Department to deny cost recovery for rebates or incentives issued to program participants that do not apply for external funding prior to enrolling in the EV programs (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 26). As an initial matter, NSTAR Electric and National Grid argue that they intend to promote MassEVIP and other state and federal funding sources through their marketing materials and to require program applicants to apply for such funds to the extent that they are available, applicable, and align with the companies' EV program offerings (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 27, 29). Moreover, NSTAR Electric and National Grid state that they propose to require program participants to report any external funding received and to deduct that amount from the rebates issued for the utility side of the

make-ready offerings (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 29). NSTAR Electric and National Grid also contend that the Attorney General's recommendation would prevent the companies from providing funding to program applicants in the event that MassEVIP or other state or federal funding is depleted or unreasonably delayed, which could, in turn, negatively impact customer interest and engagement with the EV programs (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 27-29). Further, to the extent that state or federal funding becomes available in the future and overlaps with the companies' EV program offerings, the companies state that they will work with customers to access those funds, provided that the outside funds are reasonably available to their customers (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 29). Accordingly, NSTAR Electric and National Grid request that the Department approve their EV programs as proposed (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 29).

(D) Unitil

Unitil asserts that the Department should reject the Attorney General's recommendation to require program applicants to apply for outside funding as a prerequisite to participation in its EV program (D.P.U. 21-92, Unitil Track 1 Brief at 41-42). First, Unitil contends that the Attorney General has not produced evidence that EV adoption will be overfunded if multiple sources of funding are available to customers or that external funding would supplant, rather than complement, funding through the EV program (D.P.U. 21-92, Unitil Track 1 Brief at 42). Second, Unitil argues that a strict, inflexible mandate for customers to obtain outside funding would compromise the effectiveness of the EV program because there may be longer lead times

for some incentives offered at the state and federal level, the timeline for outside funding may be inconsistent with the EV program, outside funding sources are susceptible to disruption, reduction, expiration, and discontinuation, and outside funding is not robust enough to achieve the Commonwealth's transportation electrification goals and climate objectives (D.P.U. 21-92, Unitil Track 1 Brief at 43-44).

v. Proprietary Charging Networks

(A) Attorney General

The Attorney General recommends that the Department reject National Grid's proposal to provide incentives for proprietary charging networks because: (1) proprietary charging networks are exclusive and designed to benefit only a certain subset of customers; (2) program funding for exclusive, restrictive networks will not achieve the Commonwealth's goal of widespread EV adoption because proprietary charging networks primarily benefit wealthy individuals; (3) program funding should be reserved for universal EV charging equipment and infrastructure that does not exclude any subset of EV drivers from accessing and taking advantage of EV charging options; and (4) proprietary charging networks do not need financial incentives to drive business decisions because the exclusivity of those EV chargers is part of the reason that these products are more attractive to consumers (D.P.U. 21-91, Attorney General Track 1 Brief at 39-41).

(B) Other Intervenors

GECA argues that the Department should reject National Grid's proposal to provide program funding for EVSE that use proprietary hardware or restrict access to certain vehicle

brands because program incentives for such ports limits the public benefits of investing in public EV charging infrastructure (D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 13).

Tesla, however, urges the Department to direct NSTAR Electric to expand its public and workplace program to include financial support for proprietary networks (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 1 Brief at 1, 4, 7). Tesla argues that NSTAR Electric's proposal to exclude proprietary networks from its EV program should be rejected because: (1) Tesla chargers are critical to the Commonwealth's ability to achieve its EV adoption targets, and (2) it is inconsistent with NSTAR Electric's EV programs in neighboring jurisdictions, which allow proprietary chargers to be co-located with non-proprietary chargers (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 1 Brief at 4, 7, 8; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Reply Track 1 Brief at 2). Accordingly, Tesla requests that the Department approve NSTAR Electric's proposed public and workplace program with a modification to allow proprietary networks to participate in the program (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 1 Brief at 9).

If Tesla chargers are excluded from participation in NSTAR Electric's EV program, Tesla contends that the program is inappropriately sized because the company incorrectly relied on the assumption that Tesla vehicles can charge at universal EV chargers (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 1 Brief at 7-8; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 1 Reply Brief at 5). In the event that the Department approves NSTAR Electric's proposal to exclude proprietary networks from its public and workplace program, Tesla argues that the Department should reduce the company's public and

workplace program budget by 50 percent (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 1 Reply Brief at 5).

(C) NSTAR Electric and National Grid

National Grid encourages the Department to reject the Attorney General's and GECA's recommendation to deny the company's proposal to provide program incentives for propriety network EVSE ports because: (1) approximately 50 percent of EVs in the Commonwealth are Tesla vehicles, and (2) incentives for proprietary network EVSE ports are limited to 65 percent of those available to non-proprietary network EVSE ports and the proprietary network EVSE ports must be co-located with non-proprietary network EVSE ports at a four to one ratio in order to be eligible for the incentives (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 70-71). National Grid, therefore, requests that the Department approve the inclusion of incentives for proprietary networks in its EV program (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 71).

In response to Tesla's recommendation to either direct the company to provide incentives for proprietary network EVSE ports or reduce the public and workplace program budget by approximately 50 percent, NSTAR Electric argues that its public and workplace program is appropriately sized and was developed based on an internal analysis of the availability of Tesla Supercharger installations in the Commonwealth, which showed that over 60 percent of proprietary network EVSE port installations are located in the company's service territory without ratepayer investment, and the company made no assumption about the composition of the market for any individual manufacturer (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 71-72). Accordingly, NSTAR Electric requests that the

Department reject Tesla's recommendations regarding EV program funding for proprietary network EVSE ports (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 72).

vi. Networking

(A) Attorney General

The Attorney General argues that networking should be required for program participants in the public and workplace and MUD programs in order to support managed charging capabilities (D.P.U. 21-90, Attorney General Track 1 Brief at 51, 53; D.P.U. 21-91, Attorney General Track 1 Brief at 57, 62).

(B) Other Intervenors

CEP requests that the Department approve the proposed networking rebates for the residential programs (D.P.U. 21-90, CEP Track 1 Brief at 15; D.P.U. 21-91, CEP Track 1 Brief at 16; D.P.U. 21-90/D.P.U. 21-91, CEP Track 1 Reply Brief at 6).

vii. Data Issues

(A) Attorney General

The Attorney General encourages the Department to direct the Companies to: (1) require residential EV program participants to provide EV charging data for predetermined intervals for a minimum of five years, and (2) use this data to inform the load management process recommended by the Attorney General, described in Section III.B.4.b below (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 22-23).

(B) Other Intervenors

CEP asserts that the Department should require residential program participants to provide charging data at predetermined intervals for a minimum of five years to assist the Companies in the development of TOU rates and other managed charging programs (D.P.U. 21-90, CEP Track 1 Brief at 17; D.P.U. 21-91, CEP Track 1 Brief at 19; D.P.U. 21-90/D.P.U. 21-91, CEP Track 1 Reply Brief at 8). According to EVgo, the companies' markedly different and voluminous data collection requirements are confusing and may deter potential program participants from enrolling in the EV programs; therefore, EVgo recommends that the Department direct NSTAR Electric and National Grid to propose streamlined data collection requirements based on stakeholder input (D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Brief at 6-9, 12; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Reply Brief at 4-6, 8).

Electrify America contends that the Department should direct NSTAR Electric and National Grid to require program participants to install interval meters and provide the data from these meters to the companies (D.P.U. 21-90, Electrify America Track 1 Brief at 9; D.P.U. 21-91, Electrify America Track 1 Brief at 10, 14). For DCFC stations, Electrify America argues that EV charging network operators should not be required to meet arbitrary data requirements when interval meters can meet the data requirement needs of the EV programs (D.P.U. 21-90, Electrify America Track 1 Brief at 9, 11; D.P.U. 21-91, Electrify America Track 1 Brief at 10, 14; D.P.U. 21-90/D.P.U. 21-91, Electrify America Track 1 Reply Brief at 7).

Finally, ChargePoint recommends that an additional process be conducted to develop statewide data and reporting processes and protocols (D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 7; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 8). ChargePoint also requests that

the Department explicitly protect confidential customer information collected through the EV programs from public disclosure or misuse (D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 7; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 8).

viii. Strategic Deployment of EV Chargers

(A) Intervenors

The Attorney General contends that the Companies have not complied with the Department's directive in D.P.U. 20-69-A to include proposals to mitigate barriers that impede the recruitment of DCFC site hosts for strategic locations in the Commonwealth and incorporate analyses of traffic and EV charging patterns to identify priority locations for future public EV charging stations because the Companies have not yet identified strategic locations for deployment of DCFCs or analyzed traffic and EV charging patterns to identify strategic locations for public EV charging stations (D.P.U. 21-90, Attorney General Track 1 Brief at 66; D.P.U. 21-91, Attorney General Track 1 Brief at 75). Accordingly, the Attorney General requests that the Department direct the Companies to include proposals to mitigate barriers that impede the recruitment of DCFC site hosts for strategic locations in the Commonwealth and incorporate analyses of traffic and EV charging patterns to identify priority locations for future public EV charging stations in their next EV program phases (D.P.U. 21-91, Attorney General Track 1 Brief at 75-76).

DOER asserts that the Companies should continue their work on assessing traffic and researching EV charging patterns so that customer preference and behavior is captured in the Companies' EV program budgets (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 8).

ix. Program Neutrality(A) Intervenors

ChargePoint contends that the Companies should provide program participants a choice of at least two EVSE providers and networking services to prevent hindering the development of the competitive market and to ensure that all marketing materials and outreach are competitively neutral (D.P.U. 21-90, ChargePoint Track 1 Brief at 1, 18-19, 20; D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 26, 27; D.P.U. 21-92, ChargePoint Track 1 Brief at 1, 7, 16). Further, Electrify America argues that EV charging network providers should be permitted to use their own contractors for customer-side make-ready work (D.P.U. 21-90, Electrify America Track 1 Brief at 9-10, 12).

b. Specific Issuesi. EV EMS for Public and Workplace Offering(A) Attorney General

To support EV EMS adoption, the Attorney General encourages the Department to require NSTAR Electric and National Grid to: (1) develop a standard site evaluation methodology to determine whether EV EMS can support EV charging infrastructure installation at a lesser cost than hardware-based capacity upgrades while still meeting the customers' charging needs; (2) modify make-ready incentives to provide a clear financial motivation for program participants to consider EV EMS; (3) incorporate load management, including EV EMS, into several program offerings; (4) track data related to EV EMS, including cost savings realized through EV EMS; (5) develop a program, rule, and/or tariff to support EV EMS deployment if deployment of EV EMS is low after the first two years of the EV programs; and

(6) work with affiliates and other utilities to establish standards for EV EMS data (D.P.U. 21-90, Attorney General Track 1 Brief at 58-64; D.P.U. 21-91, Attorney General Track 1 Brief at 67-74).

If the Department declines to adopt its recommendation, the Attorney General requests that the Department direct NSTAR Electric and National Grid to: (1) develop a site evaluation methodology to determine whether EV EMS would be cost-effective at a particular site and, if so, the appropriate level of financial support for the installation of the EV EMS; (2) if EV EMS is determined to be cost-effective for a particular site, apply the cost savings as either an increase to the customer-side incentive levels or the applicable rebate cap; and (3) refrain from providing financial support for EV EMS unless EV EMS deployment is expected to generate overall cost savings for a particular project (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 17-18).

Additionally, the Attorney General urges the Department to direct Unitil to use average installation costs rather than actual installed costs as the measure for make-ready financial support for EV EMS (D.P.U. 21-92, Attorney General Track 1 Brief at 26).

(B) Other Intervenors

FreeWire asserts that NSTAR Electric's and National Grid's proposed public and workplace programs would hinder the competitive market because they do not incentivize program participants to install EVSE with integrated battery storage, which can reduce total installation costs by avoiding costly upgrades to the companies' distribution systems (D.P.U. 21-90, FreeWire Track 1 Brief at 8-11; D.P.U. 21-91, FreeWire Track 1 Brief at 8-11). In essence, by providing rebates for all utility-side make-ready costs and 100 percent of the

average customer-side make-ready costs of a DCFC project, FreeWire contends that the companies' program would eliminate the incentive for program participants to purchase and install EVSE with integrated battery storage (D.P.U. 21-90, FreeWire Track 1 Brief at 9; D.P.U. 21-91, FreeWire Track 1 Brief at 9; D.P.U. 21-90/D.P.U. 21-91, FreeWire Track 1 Reply Brief at 3). Therefore, FreeWire requests that the Department direct NSTAR Electric and National Grid to modify their proposed public and workplace programs to include additional financial support for EVSE with EMS (D.P.U. 21-90, FreeWire Track 1 Brief at 9-10; D.P.U. 21-91, FreeWire Track 1 Brief at 9-10; D.P.U. 21-90/D.P.U. 21-91, FreeWire Track 1 Reply Brief at 2). FreeWire suggests that the Department direct the companies to implement a cap on EV EMS incentives at 100 percent of the average utility-side make-ready costs of conventional DCFC deployments (D.P.U. 21-90, FreeWire Track 1 Brief at 12; D.P.U. 21-91, FreeWire Track 1 Brief at 12-13). Alternatively, FreeWire requests that the Department direct the companies to offer a discrete incentive for deploying EV EMS that uses avoided distribution upgrade costs as the baseline for determining the value of the incentives (D.P.U. 21-90, FreeWire Track 1 Brief at 13; D.P.U. 21-91, FreeWire Track 1 Brief at 13).

FreeWire also urges the Department to direct NSTAR Electric and National Grid to develop standard site evaluation methodologies to assist customers in determining whether load management and EV EMS can deliver benefits and offer an optimal EV charging solution (D.P.U. 21-90, FreeWire Track 1 Brief at 14; D.P.U. 21-91, FreeWire Track 1 Brief at 14). Specifically, FreeWire requests that the Department direct NSTAR Electric and National Grid to develop a more robust site evaluation methodology for larger sites where utility-side make-ready

is required and a more streamlined site evaluation methodology for smaller sites (D.P.U. 21-90, FreeWire Track 1 Brief at 14; D.P.U. 21-91, FreeWire Track 1 Brief at 14).

(C) NSTAR Electric and National Grid

NSTAR Electric and National Grid disagree with consideration of EV EMS for projects sites below 100 KVa because EV EMS is less likely to be cost-effective and may limit customer flexibility to expand the number of EV charging ports in the future (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 32). Moreover, the companies do not recommend tiering incentives based on EV EMS deployment and, instead, recommend selectively considering EV EMS as a potential solution on an as needed basis (D.P.U. 21-90/ D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 33). Additionally, the companies contend that their proposal to cover EV EMS costs as part of the customer-side make-ready program provides sufficient incentive for program participants to pursue EV EMS (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 33). With respect to potential reporting requirements on EV EMS, the companies state that they may be able to collect data and report on whether EV EMS was installed and the installation costs but is unable to report on the usage rate of the EV EMS or whether EV EMS is installed after the project is placed into service (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 33).

ii. National Grid Level 1 Charger Offering

(A) Intervenors

ChargePoint recommends that the Department reject National Grid's proposal to deploy 500 Level 1 chargers at long-dwell time sites because: (1) Level 1 chargers are inconsistent with

the broader requirements of the EV program; (2) smart, networked Level 2 chargers offer numerous benefits that Level 1 chargers do not provide; and (3) Level 1 chargers are becoming increasingly obsolete and would not be a cost-effective use of ratepayer funds (D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 6, 14).

(B) National Grid

National Grid asserts that Level 1 charging stations may play an important role in the context of a larger project, especially for sites that support long-dwell time vehicles (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 41-42). Accordingly, the company requests that the Department approve its Level 1 charger proposal (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 42).

iii. Unitil Fleet Make-Ready Offering

(A) Intervenors

CLF requests that the Department direct Unitil to develop and propose a fleet make-ready infrastructure pilot program with 50 percent of the pilot program budget dedicated to supporting transit electrification in EJ communities (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Brief at 18, 25, 36).

(B) Unitil

Unitil argues that the Department should reject CLF's recommendation because this is the company's first proposed EV program (D.P.U. 21-92, Unitil Track 1 Brief at 54). Therefore, it would not be prudent for the company to conduct a municipal fleet program at this time (D.P.U. 21-92, Unitil Track 1 Brief at 54).

iv. NSTAR Electric Coordination with Compact for Residential Offering

(A) Intervenors

The Compact requests that the Department direct NSTAR Electric to allow the Compact's customers unrestricted access to participate in the company's residential program and work cooperatively with the Compact to develop a managed charging program and marketing plan (D.P.U. 21-90, Compact Track 1 Brief at 1-2, 4, 6, 8, 9; D.P.U. 21-90, Compact Track 1 Reply Brief at 1, 4-5). As part of that process, the Compact recommends that the Department direct NSTAR Electric to submit a compliance filing explaining its residential managed charging program and examine the program design to ensure that all distribution customers will benefit from the program (D.P.U. 21-90, Compact Track 1 Reply Brief at 5).

The Attorney General encourages the Department to direct NSTAR Electric to: (1) allow Compact customers to participate in the company's residential program, and (2) coordinate a managed charging program with the Compact so that Compact residential customers can participate in NSTAR Electric's approved managed charging programs (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 22).

(B) NSTAR Electric

NSTAR Electric states that it will consider whether any EV managed charging program the Compact proposes is sufficient for program participation purposes (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 48).

v. National Grid Utility-Side Expansion Budget(A) Attorney General

The Attorney General recommends that the Department reject National Grid's \$15 million utility-side system expansion budget because it is an ad hoc request for a \$15 million increase to rates above the rates authorized by the Department in the company's last base distribution rate case in D.P.U. 18-150, which is inconsistent with traditional ratemaking practices, and also inconsistent with the company's treatment of public DCFC sites as well as the company's statement that it does not expect significant system expansion due to transportation electrification within the proposed EV program term (D.P.U. 21-91, Attorney General Track 1 Brief at 53).

(B) National Grid

National Grid urges the Department approve its utility-side system expansion budget proposal because: (1) the distribution system upgrades would be necessary for all customers on the local distribution network and would be a shared cost for all ratepayers; (2) the company's multi-year rate plan includes a budget for load-related system expansion, but that budget does not include funding for projects related to large-scale fleet electrification; and (3) if the utility-side system expansion budget is denied, the company may be required to spend its base distribution rate plan budget on fleet-related projects, thereby reducing the available funds for new non-EV-related activity as well as system capacity and performance improvements for the rest of the electric grid (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 55-56).

vi. Unitil Rebate Calculation(A) Attorney General

The Attorney General recommends that the Department direct Unitil to use National Grid's average cost data to estimate comparable average costs for Level 2 chargers for the first year and a half of the EV program because: (1) National Grid has a similarly-situated service territory; (2) National Grid is the furthest along in its EV program implementation; and (3) Unitil proposes to install Level 2 chargers similar to the Level 2 chargers that National Grid proposes to install (D.P.U. 21-92, Attorney General Track 1 Brief at 26).

(B) Unitil

Unitil opposes the Attorney General's recommendation to require the company to use National Grid's Level 2 cost data for the first year and a half of the EV program because the Attorney General's recommendation is unsupported by record evidence while Unitil based its cost data on estimates developed for and by the company (D.P.U. 21-92, Unitil Track 1 Brief at 36-37).

vii. Co-Located Energy Storage Pilot(A) Intervenors

FreeWire recommends that the Department direct NSTAR Electric to implement a co-located energy storage pilot similar to that proposed by National Grid (D.P.U. 21-90, FreeWire Track 1 Brief at 13).

viii. Default Pricing Arrangement for Public and Workplace Offering

(A) Intervenors

CEP recommends that the Department require the Companies to establish a default arrangement that site hosts pass through time-varying price signals to drivers with an opt-out to allow site hosts to implement their own pricing plans (D.P.U. 21-90, CEP Track 1 Brief at 20-21; D.P.U. 21-91, CEP Track 1 Brief at 21; D.P.U. 21-90/D.P.U. 21-91, CEP Track 1 Reply Brief at 11).

ChargePoint opposes CEP's recommendation, arguing that the Department has previously held that owners and operators of EVSE are not subject to the Department's jurisdiction (D.P.U. 21-90, ChargePoint Track 1 Brief at 15, citing D.P.U.13-182-A at 5; D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 4-5; D.P.U. 21-91, ChargePoint Track 1 Brief at 22; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 5). Additionally, ChargePoint contends that site hosts should be empowered to price EV charging in a manner that best supports their own goals for installing EV charging stations (D.P.U. 21-90, ChargePoint Track 1 Brief at 15; D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 5; D.P.U. 21-91, ChargePoint Track 1 Brief at 22-23; D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 5). Instead, ChargePoint urges the Department to allow for flexible pricing and EV tariffs that encourage off-peak charging across all charging use cases without setting a requirement for site hosts to pass through time-varying price signals to end users (D.P.U. 21-90, ChargePoint Track 1 Brief at 17; D.P.U. 21-91, ChargePoint Track 1 Brief at 24).

3. Environmental Justice-Related Proposals
 - a. EJ Community Targets and Incentives
 - i. Attorney General

The Attorney General recommends binding port deployment and EV site plan targets for EJ communities due to the higher barriers to transportation electrification and the lower likelihood that the competitive market will serve EJ communities (D.P.U. 21-90, Attorney General Track 1 Brief at 15-16; D.P.U. 21-91, Attorney General Track 1 Brief at 18; D.P.U. 21-92, Attorney General Track 1 Brief at 13).²⁸ For NSTAR Electric and National Grid, the Attorney General recommends a binding port target of 40 percent in EJ communities (D.P.U. 21-90, Attorney General Track 1 Brief at 15; D.P.U. 21-91, Attorney General Track 1 Brief at 18). For Unitil, the Attorney General recommends that all ports be deployed in EJ communities (D.P.U. 21-92, Attorney General Track 1 Brief at 13, 14).

According to the Attorney General, without binding targets or another mechanism to ensure equitable distribution of EV program benefits, the Companies' EV programs are likely to disproportionately benefit higher-income individuals and large private fleets that have more financial flexibility to purchase EVs without financial assistance through the EV programs (D.P.U. 21-90, Attorney General Track 1 Brief at 16-17; D.P.U. 21-91, Attorney General Track 1 Brief at 19-20; D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 7, 8-9;

²⁸ The Attorney General also states that she would not oppose a program modification that would allow for additional financial incentives to customers that meet more than one EJ community criteria (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 17-18).

D.P.U. 21-92, Attorney General Track 1 Brief at 13).²⁹ If the Companies do not meet these targets, the Attorney General recommends barring the Companies from reallocating any associated budget components to non-EJ community ports (D.P.U. 21-90, Attorney General Track 1 Brief at 18; D.P.U. 21-91, Attorney General Track 1 Brief at 21). Additionally, the Attorney General rejects the Companies' claim that market uncertainty is a sufficient reason not to prescribe binding port deployment targets particularly given the Companies' unique role in shaping the EV market and the market indications that early adopters of light-duty EVs in the Commonwealth are primarily higher-income individuals (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 7-8; D.P.U. 21-92, Attorney General Track 1 Reply Brief at 6-7).

Alternatively, the Attorney General states that she would not object to a binding port deployment target in EJ communities of at least 30 percent per customer segment provided that at least 40 percent of the overall ports deployed through NSTAR Electric's and National Grid's EV programs are deployed in EJ communities (D.P.U. 21-90, Attorney General Track 1 Brief at 17-18; D.P.U. 21-91, Attorney General Track 1 Brief at 20-21). For Unitil, the Attorney General states that she would not oppose a binding port deployment target of 65 percent in EJ communities if the Department is not inclined to direct Unitil to deploy all of its ports in EJ communities (D.P.U. 21-92, Attorney General Track 1 Brief at 14-15).

²⁹ The Attorney General urges the Department to require NSTAR Electric and National Grid to dedicate additional ports to low-income ratepayers because: (1) EJ community ratepayers are not synonymous with low-income ratepayers; (2) some low-income customers reside outside of EJ communities; and (3) the companies' residential programs do not include port deployment targets or associated benefits targeting low-income ratepayers outside of EJ communities (D.P.U. 21-90, Attorney General Track 1 Brief at 18-19; D.P.U. 21-91, Attorney General Track 1 Brief at 21-22).

ii. Other Intervenors

DOER urges the Department to reject the Attorney General's recommendations to dedicate a certain percentage of port deployments in low-income communities and for EJ community port deployment targets and, instead, allow for programmatic flexibility that can respond to community and stakeholder feedback (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 10). Electrify America claims that there is no support in the record for the Attorney General's recommended port deployment targets in EJ communities (D.P.U. 21-90, Electrify America Track 1 Brief at 6; D.P.U. 21-91, Electrify America Track 1 Brief at 6-7).

CLF, however, argues that NSTAR Electric and National Grid should be required to dedicate at least 30 percent of public and workplace program EV charging ports in EJ communities (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Brief at 4, 29, 34, 36). CLF also recommends that the Companies modify their rebate program proposals to provide additional financial support to program participants based on the number of EJ community criteria satisfied (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Brief at 4, 26-27, 36). Further, CLF urges the Department to approve the Companies' proposed one to four-unit residential offering with the inclusion of a sliding scale of incentives that provides additional financial support to residential program customers based on the number of EJ community criteria met (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Reply Brief at 10-11).

Finally, CEP recommends that the Department direct the Companies to increase their funding targets in EJ communities to a level that is at least proportionate to the percentage of EJ community customers in each company's respective service territory (D.P.U. 21-90, CEP

Track 1 Brief at 20; D.P.U. 21-91, CEP Track 1 Brief at 20; D.P.U. 21-90/D.P.U. 21-91, CEP Track 1 Reply Brief at 9-10).

iii. NSTAR Electric and National Grid

NSTAR Electric and National Grid urge the Department to reject the Attorney General's recommendation to direct the companies to deploy 40 percent of all ports in EJ communities and CEP's recommendation to increase funding for port deployments in EJ communities in proportion to the number of EJ community customers in each company's service territory because: (1) strict port deployment targets do not reflect the needs of EJ communities; (2) the Attorney General did not base its recommended 40 percent port deployment target in EJ communities on the level of demand for EV charging in EJ communities; (3) there may be unintended consequences for siting EV chargers in EJ communities due to low EV ownership; (4) the companies cannot unilaterally site EV charging infrastructure in EJ communities; (4) due to evolving market dynamics and variability in EV adoption, flexibility in EV program deployment approaches is necessary to allow the companies to prioritize EJ community investments where there is the most market demand; and (5) the companies already propose to work with EJ community stakeholders to identify their EV charging needs (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 65-66). As such, NSTAR Electric and National Grid contend that the Department should reject the Attorney General's and CEP's recommendation to direct the companies to implement binding port deployment targets in EJ communities (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 66).

iv. Unitil

Unitil asserts that the Attorney General's recommendation to direct the company to deploy 65 percent of its charging ports in EJ communities or low-income communities should be rejected because: (1) Unitil cannot unilaterally deploy EV charging infrastructure in EJ communities, and (2) there is no correlation between the percentage of customers living in the city of Fitchburg and the need for public EV charging locations in specific neighborhoods (D.P.U. 21-92, Unitil Track 1 Brief at 35-36). Further, Unitil contends that CLF's recommendation to implement a sliding scale of EJ community incentives for the residential program should be rejected because: (1) Unitil does not have data on whether individual customers meet one or more EJC criteria, and (2) the inclusion of incentive tiers would unnecessarily complicate the residential program and could lead to program implementation delays and increased administrative costs (D.P.U. 21-92, Unitil Track 1 Brief at 55-56).

b. NSTAR Electric Equity Pilotsi. Attorney General

The Attorney General urges the Department to deny NSTAR Electric's proposed car sharing program in EJ communities because: (1) the company can better support transportation electrification in EJ communities through implementation of the Attorney General's prioritization framework and recommendations; (2) a car sharing program is outside the scope of the normal business operations of a utility; and (3) providing financial support for car insurance is an inappropriate use of ratepayer funds (D.P.U. 21-90, Attorney General Track 1 Brief at 67).

Additionally, the Attorney General recommends that NSTAR Electric's medium- and heavy-duty fleet pilot program include financial support for electrification of mass transit

because: (1) mass transit will provide clean transportation benefits to a broad section of the public, including low-income households and customers who do not own personal vehicles, and (2) electrification of mass transit will significantly reduce GHG emissions and provide large battery power for the electric grid through vehicle to grid (“V2G”) services³⁰ (D.P.U. 21-90, Attorney General Track 1 Brief at 45). The Attorney General also asserts that NSTAR Electric should be more proactive in supporting fleets, including mass transit and medium- and heavy-duty fleets, and recommends that the Department direct the company to submit an expanded fleet proposal in the near term (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 19).

ii. Other Intervenors

CLF contends that the Department should direct NSTAR Electric to propose: (1) a medium- and heavy-duty fleet program scaled to match National Grid’s medium- and heavy-duty fleet program; (2) a school bus rebate program; and (3) a public transit bus pilot program that would provide rebates for the purchase of up to 30 public transit buses that operate primarily in EJ communities³¹ (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Brief at 18, 24, 25, 36). With respect to the medium- and heavy-duty fleet program, CLF recommends that at least

³⁰ V2G is a technology that enables electricity to be exported back to the electric grid from the battery of an EV by EV chargers (D.P.U. 21-92, Exh. AG 6-9).

³¹ CLF also recommends that the Department direct National Grid to propose a public transit bus rebate pilot program to provide financial support for the purchase of up to 30 public transit buses that operate primarily in EJ communities (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Brief at 18, 24-25, 36).

50 percent of the program budget be dedicated to supporting the electrification of public transit in EJ communities (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Brief at 18, 19, 21).

CEP recommends that the Department direct NSTAR Electric to expand its medium- and heavy-duty fleet program and develop an electric school bus rebate program before 2024 (D.P.U. 21-90, CEP Track 1 Brief at 18; D.P.U. 21-91, CEP Track 1 Brief at 19; D.P.U. 21-90/D.P.U. 21-91, CEP Track 1 Reply Brief at 8). Additionally, GECA recommends that the Department direct NSTAR Electric to develop and implement a make-ready program for medium- and heavy-duty vehicles (D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 4, 16).

iii. NSTAR Electric

NSTAR Electric argues that the Department should reject the Attorney General's recommendation to deny the car sharing program in EJ communities because: (1) car sharing is an important transportation option for EJ community residents; (2) the car sharing program will reduce emissions by removing internal combustion vehicles from the roadways, relieve traffic congestion, and reduce parking needs; (3) the company proposes to partner with organizations that have experience with these types of programs; and (4) few car sharing programs are designed to serve low-income customers (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 68-69). NSTAR Electric, therefore, requests that the Department approve its car sharing program in EJ communities (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 69).

Further, NSTAR Electric disagrees with the Attorney General's and CEP's recommendation to expand its proposed medium- and heavy-duty fleet pilot program because the company needs to first gather data on fleet types, opportunities for fleet electrification, and costs

and equipment necessary for fleet electrification and incorporate any lessons learned into any expanded medium- and heavy-duty fleet program (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 69-70). After the second year of its fleet assessment services program, NSTAR Electric states that it will develop an offering that will cost effectively enable medium- and heavy-duty fleet electrification in its service territory (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 69-70). Accordingly, the company requests that the Department approve the medium- and heavy-duty fleet pilot program as proposed (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 70).

c. National Grid School Bus Rebate Program

i. Attorney General

The Attorney General recommends that the Department deny National Grid's proposed school bus rebate program and direct the company to reevaluate its proposal in light of newly available federal and state funding for the purchase of electric school buses (D.P.U. 21-91, Attorney General Track 1 Reply Brief at 78). If the Department approves the school bus rebate program, the Attorney General requests that the Department direct National Grid to condition program funding on customer participation in V2G services (D.P.U. 21-91, Attorney General Track 1 Reply Brief at 78).

ii. Other Intervenors

DOER urges the Department to reject the school bus rebate program because: (1) school bus rebates will be addressed through state and federal programs; (2) a rebate program for school buses exceeds the role of a utility in the EV market; and (3) the proposed budget of over

\$50 million is approximately 20 percent of National Grid's total budget and would substantially increase its customers' electric rates (D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, DOER Track 1 Brief at 23-24). Instead, DOER recommends that the company provide support for electric school buses through its fleet program and fleet advisory services offerings (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 23).

In contrast, CLF, CEP, and GECA urge the Department to approve National Grid's school bus rebate proposal (D.P.U. 21-91, CEP Track 1 Brief at 19; D.P.U. 21-90/ D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Reply Brief at 6-7; D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 15) More specifically, CLF contends that: (1) state and federal funding sources will complement, not supplant, National Grid's school bus rebate proposal; (2) diesel-powered school buses have dangerous health impacts for children, especially in EJ communities; and (3) medium- and heavy-duty vehicles, like school buses, emit considerably more GHG emissions than light duty vehicles and contribute a disproportionate share of the localized pollution that harms public health (D.P.U. 21-91, CLF Track 1 Reply Brief at 6-7). CLF, CEP, and GECA also recommend that the Department direct NSTAR Electric to develop a school bus rebate program (D.P.U. 21-90, CLF Track 1 Brief at 4; D.P.U. 21-90, CEP Track 1 Brief at 18; D.P.U. 21-90/ D.P.U. 21-91, GECA Track 1 Brief at 4, 16). Finally, GECA requests that the Department direct National Grid to develop a V2G program (D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 15).

iii. National Grid

National Grid disagrees with the Attorney General's and DOER's recommendation to deny the school bus rebate program (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National

Grid Joint Track 1 Brief at 59). National Grid acknowledges that there is some external funding available for the purchase of electric school buses, but the company states that utility funding for the purchase of electric school buses is still necessary given the uncertainty on the extent of available state and federal funding for the purchase of electric school buses and because any available external funding is likely to only contribute to a small portion of the school buses operating in the Commonwealth (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 59).

Regarding the Attorney General's and CEP's recommendation to require participating school buses to participate in a V2G program, National Grid is not opposed to such a requirement; however, the company recommends allowing school districts to opt out of the V2G program because V2G services may increase school bus, EVSE, interconnection, and operations and maintenance ("O&M") costs for the school district (D.P.U. 21-90/ D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 60). The company also recommends limiting the number of participating V2G buses at a particular site to reduce the expenses and energy management burdens on any particular school district (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 60). Further, National Grid contends that it must maintain discretion to decide not to pursue V2G capability at a site contingent on the results of an interconnection study, as the potential value from V2G services at a particular site may be limited (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 60).

iv. NSTAR Electric

NSTAR Electric opposes CLF's, CEP's, and GECA's recommendation for NSTAR Electric to propose a school bus rebate program, arguing that it has not yet evaluated the charging requirements and demand for fleet customers in its service territory (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 60). In addition, NSTAR Electric contends that it would be more prudent for the company to evaluate the results of National Grid's program before determining whether to offer a similar program (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 61).

d. National Grid Utility-Owned DCFCs in EJ Communitiesi. Attorney General

The Attorney General opposes National Grid's proposal to own and operate DCFCs in EJ communities because the company did not demonstrate that: (1) there will be a market failure to provide DCFCs in EJ communities; (2) DCFC installation in EJ communities would not occur without utility ownership; or (3) the proposed number of utility-owned DCFCs is appropriate (D.P.U. 21-91, Attorney General Track 1 Brief at 74-75).

ii. Other Intervenors

GECA recommends that the Department allow utility ownership of DCFCs in EJ communities if the private market fails to meet the needs of those communities (D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 14). Similarly, ChargePoint contends that the Department should require National Grid to demonstrate that there is need for utility-owned DCFC in EJ communities before approving the proposal because: (1) DCFCs in EJ communities will not necessarily result in increased access to and equitable deployment of EV charging

stations; (2) the proposal is premature, particularly in light of federal funds from the Infrastructure and Jobs Acts,³² which provides financial support for these types of investments in EJ communities; and (3) utility-ownership of DCFCs in EJ communities could undermine the ability of the competitive market to meet that need and result in unnecessary costs for ratepayers (D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 8, 12-13). In lieu of this proposal, ChargePoint recommends that National Grid report to the Department and stakeholders on the development of DCFCs in EJ communities at the midpoint of the EV program and assess whether utility intervention is appropriate at that time (D.P.U. 21-91, ChargePoint Track 1 Brief at 13). If so, ChargePoint suggests that National Grid then submit a proposal for utility ownership of DCFCs in EJ communities for Department and stakeholder input and Department approval (D.P.U. 21-91, ChargePoint Track 1 Brief at 13).

Additionally, Electrify America recommends that the Department require National Grid to notify the private market of any plans to construct and own DCFC stations in EJ communities at least one year in advance of construction (D.P.U. 21-91, Electrify America Track 1 Brief at 13, 14).

iii. National Grid

National Grid requests that the Department reject the Attorney General's recommendation to deny its proposal to own and operate DCFC in EJ communities because:

- (1) the company has developed a reasonable allocation of DCFC ports to serve EJ communities;
- (2) the offering is designed to encourage the private EV market to deploy DCFC in EJ

³² Infrastructure and Jobs Act of 2021, Pub. L. No. 117-58.

communities; and (3) prior to installing, owning, and operating DCFCs in EJ communities, the company proposes to provide EV charging station developers with advance notice of the identified gaps in DCFC deployment in EJ communities and an additional opportunity to deploy DCFCs in that location before the company does (D.P.U. 21-90/ D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 38-39).

e. NSTAR Electric EJ Community Charging Hub

i. Attorney General

The Attorney General recommends that the Department approve NSTAR Electric's EJ community charging hub proposal with modifications, including: (1) limiting the DCFC hubs to three to four DCFC hubs, rather than permitting the proposed four to five DCFC hubs; (2) directing the company to engage with EJ community stakeholders, including municipalities and community organizations, prior to issuing a request for proposals ("RFP") for a vendor to own and operate the hubs; and (3) directing the company in its next proposed EV program to include proposals to mitigate barriers that impede the recruitment of DCFC site hosts for strategic locations in the Commonwealth and to incorporate analyses of traffic and EV charging patterns to identify priority locations for future public EV charging stations (D.P.U. 21-90, Attorney General Track 1 Brief at 64-66).

f. Utility-Ownership of EVSE for MUDs in EJ Communities

i. Intervenors

CEP recommends that the Department consider utility ownership of EV charging stations for MUDs in EJ communities to address barriers to EV adoption at MUDs, such as landlord/tenant relationships (D.P.U. 21-90, CEP Track 1 Brief at 17-18; D.P.U. 21-91, CEP

Track 1 Brief at 19). ChargePoint, however, contends that CEP's recommendation that the Department consider proposals for utility ownership of EVSE at MUDs in EJ communities should be rejected because: (1) the Department has previously found that the electric distribution companies have not demonstrated a need for utility ownership of EVSE to address a market failure or that utility ownership of EVSE would effectively address gaps in the EV charging market; (2) the competitive market already provides alternatives to utility ownership of EVSE for site hosts that do not wish to own and operate EVSE; and (3) utility ownership of EVSE would hinder the development of the private EV charging market (D.P.U. 21-90, ChargePoint Track 1 Brief at 13-14; D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 5-6; D.P.U. 21-91, ChargePoint Track 1 Brief at 21-22; D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 6-7).

4. Other Proposals

a. Workforce Development and Electrician Training

i. Attorney General

The Attorney General argues that the Department should only approve the Companies' proposed workforce development and electrician training program if the Companies agree to develop and commit to meaningful metrics to tangibly assess the program's success and demographic targets for program participants (D.P.U. 21-90, Attorney General Track 1 Brief at 78-79; D.P.U. 21-91, Attorney General Track 1 Brief at 93; D.P.U. 21-92, Attorney General Track 1 Brief at 30). This, in turn, according to the Attorney General, will allow for a tangible assessment of the progress towards the program's equity goals and an opportunity for course correction if the Companies fail to make sufficient progress towards meeting those goals

(D.P.U. 21-90, Attorney General Track 1 Brief at 79; D.P.U. 21-91, Attorney General Track 1 Brief at 94; D.P.U. 21-92, Attorney General Track 1 Brief at 30).

ii. NSTAR Electric and National Grid

NSTAR Electric and National Grid do not oppose the Attorney General's recommendation for the companies to collect data on the demographic makeup of the participants in the program and are willing to commit to working with key stakeholders to determine best practices and strategies for reaching targeted populations to increase the diversity of the program (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 62). The companies, however, state that they cannot commit to ensuring a diverse group of program participants because they do not control who chooses to participate in the program (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 62). Accordingly, NSTAR Electric and National Grid request that the Department not condition approval of the workforce development and electrician training program on the development of certain metrics related to demographic targets for program participants (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 62).

iii. Unitil

Unitil encourages the Department to reject the Attorney General's recommendation to condition approval of the workforce development and electrician training program on the development of metrics that demonstrate success in increasing workforce diversity (D.P.U. 21-92, Unitil Track 1 Brief at 47). As an initial matter, Unitil argues that the recommendation is unnecessary because the company has already stated that it intends to consult with key stakeholders to develop the workforce development and electrician training program

(D.P.U. 21-92, Unitil Track 1 Brief at 47). Further, Unitil states that it has already agreed to collect data on the number of participants enrolled in the program, demographic information about the participants, and the number of participants that complete the program and report that information in an annual compliance filing to the Department (D.P.U. 21-92, Unitil Track 1 Brief at 47-48). Moreover, Unitil contends that the Attorney General's recommendation is not feasible because the company cannot control program participation rates with the level of precision that the Attorney General requests (D.P.U. 21-92, Unitil Track 1 Brief at 48). For these reasons, Unitil requests that the Department reject the Attorney General's proposed condition on the workforce development and electrician training program (D.P.U. 21-92, Unitil Track 1 Brief at 48).

b. Load Management

i. Attorney General

The Attorney General recommends that the Department: (1) direct the Companies to coordinate to develop a comprehensive load management plan³³ that details current and future managed charging offerings for residential and commercial customers for Department review by June 2023, and (2) open a proceeding into load management that would, among other things, establish a timeline and approach for developing and implementing more advanced managed charging programs for all customer groups and the transition of the proposed DCA rates to future

³³ The Attorney General asserts that the load management plan should include a suite of services to enable and incentivize load flexibility from EVs and other distributed energy resources and align with the Companies' deployment of grid modernization investments (D.P.U. 21-90, Attorney General Track 2 Brief at 38; D.P.U. 21-91, Attorney General Track 2 Brief at 42; D.P.U. 21-92, Attorney General Track 2 Brief at 45).

demand charge rate designs that will be enabled through the full deployment of AMI meters (D.P.U. 21-90, Attorney General Track 1 Brief at 51, 53; D.P.U. 21-91, Attorney General Track 1 Brief at 56-57, 63; D.P.U. 21-92, Attorney General Track 1 Reply Brief at 11, 13; D.P.U. 21-90, Attorney General Track 2 Brief at 28, 31; D.P.U. 21-91, Attorney General Track 2 Brief at 32, 42; D.P.U. 21-92, Attorney General Track 2 Brief at 38, 45; D.P.U. 21-92, Attorney General Track 2 Reply Brief at 15-16, 17-18). Through this process, the Attorney General argues that a comprehensive evaluation of all customer rates and load management programs across customer segments and technology types is necessary to ensure that distribution system costs are minimized, variable renewable resources are integrated in a cost-effective manner, and the most cost-effective load types are prioritized (D.P.U. 21-90, Attorney General Track 2 Brief at 38; D.P.U. 21-91, Attorney General Track 2 Brief at 41; D.P.U. 21-92, Attorney General Track 2 Brief at 44). To assist in the development of the load management plan, the Attorney General urges the Department to require the Companies to convene a load management working group within 30 days following the Department's Order in this proceeding (D.P.U. 21-90, Attorney General Track 1 Brief at 54; D.P.U. 21-91, Attorney General Track 1 Brief at 63; D.P.U. 21-92, Attorney General Track 1 Reply Brief at 13). The Attorney General also asserts that the load management process should establish a mechanism by which the Department and stakeholders can reevaluate the Companies' rates at predictable intervals, either every two or three years or aligned with distribution system planning or base distribution rate cases (D.P.U. 21-90, Attorney General Track 2 Brief at 39; D.P.U. 21-91, Attorney General Track 2 Brief at 42-43; D.P.U. 21-92, Attorney General Track 2 Brief at 46). In addition, the Attorney General contends that the load management process should include performance metrics to

measure the Companies' success in managing load and incentivizing load flexibility (D.P.U. 21-90, Attorney General Track 2 Brief at 39; D.P.U. 21-91, Attorney General Track 2 Brief at 43; D.P.U. 21-92, Attorney General Track 2 Brief at 46). Regarding EV-specific rates, the Attorney General contends that the load management plan should include several types of rate designs that can support and facilitate EV charging in the Commonwealth, such as TOU rates, critical peak pricing, dynamic rates, demand response rates, and export rates (D.P.U. 21-90, Attorney General Track 2 Brief at 40-42; D.P.U. 21-91, Attorney General Track 2 Brief at 43-46; D.P.U. 21-92, Attorney General Track 2 Brief at 47-49).

The Attorney General encourages the Department not to delay action on the load management plan until after the Companies have had the opportunity to incorporate managed charging questions into their evaluations reports because: (1) managed charging options should be developed now so that a range of attractive options are available to customers before increased load from EVs leads to unnecessary distribution system upgrade costs; (2) the load management plan should inform an iterative load management process that consistently integrates new data and learnings to create new offerings and evaluate current load management offerings; and (3) the Companies can use the load management working group to get additional information and input from stakeholders, including from EV manufacturers and service providers with experience in managed charging (D.P.U. 21-90, Attorney General Track 1 Brief at 55-56; D.P.U. 21-91, Attorney General Track 1 Brief at 64-66; D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 14).

The Attorney General also recommends that the Department condition approval of the third year of NSTAR Electric's EV program expenditures on its ability to successful develop

additional managed charging options (D.P.U. 21-90, Attorney General Track 1 Brief at 51, 56-57). According to the Attorney General, a failure to adequately integrate managed charging into the EV programs is a missed opportunity to reduce costs for ratepayers (D.P.U. 21-90, Attorney General Track 1 Brief at 51).

In addition, the Attorney General argues that National Grid should require fleet program participants to participate in a managed charging program, which could provide meaningful benefits to the company's distribution system and, by extension, its customers (D.P.U. 21-91, Attorney General Track 1 Brief at 61-62).

ii. FreeWire

FreeWire supports the Attorney General's recommendation for the Department to require the Companies to: (1) timely file comprehensive load management plans that include an EV component; (2) develop rate designs and other programs that incentivize load flexibility; and (3) participate in a Department-led stakeholder EV load management working group (D.P.U. 21-90, FreeWire Track 1 Brief at 15; D.P.U. 21-90, FreeWire Track 1 Brief at 14-15; D.P.U. 21-90, FreeWire Track 2 Brief at 9-11, 13; D.P.U. 21-91, FreeWire Track 2 Brief at 9-10, 12).

iii. Electrify America

Electrify America opposes the Attorney General's recommendation for the Department to direct the Companies to develop a load management plan because: (1) it would overlap with existing energy efficiency programs; (2) it would be premature to develop load management programs before at least one year of program data is collected; (3) DCFC load is largely inelastic and load management programs would increase EV charging time and frustrate EV drivers; and

(4) the record does not support the urgent need for EV-related load management programs (D.P.U. 21-90, Electrify America Track 1 Brief at 6-8; D.P.U. 21-91, Electrify America Track 1 Brief at 7-9; D.P.U. 21-90, Electrify America Track 2 Brief at 9-11; D.P.U. 21-91, Electrify America Track 2 Brief at 9-11; D.P.U. 21-90, Electrify America Track 2 Reply Brief at 5-7; D.P.U. 21-91, Electrify America Track 2 Reply Brief at 5-7). According to Electrify America, any future load management programs for EV charging loads should be coordinated with the Companies' energy efficiency programs and informed by actual EV charging data collected during program operation (D.P.U. 21-90, Electrify America Track 2 Brief at 11; D.P.U. 21-91, Electrify America Track 2 Brief at 11).

iv. CEP

CEP recommends that the Department direct the companies to develop TOU rates or strengthen their load management programs to send more appropriate price signals to customers (D.P.U. 21-90, CEP Track 1 Brief at 20; D.P.U. 21-91, CEP Track 1 Brief at 20-21; D.P.U. 21-90/D.P.U. 21-91, CEP Track 1 Reply Brief at 10-11).

v. NSTAR Electric and National Grid

NSTAR Electric and National Grid argue that the Attorney General's recommendation to open a generic proceeding on load management is unnecessary and outside the scope of this proceeding (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 26). Nevertheless, NSTAR Electric and National Grid state that they would be amenable to providing a framework that outlines current and future solutions for management of EV-related load and provide it and any relevant updates as part of their respective annual compliance filings to the Department (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National

Grid Joint Track 2 Reply Brief at 26). Furthermore, NSTAR Electric and National Grid do not oppose the formation of a load management working group but recommend that the companies first capture and report on initial lessons learned during the first year of program implementation before initiating the load management working group because the initial lessons learned will help inform the stakeholder engagement (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 31; D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 26-27).

Additionally, NSTAR Electric requests that the Department reject the Attorney General's recommendation to condition approval of its program expenditures in the third year of the EV program on the successful development of additional managed charging options because: (1) the company already provides managed charging options for different devices and supports opt-in participation for select non-residential customers with inflexible EV loads, and (2) the company will use lessons learned from more widespread EV charger deployment to evaluate the efficacy and cost of current and future managed charging solutions (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 30).

vi. Unitil

Unitil asserts that the Attorney General's load management and advanced rate design recommendations should be dismissed because: (1) they are beyond the scope of this proceeding, impractical, and irrelevant; (2) it is premature for the company to develop a comprehensive load management plan because there is not enough EV-related load on the company's distribution system to warrant its development; and (3) the company has not yet had the opportunity to test and evaluate embedded EVSE metering technology in the field and does

not have sufficient data to create a comprehensive load management plan (D.P.U. 21-92, Unitil Track 1 Reply Brief at 10-11; D.P.U. 21-92, Unitil Track 2 Brief at 23-27). In addition, Unitil notes that this is the company's first EV program and argues that it would be prudent for the company to first collect data on utilization factors, peak demands, and cost implications before developing a load management plan or developing complex rate design proposals (D.P.U. 21-92, Unitil Track 2 Brief at 23-24, 26, 27-28). Accordingly, Unitil requests that the Department reject the Attorney General's load management and advanced rate design recommendations at this time (D.P.U. 21-92, Unitil Track 1 Reply Brief at 11).

c. Marketing and Outreach Plan

i. Attorney General

The Attorney General recommends that the Department direct NSTAR Electric and National Grid to file a detailed marketing and outreach plan in a compliance filing in these proceedings that is subject to Department and stakeholder review and Department approval that:

- (1) identifies and prioritizes certain customers that align with the Attorney General's recommended prioritization framework;
- (2) includes a messaging strategy and sample communications for conveying the importance of and options for load management as an accompaniment to EV charging infrastructure;
- (3) provides a timeline for communications that identifies specific communication types or each communication touchpoint;
- (4) includes a strategy for implementing dedicated outreach to ensure that NSTAR Electric and National Grid are reaching low-income and EJ community customers, including plans to work with community action program agencies and community organizations;
- (5) includes a detailed strategy for reaching customers through a variety of channels; and
- (6) describes how iterations of the

marketing and outreach process will integrate results from the program evaluation (D.P.U. 21-90, Attorney General Track 1 Brief at 77; D.P.U. 21-91, Attorney General Track 1 Brief at 90-92).

ii. Other Intervenors

DOER encourages the Department to direct the Companies to conduct direct outreach to customers regarding the availability of the DCA rates through multiple venues, which could include direct mail, bill inserts, emails, website postings, and communication with municipal officials (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 2 Brief at 8).

iii. NSTAR Electric and National Grid

NSTAR Electric and National Grid urge the Department to reject the Attorney General's recommendation to direct the companies to submit a detailed marketing and outreach plan in a compliance filing for Department and stakeholder review and Department approval because the companies have committed to working with stakeholders on the development of their marketing and outreach strategies (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 74). Moreover, the companies state that the Department and stakeholders will have the ability to review the companies' marketing collateral as part of their annual cost recovery filings (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 74). NSTAR Electric and National Grid, therefore, request that the Department approve the companies' marketing and outreach proposals (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 74).

Regarding outreach on the DCA rate offerings, NSTAR Electric and National Grid propose to publicize the DCA rate offerings to existing and prospective customers through a number of channels, including: (1) EVSE vendors with existing relationships with customers;

(2) direct outreach to EV charging station developers and customers with multiple EV charging sites with existing relationships with the companies; and (3) outreach (e.g., via brochures or other materials) to EVSE customers on National Grid's G-1, G-2, and G-3 rates; (4) for new customers, the make-ready application will include an option for customers to learn more about and/or sign up for the DCA rates; and (5) additional information that will be sent to customers along with the commitment letter for the project, which will include an option to opt-in to the DCA rates (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 14).

d. National Grid Off-Peak Charging Rebate Program

i. Attorney General

The Attorney General encourages the Department to direct National Grid to make the following four modifications to its proposed off-peak charging rebate program: (1) customers should be provided with the option to participate via vehicle telematics and networked EVSE; (2) the program should be expanded to public, workplace, and MUD customers; (3) the program should be implemented within six months of Department approval in this proceeding; and (4) the company should develop a program evaluation plan for its proposed flexible scheduling offering (D.P.U. 21-91, Attorney General Track 1 Brief at 59-60).

ii. Other Intervenors

GECA argues that the Department should direct National Grid to increase the value of its off-peak charging rebate and extend the rebate program to weekend hours (D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 4, 10-12). GECA also recommends that the Department direct NSTAR Electric to develop and implement an off-peak charging rebate

program that includes rebates for off-peak EV charging during weekend hours (D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 4, 12). DOER, however, contends that the Department should not require NSTAR Electric to propose an off-peak charging rebate program similar to National Grid's because NSTAR Electric's existing managed charging program is sufficient to manage its current peak demand (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 21).

iii. NSTAR Electric and National Grid

National Grid opposes the Attorney General's recommendation to expand the off-peak charging rebate program to public, workplace, and MUD customers with networked EVSE because EV drivers alone are responsible for the charging decisions for their vehicles and expanding the off-peak charging rebate program to EV charging station operators increases the odds of duplicate incentives for a single act of EV charging (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 57). Accordingly, National Grid encourages the Department to reject the Attorney General's recommendation to expand the off-peak charging rebate program (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 57).

In response to GECA's recommendation for NSTAR Electric to develop an off-peak charging rebate program similar to National Grid's proposal, NSTAR Electric argues that it would be more prudent for the company to evaluate the results of National Grid's pilot program before developing its own off-peak charging rebate program (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 57).

e. National Grid Pole-Mounted EVSE Programi. Attorney General

The Attorney General recommends that the Department deny National Grid's proposal to deploy pole-mounted EV chargers because the proposal is inconsistent with Department precedent (D.P.U. 21-91, Attorney General Track 1 Brief at 74-77). According to the Attorney General, third-party ownership of EVSE is preferable and the company failed to demonstrate that the private market would not address the gap in EV charging in the absence utility ownership (D.P.U. 21-91, Attorney General Track 1 Brief at 74-77). Alternatively, the Attorney General recommends that the Department direct National Grid to identify optimal pole locations and to issue a RFP to provide the opportunity for private developers to enter the pole-mounted EVSE market before the company does (D.P.U. 21-91, Attorney General Track 1 Brief at 77).

ii. Other Intervenors

DOER supports approval of National Grid's proposed pole-mounted EVSE program but recommends that the Department direct the company to develop metrics for the program and to work with municipalities on strategies to support the program (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 22). Further, DOER contends that the company should be required to evaluate the success of the program in reaching customers, how the program design contributed to that success, and any improvements that could be made to the program (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 22). DOER also argues that National Grid should be required to resolve outstanding concerns with the program, including the manner in which the company will coordinate with municipalities and stakeholders

in implementing the program and any appropriate parking restrictions, prior to program implementation (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 23).

ChargePoint, however, opposes National Grid's proposed pole-mounted EVSE program because it does not provide municipalities the ability to set the prices for the EV charging services, which, in turn, could allow the company to undercut the competitive industry's EV charging pricing (D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 8-12; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 7). ChargePoint also argues that the company claims without evidence that it needs to own the pole-mounted EVSE for it to run efficiently, fails to support the basis for its ownership and operation of these assets for a four-year period, or what will occur if no third-party is interested in purchasing these assets after four years (D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 8-12; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 7). If the Department approves National Grid's pole-mounted EVSE proposal, ChargePoint recommends that the Department direct the company to: (1) allow municipalities to set pricing policies for EVSE within their cities and towns; (2) sell the pole-mounted EVSE to the competitive market once these stations have been energized and are operable; and (3) if the company is unable to sell the pole-mounted EVSE after four years, to refrain from seeking recovery for costs related to the program (D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 9, 11; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 7).

iii. National Grid

National Grid urges the Department to approve its pole-mounted EVSE proposal because: (1) utility ownership of pole-mounted EVSE eliminates the need to adhere to the complex third-party attachment process, accelerates the timeline for EVSE deployment, and

reduces EVSE deployment costs; (2) it would provide EV charging options for customers without access to at-home charging; (3) the EVSE would be located in publicly accessible locations; and (4) 50 percent of the EVSE deployed through this program would be located in EJ communities (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 39-41).

C. Analysis and Findings

1. Introduction

In Electric Vehicles, D.P.U. 13-182-A at 13 (2014), the Department established three criteria that an electric distribution company EV charging infrastructure proposal must meet in order to receive Department approval. Specifically, any EV charging infrastructure proposal must: (1) be in the public interest; (2) meet a need regarding the advancement of EVs in the Commonwealth that is not likely to be met by the competitive EV charging market; and (3) not hinder the development of the competitive EV charging market. D.P.U. 13-182-A at 13.

Generally, the parties to these proceedings support the Department's approval of the Companies' EV program proposals but recommend certain modifications. Below, the Department first addresses whether the Companies' EV program proposals comply with the requirements established in D.P.U. 13-182-A. Then, the Department addresses the proposed modifications to the Companies' EV program proposals.

2. Compliance with D.P.U. 13-182-A

The Companies maintain that their proposed EV charging programs will help accelerate deployment of EV charging infrastructure in the state, expand the opportunities for market participants to gain experience owning and operating EVSE, and support the Commonwealth's

public policy goals (D.P.U. 21-90, Exh. ES-KB-1, at 32-33; D.P.U. 21-91, Exh. NG-EVPP-1, at 32-33; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 8). No intervenor to this proceeding contests that the Companies' proposed EV programs meet the Department's three-part standard of review for EV program approval established in D.P.U. 13-182-A. Indeed, all of the intervenors urge the Department to approve the Companies' proposed EV programs with some modifications.

Based on our review of the EV proposals, the Department determines that NSTAR Electric's and National Grid's proposed Phase II and Phase III EV programs, respectively, build on their experience with their Phase I EV programs and include a variety of offerings to meet the diverse needs of EV drivers in the Commonwealth (D.P.U. 21-90, Exh. ES-KB-1, at 6; D.P.U. 21-91, Exh. NG-EVPP-1, at 8). Unital's proposed EV program will be its first and will support the deployment of EV charging infrastructure within its service territory (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 8). Together, these EV program proposals will help to put the Commonwealth on the path to achieving its ZEV MOU targets through the deployment of EV charging infrastructure, which will, in turn, contribute to more EV adoption in the Commonwealth (D.P.U. 21-90, Exh. ES-KB-1, at 6; D.P.U. 21-91, Exh. NG-EVPP-1, at 8; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 8).

The Companies' proposed investments in make-ready infrastructure will lower the financial barriers to EVSE ownership (D.P.U. 21-90, Exhs. ES-KB-1, at 40; CEP-1, at 46; D.P.U. 21-91, Exhs. NG-EVPP-1, at 40; CEP-1, at 50; D.P.U. 21-92, Exh. CSVG (Rev.) at 32). The EV charging infrastructure that will be deployed through the proposed EV programs will incentivize the deployment of EV charging infrastructure necessary to support the Commonwealth's transportation electrification goals and assist the Commonwealth in its

transition to a clean transportation future (D.P.U. 21-90, Exhs. ES-KB-1, at 6; CEP-1, at 46-47; CP-KGM-1, at 6-7; D.P.U. 21-91, Exhs. NG-EVPP-1, at 8; CEP-1, at 50-51; CP-KGM-1, at 8-9; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 8). Further, the EV program proposals aim to deploy EV charging infrastructure equitably, which will help address the disproportionate environmental burdens borne by EJ communities (D.P.U. 21-90, Exhs. ES-KB-1, at 9-11; CEP-1, at 47; CP-KGM-1, at 7; D.P.U. 21-91, Exhs. NG-EVPP-1, at 11-13; CEP-1, at 51; CP-KGM-1, at 9; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 12, 54). Therefore, the Department finds that the Companies' EV program proposals are in the public interest.

Second, the Companies' proposed EV programs would recruit site hosts to promote and accelerate the construction of EV charging stations (D.P.U. 21-90, Exh. ES-KB-1, at 28-29; D.P.U. 21-91, Exh. NG-EVPP-1, at 53; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 37). Through the recruitment of public and workplace site hosts, residential customers, and fleet customers and incentivizing the deployment of EV charging infrastructure, the Companies' proposed EV programs would assist the Commonwealth to meet a need regarding the advancement of EVs in the Commonwealth that is not likely to be met by the competitive EV charging market in the near term and help the Commonwealth achieve its ZEV MOU goals (D.P.U. 21-90, Exh. ES-KB-1, at 6-9; D.P.U. 21-91, Exh. NG-EVPP-1, at 8-11; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 31-43). Accordingly, the Department finds that the proposed EV programs meet the second prong of the standard of review for EV program approval outlined in D.P.U. 13-182-A.

Finally, the Companies' EV program proposals seek to install EV charging infrastructure up to the EVSE and lower cost barriers for site hosts without limiting their ability to choose an EVSE vendor (D.P.U. 21-90, Exhs. ES-KB-1, at 6-9; CEP-1, at 49-50; D.P.U. 21-91,

Exhs. NG-EVPP-1, at 8-11; CEP-1, at 55; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 31-43).

Moreover, given the current EV market and the limited EV charging options available, the proposed EV programs will incentivize EVSE deployment, which will support increased EV adoption and improve EV charging station utilization and, importantly, the business case for further EV charging station development funded by the competitive market (D.P.U. 21-90/ D.P.U. 21-91, Exh. GL-TA-1, at 7; D.P.U. 21-90, CEP-1, at 24-25; D.P.U. 21-91, CEP-1, at 25). Thus, the Department finds that the Companies' EV program proposals do not hinder the development of the competitive EV charging market.

In sum, the Department finds that the Companies' proposed EV programs are in the public interest and will support the Commonwealth's public policy goals, meet a need for more EV charging infrastructure and EVSE that has not been met by the competitive market, and will support, rather than hinder, the competitive EV charging market. Therefore, as a general matter, the Department finds that the Companies' EV program proposals meet the three-part standard established in D.P.U. 13-182-A and, after review of the proposals and intervenor arguments, the Department finds it reasonable and appropriate to approve the Companies' EV program proposals with certain modifications, as discussed below.

Notwithstanding this determination, the Department acknowledges that, during the course of these proceedings and after the close of the evidentiary record, the General Court adopted several policies that change the policy landscape for encouraging the deployment of EV charging infrastructure in the Commonwealth. An Act Driving Clean Energy and Offshore Wind, St. 2022, c. 179 ("2022 Clean Energy Act"). These policies include the establishment of the Charging Infrastructure Deployment Fund, and the formation of an intergovernmental

coordinating council (“EV Coordinating Council”) to implement a statewide, coordinated approach to EV charging infrastructure deployment. St. 2022, c. 179, § 81. The law requires the Massachusetts Department of Transportation to analyze operation of charging stations at service plazas, as well as install and maintain EV charging stations at various public locations. St. 2022, c. 179, § 89. The 2022 Clean Energy Act further requires the development of TOU rate proposals by the Companies for review by the Department. St. 2022, c. 179, § 90. The Legislature also required that, going forward, electric distribution company proposals for facilitating transportation electrification be developed and incorporated in the electric sector modernization plans established pursuant to G.L. c. 164, § 92B. The 2022 Clean Energy Act also establishes a stakeholder group to review and provide input on such plans. St. 2022, c. 179, § 53. Accordingly, the Department expects that the Companies will implement their programs in a manner that aligns with the 2022 Clean Energy Act. Further, future EV charging infrastructure program proposals, including, at a minimum, any distribution system-related investments, will be developed through the process set forth in St. 2022, c. 179, § 53, described in further detail in Section VI, below.

3. Make-Ready Rebates

a. Make-Ready Proposals

NSTAR Electric and National Grid propose to offer rebates for 100 percent of the make-ready costs on the utility side of the meter for all program segments (D.P.U. 21-90, Exh. ES-KB-1, at 43, 50, 60, 67-68; D.P.U. 21-91, Exh. NG-EVPP-1, at 43, 56, 65, 73). NSTAR Electric and National Grid also propose to offer rebates for up to 100 percent of the average installation costs of the infrastructure on the customer side of the meter, not to exceed actual

installation costs, for the public, workplace, MUD, and fleet segments, and 100 percent of the customer-side make-ready costs for one to four-unit residential customers, up to a specific dollar amount cap (D.P.U. 21-90, Exh. ES-KB-1, at 43, 50, 60, 67-68; D.P.U. 21-91, Exh. NG-EVPP-1, at 43, 56, 65, 73).³⁴ Unutil proposes to offer rebates to cover 100 percent of infrastructure costs on both sides of the meter for all program segments (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 36, 38).

The Attorney General recommends three restrictions on make-ready rebate eligibility. First, the Attorney General suggests that make-ready rebates be limited to 80 percent of the average installation costs of infrastructure on both the utility side and the customer side of the meter, not to exceed actual costs, for non-publicly accessible, non-EJ community sites,³⁵ publicly-owned fleets operating outside of EJ communities, and small private fleets operating in EJ communities (D.P.U. 21-90, Attorney General Track 1 Brief, App. Table A, C; D.P.U. 21-91, Attorney General Track 1 Brief, Appendix Table A, C; D.P.U. 21-92, Attorney General Track 1 Brief at 26). Second, the Attorney General recommends restricting make-ready rebates for the residential segment to low- and moderate-income customers (D.P.U. 21-90, Attorney General

³⁴ To account for certain site-specific characteristics and potential cost-shifts in the industry, NSTAR Electric and National Grid propose to provide up to 150 percent of the average installation costs of the infrastructure on the customer side of the meter on a case-by-case basis for the public and workplace and MUD segments (D.P.U. 21-90, Exh. ES-KB-1, at 43, 50; D.P.U. 21-91, Exh. NG-EVPP-1, at 43, 57, 65). In addition, NSTAR Electric proposes to provide up to 150 percent of the average installation costs of the infrastructure on the customer side of the meter on a case-by-case basis for the fleet segment (D.P.U. 21-90, Exh. ES-KB-1, at 68).

³⁵ This recommendation refers to sites in both the public and workplace and MUD segments (D.P.U. 21-90, Attorney General Track 1 Brief, App. Tables A-B; D.P.U. 21-91, Attorney General Track 1 Brief, App. Tables A-B).

Track 1 Brief, App. Table B; D.P.U. 21-91, Attorney General Track 1 Brief, App. Table B; D.P.U. 21-92, Attorney General Track 1 Brief at 27, 30). Finally, the Attorney General suggests eliminating fleet make-ready rebates for large private fleet customers (D.P.U. 21-90, Attorney General Track 1 Brief, App. Table C; D.P.U. 21-91, Attorney General Track 1 Brief, App. Table C). In response, the Companies and CLF argue that the Attorney General's proposal to restrict make-ready rebates for certain program segments will hinder the Commonwealth's ability to achieve its ZEV MOU and decarbonization goals (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 16-17; D.P.U. 21-90, CLF Track 1 Brief at 4-5, 31; D.P.U. 21-92, Unifil Track 1 Reply Brief at 2-4).

Rebates serve to reduce the financial barriers for site hosts to adopt EV charging stations. D.P.U. 17-13, at 30. In these proceedings, the Department is persuaded that, without incentives, the high costs of EV charging infrastructure would likely dissuade the private EV market from investing in EVSE and DCFCs, in particular, where the cost of EV charging infrastructure is a significant, and sometimes prohibitive, barrier to DCFC installation (D.P.U. 21-90, Exhs. ES-KB-1, at 18; CEP-1, at 24-25; GL-TA-1, at 6-7; CP-KGM-1, at 7-8; EVG-CD-1, at 11; FW-1, at 17; D.P.U. 21-91, Exhs. NG-EVPP-1, at 20-21; CEP-1, at 25-26; GL-TA-1, at 8-10; CP-KGM-1, at 9; EVG-CD-1, at 12; FW-1, at 17; D.P.U. 21-92; Exhs. CSVG-1 (Rev.) at 31-32; CP-KGM-1, at 8). While the EV charging market continues to develop in the Commonwealth, the Department finds that make-ready rebates will play an important role in the achievement of the Commonwealth's transportation electrification and decarbonization goals by incentivizing the installation of EVSE, which will, in turn, support an increase in EV adoption in the Commonwealth (D.P.U. 21-90, Exhs. ES-KB-1, at 6; CEP-1, at 46-47; CP-KGM-1, at 6-7;

D.P.U. 21-91, Exhs. NG-EVPP-1, at 8; CEP-1, at 50-51; CP-KGM-1, at 8-9; D.P.U. 21-92, Exh. CSVG-1, at 8).

Given the level of EV charging deployment to date and because EV charging infrastructure costs constitute the majority of the costs associated with deploying EV charging stations, the Department determines that the Companies' make-ready rebate proposals are reasonable. On the other hand, we find that the reductions proposed by the Attorney General to the make-ready rebates could impact the deployment of EV charging stations significantly, and, in turn, has the potential to hinder the Commonwealth's ability to achieve its transportation electrification and decarbonization goals. The Department recognizes that, as the competitive EV charging market grows, and additional funds enabled by the Legislature become available, the need for significant financial incentives to deploy EV charging sites will likely diminish. See D.P.U. 13-182-A at 13 (finding that a utility proposal must meet a need unlikely to be met by the competitive market). But, given the current status of EV charging station deployment in the Commonwealth, the Department declines to adopt the Attorney General's recommended reductions to the make-ready rebates.³⁶

Finally, the Department determines that the Companies' proposed EV program budgets properly allocate the majority of budgeted costs towards addressing the high cost of EV charging infrastructure. Specifically, the Companies' proposed make-ready rebates comprise more than

³⁶ The Department notes that, in Section III.C.4.a-d, below, the Department requires certain modifications to the Companies' EVSE rebates that are in line with the intent of the Attorney General's recommended reductions to the make-ready rebates. For instance, the Department limits EVSE rebates to public fleets and prioritizes EJ communities, particularly those that meet the EJ criteria based on income.

77 percent of the total public and workplace segment budget and more than 70 percent of the total residential segment budget (D.P.U. 21-90, Exhs. ES-KB-6, ES-KB-7, ES-KB-8; D.P.U. 21-91, Exhs. NG-EVPP-5, NG-EVPP-7, NG-EVPP-8; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 35-36).³⁷ Based on the foregoing reasons, the Department declines to restrict make-ready rebates for the public and workplace, residential, and fleet segments, as proposed by the Attorney General, except that make-ready rebates must not exceed actual make-ready installation costs. Accordingly, the Department approves the Companies' make-ready rebate proposals.

b. Unitil Make-Ready Rebate Calculation

Unitil proposes to offer make-ready rebates for 100 percent of the actual infrastructure costs on both the utility and the customer side of the meter (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 36, 39). The Attorney General argues that Unitil's public segment make-ready rebates should be based on average make-ready installation costs rather than actual make-ready installation costs because, under the current proposal, customers have no incentive to adopt EV EMS (D.P.U. 21-92, Attorney General Track 1 Brief at 26). Due to the absence of historical cost data to calculate company-specific average make-ready installation costs, the Attorney General recommends that Unitil apply National Grid's average make-ready installation cost data to

³⁷ National Grid's fleet budget includes the proposed budgets for its EJ community school bus rebate offering proposal, utility-side system expansion proposal, and fleet assessment services proposal (D.P.U. 21-91, Exh. NG-EVPP-1, at 123). Removing those costs from the fleet budget, make-ready rebates comprise 65 percent of National Grid's total fleet segment budget. NSTAR Electric's fleet segment budget is intertwined with its public and workplace segment budget and, therefore, a similar comparison of the percentage of make-ready budget to total fleet segment budget could not be readily calculated (D.P.U. 21-90, Exh. ES-KB-4).

estimate comparable average make-ready installation costs for the first 18 months of Unitil's EV program and to use average make-ready installation costs to determine make-ready financial support for EV EMS (D.P.U. 21-92, Attorney General Track 1 Brief at 26). For the following reasons, we decline to adopt the Attorney General's recommendations.

Unitil's program budget is based on cost estimates developed by and for the company (D.P.U. 21-92, Exh. CVG-Rebuttal-1 (Rev.) at 26). Nothing in the record suggests that Unitil's make-ready infrastructure cost estimates are inaccurate or inappropriate for purposes of calculating make-ready installation costs, or that National Grid's company-specific average make-ready installation costs are more appropriate than the Unitil-specific cost estimates proposed. Accordingly, based on our review of Unitil's cost estimates, the Department determines that Unitil's proposed make-ready installation cost calculations are reasonable and appropriate.³⁸

c. EV Energy Management Systems

As part of their proposed make-ready rebates, NSTAR Electric and National Grid propose to offer incentives for EV EMS to public, workplace, and MUD customers (D.P.U. 21-90, Exh. ES-KB-1, at 61-62; D.P.U. 21-91, Exh. NG-EVPP-1, at 66-67; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 4, at 811-819). The Attorney General recommends that the Department direct NSTAR Electric and National Grid to develop a standard site evaluation methodology to determine whether EV EMS can support EV charging

³⁸ Unitil's proposal is silent on whether the company proposes to offer rebates for EV EMS to public segment customers. Unitil is not precluded from offering rebates for EV EMS to public segment customers and, should the company decide to do so, it shall follow the same procedure outlined in Section III.C.3.c, below.

infrastructure installation at a cost less than hardware-based capacity upgrades while still meeting the customers' charging needs and, if so, to develop guidelines to support EV EMS deployment if deployment is low after two years (D.P.U. 21-90, Attorney General Track 1 Brief at 58-64; D.P.U. 21-91, Attorney General Track 1 Brief at 67-74). Alternatively, the Attorney General proposes that NSTAR Electric and National Grid develop a site evaluation method to assess the cost-effectiveness of EV EMS at a particular site and to allow EV program funding for EV EMS only to sites where EV EMS deployment would generate overall cost savings for the project (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 17-18). NSTAR Electric and National Grid oppose the Attorney General's recommendations and assert that their proposal to include rebates for EV EMS costs in customer-side make-ready offerings provides sufficient incentive for program participants to pursue EV EMS (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 33).

NSTAR Electric and National Grid acknowledge that EV EMS may, in certain circumstances, reduce a project's overall infrastructure costs (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 35; D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 39). Nevertheless, the companies argue that, based on their experience and examples from Southern California Edison and Pacific Gas & Electric, EV EMS is less likely to be a cost-effective option for sites below 100 KVa and urge a case-by-case consideration of EV EMS for sites with new services of at least 100 KVa (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 35-37; D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 39-41).

Based on the record, the Department determines that a case-by-case evaluation of the cost-effectiveness of EV EMS for public and workplace and MUD customers is reasonable. A

case-by-case evaluation will allow for a more nuanced review of the cost-effectiveness of EV EMS for a particular site. Therefore, the Department declines to adopt the Attorney General's recommendation. Nonetheless, the Department directs the companies to inform public, workplace, and MUD customers about the availability of additional incentives for EV EMS for project sites likely to have on site load constraints.

Next, FreeWire requests modifications to NSTAR Electric's and National Grid's proposed public and workplace segment offerings to include additional financial support for EVSE with EMS or, in the alternative, for the companies to offer a discrete incentive for deploying EV EMS that uses avoided distribution upgrade costs as the baseline for determining the value of the incentives (D.P.U. 21-90, FreeWire Track 1 Brief at 9-10; D.P.U. 21-91, FreeWire Track 1 Brief at 9-10; D.P.U. 21-90/D.P.U. 21-91, FreeWire Track 1 Reply Brief at 2; D.P.U. 21-90, FreeWire Track 1 Brief at 13; D.P.U. 21-91, FreeWire Track 1 Brief at 13). We decline to do so. The Department finds that EV EMS may be a cost-effective solution for some projects, but declines to allow the use of ratepayer funds for incentives that uniformly encourage EMS offerings before EMS is determined to be a cost-effective solution for a particular site. Therefore, the Department approves financial incentives for EV EMS as determined on a case-by-case basis, as described above.

4. EVSE Rebates

a. Environmental Justice Communities

In discharging its responsibilities under chapters 25 and 164 of the General Laws, the Department must prioritize, among other things, equity, with respect to itself and the entities it regulates. G.L. c. 25, § 1A. Further, as part of any new or revised EV charging infrastructure

program proposal, the Department expected the Companies to use their experience implementing existing programs to further increase the accessibility of EV chargers in EJ communities and to consider appropriate measures to decrease barriers to the installation of EV chargers in all communities across their service territories, including EJ communities. D.P.U. 20-69-A at 46, 49-50.

EOEEA defines an environmental justice population as a neighborhood that meets one or more of the following EJ criteria: (1) the annual median household income is 65 percent or less of the statewide annual median household income; (2) minorities comprise 40 percent or more of the population; (3) 25 percent or more of households lack English language proficiency; or (4) minorities comprise 25 percent or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150 percent of the statewide annual median household income. Environmental Justice Policy of the Executive Office of Energy and Environmental Affairs at 4 (June 24, 2021).³⁹ Additionally, EOEEA's Secretary may designate a geographic portion of a neighborhood as an EJ population in accordance with law. Environmental Justice Policy of the Executive Office of Energy and Environmental Affairs at 4 (June 24, 2021). Previously, in D.P.U. 17-05, at 473, 478 and D.P.U. 17-13, at 24, 30, the Department approved NSTAR Electric's and National Grid's respective Phase I EV program proposals to provide enhanced EVSE rebates to customers located in communities that meet at least two of the Commonwealth's EJ criteria, with the

³⁹ Available at <https://www.mass.gov/doc/environmental-justice-policy6242021-update/download>. We note that, in the instant proceedings, NSTAR Electric and National Grid rely on the definition of EJ population that was contained in an earlier version of EOEEA's EJ policy.

exception of NSTAR Electric's Western Massachusetts service territory where customers in communities that met at least one of the Commonwealth's EJ criteria were eligible for enhanced rebates.

In these proceedings, NSTAR Electric and National Grid propose to offer enhanced rebates to public, workplace, MUD (i.e., dwellings with five or more units), and fleet customers who are located or operate in a community that meets at least one of the Commonwealth's EJ criteria (D.P.U. 21-90, Exh. ES-KB-1, at 55 n.75; D.P.U. 21-91, Exh. NG-EVPP-1, at 62).^{40,41} Specifically, for the public and workplace, NSTAR Electric and National Grid propose to offer 100 percent EVSE rebates to customers located in EJ communities that meet one EJ criteria (D.P.U. 21-90, Exh. ES-KB-1, at 45; D.P.U. 21-91, Exh. NG-EVPP-1, at 12). For MUDs, the companies propose to offer up to 100 percent of the average cost per port for sites in EJ communities and 50 percent of the average cost per port for other sites, not to exceed actual costs. (D.P.U. 21-90, Exh. ES-KB-1, at 50-51 D.P.U. 21-91, Exh. NG-EVPP-1, at 57, 65-67). For its light-duty fleet segment and its medium- and heavy-duty fleet pilot proposal, NSTAR Electric proposes to offer 100 percent EVSE rebates to fleet customers registered in an EJ community or who operate more than 50 percent of the time within census block groups that meet at least one of the Commonwealth's EJ criteria (D.P.U. 21-90, Exh. ES-KB-1, at 11,

⁴⁰ Unitil does not propose EVSE rebates for public, MUD, or fleet customers.

⁴¹ Although MUDs serve residential customers, those receiving EVSE rebates as MUD owners or operators are non-residential customers. The rebates discussed in this section do not apply to residents residing in MUDs. We address NSTAR Electric's, National Grid's, and Unitil's EVSE rebate proposals for residential customers in one to four-unit dwellings separately in Section III.C.4.c.i, below.

67-68). For its fleet segment, National Grid proposes to offer 100 percent EVSE rebates to all fleet customers that are either registered in an EJ community or operate more than 50 percent of the time within census block groups that meet at least one EJ criteria (D.P.U. 21-91, Exh. NG-EVPP-1, at 13, 73, 80).

The Department is committed to ensuring the equitable distribution of EV program benefits in the Commonwealth. To that end, the Department finds that it is reasonable and appropriate for NSTAR Electric and National Grid to offer enhanced rebates for EVSE for public, workplace, MUD, and fleet customer segments located in EJ communities that meet one EJ criteria, including fleets that operate more than 50 percent of the time within census block groups that meet at least one EJ criteria.⁴² To ensure consistency, the Department directs the companies to incorporate the updated definitions and EJ criteria provided in EOEEA's most recent EJ Policy issued on June 24, 2021 and to rely on 2020 U.S. Census data to assess whether a location qualifies as an EJ community. We expect the enhanced rebates to incentivize the deployment of EVSE in EJ communities which, in turn, will enhance opportunities for EJ populations to more readily participate in the companies' electrification offerings and to benefit from the positive environmental impacts from transportation electrification. In sum, the Department approves NSTAR Electric's and National Grid's proposal to offer enhanced EVSE rebates based on a community satisfying at least one EJ criteria for non-residential customers, subject to the additional requirements outlined below.

⁴² Here, we define EJ fleet customers to include those that are either registered in an EJ community or operate more than 50 percent of the time within census block groups that meet at least one EJ criteria (D.P.U. 21-90, Exh. ES-KB-1, at 55 n.75; D.P.U. 21-91, Exh. NG-EVPP-1, at 62).

While the Department agrees with the companies' proposals to provide enhanced EVSE rebates for certain customer segments within EJ communities, the Department seeks to balance the use of ratepayer funding in a manner that maximizes the goals of the EV programs. As discussed above, the criteria for EJ communities are not solely income-based, and some higher-income communities may meet the criteria of an EJ community.⁴³ As the Attorney General noted, higher-income communities are more likely to have access to public and residential EV charging (D.P.U. 21-90, Exh. AG-REN-CP-Surrebuttal-1, at 8-9). Therefore, the Department finds that a sliding scale of incentives that places a higher priority on communities that meet the Commonwealth's EJ criteria based on income (i.e., communities where the annual median household income is 65 percent or less of the statewide annual median household income) is appropriate across all non-residential customer segments to support participation in areas with the greatest financial barriers to EV adoption which, in turn, will allow for a more equitable distribution of benefits.⁴⁴ The Department has previously adopted a sliding scale of incentives based on certain customer characteristics. Specifically, in D.P.U. 17-13, at 25, 30, the

⁴³ For example, the Town of Lexington, Block Group 4, Census Tract 3584 is an EJ community but has a median household income of over \$190,000 or over 225 percent of state median household income. Similarly, the Seaport Area of Boston, Block Group 1, Census Tract 606.04 is an EJ community but has a median household income of over \$240,000 or over 285 percent of state median household income. See The EOEEA EJ Map Viewers, available at, <https://mass-eoeea.maps.arcgis.com/apps/webappviewer/index.html?id=1d6f63e7762a48e5930de84ed4849212> (last visited December 28, 2022).

⁴⁴ In Section III.C.4.c.i, below, the Department addresses CLF's recommendation for a sliding scale of incentives that provides higher incentives to residential program customers based on the number of EJ criteria that a community meets (see D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Reply Brief at 10-11).

Department approved a tiered level of EVSE rebates based on site type.⁴⁵ Accordingly, the Department finds that the highest level of funding should be reserved for the installation of EVSE in communities that meet the EJ criterion based on income and directs NSTAR Electric and National Grid to implement the following sliding scale of EVSE rebates for EJ community customers as part of their public and workplace, MUDs (i.e., five or more units), and fleet programs: (1) a 100 percent EVSE rebate for non-residential customers in EJ communities that meet the EJ criteria based on income; and (2) a 75 percent EVSE rebate for non-residential customers in EJ communities that meet any of the other EJ criteria.^{46,47}

The Department emphasizes that our limitation of eligibility for rebates of 100 percent of EVSE costs, and the reduction to 75 percent for EVSE rebates for customers in communities that meet any of the other three EJ criteria, is not intended to diminish the importance of the other EJ criteria. Rather, the record shows that EV charging infrastructure deployment disproportionately benefits higher-income customers and communities with greater financial resources (D.P.U. 21-90, Exhs. AG-REN-CP-Surrebuttal-1, at 8-9, 10-11; AG-REN-1, at 27; D.P.U. 21-91, Exhs. AG-REN-CP- Surrebuttal-1, at 7-11; AG-REN-1, at 27-28; D.P.U. 21-92,

⁴⁵ In D.P.U. 17-13, at 25, as part of National Grid's Phase I EV program, the Department approved EVSE rebate levels of: (1) up to 50 percent of costs for workplace/business site hosts; (2) up to 75 percent of costs for multi-unit dwelling owners, public entities, and non-profits; and (3) up to 100 percent of costs for participants in EJ communities. D.P.U. 17-13, at 25, 30. NSTAR Electric's Phase I EV program did not include rebates for EVSE.

⁴⁶ See Sections III.C.4.b-d, below, for additional directives concerning EVSE eligibility criteria for customers in public, workplace, MUD, and fleet segments.

⁴⁷ See Sections III.C.4.b-d for discussion of EVSE rebates for public, workplace, MUD, and fleet customers that are not in EJ communities.

Exhs. AG-REN-CP-Surrebuttal-1, at 6-9; AG-REN-1, at 26). As the Commonwealth strives to achieve its transportation electrification and decarbonization goals, our intention is to focus these ratepayer-funded EV programs on those communities with the least financial resources and that may otherwise be underserved by the competitive market. The Department emphasizes that our directives on EVSE rebate eligibility does not impact the make-ready rebates proposed and approved above.⁴⁸ Further, the EVSE budget for each of these program segments remains unchanged.

The Department recognizes that the implementation of a sliding scale of incentives for non-residential customers may increase the complexity of the companies' EV programs by requiring differences in eligibility for incentives. The Department, however, notes that adequate customer education and communication can mitigate any customer confusion. As noted above, National Grid has previous experience implementing tiered incentive levels as part of its prior EV program. Further, the two-tiered incentive scale for non-residential customers based on a single EJ criterion we adopt, above, is limited and straightforward. Accordingly, the Department expects the companies to explain the available incentives to non-residential customers in a clear and simple manner in their customer education materials.

⁴⁸ All customer segments remain eligible to receive rebates for 100 percent of the make-ready costs on the utility side of the meter and, for NSTAR Electric and National Grid, up to 100 percent of the average installation costs of the infrastructure on the customer side of the meter, not to exceed actual installation costs, and, for Unitil, 100 percent of the infrastructure costs on the customer side of the meter, which constitute the majority of EV charging station deployment costs.

b. Public and Workplace Segment

NSTAR Electric's and National Grid's public and workplace segment proposals include EVSE rebates while Unitil does not (D.P.U. 21-90, Exh. ES-KB-1, at 45-47; D.P.U. 21-91, Exh. NG-EVPP-1, at 43-45; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 36-38). The Attorney General recommends that the companies offer a higher level of EVSE rebates to publicly accessible public and workplace sites (D.P.U. 21-90, Attorney General Track 1 Brief at 11; D.P.U. 21-91, Attorney General Track 1 Brief at 14).

Rebates serve to reduce the financial barriers for site hosts to deploy EV charging stations. D.P.U. 17-13, at 30. As such, like make-ready rebates, EVSE rebates are an important tool to assist the Commonwealth in meeting its transportation electrification and decarbonization goals. Nonetheless, the Department recognizes that, as the competitive EV charging market grows, the need for financial incentives for private site hosts will likely diminish. See D.P.U. 13-182-A at 13 (finding that a utility proposal must meet a need unlikely to be met by the competitive market). Further, the Department is persuaded that, without some parameters, the companies' public and workplace offerings may be inequitably distributed, with EV charging infrastructure concentrated in higher income areas (D.P.U. 21-90, Exhs. AG-REN-CP-Surrebuttal-1, at 8-9, 10-11; AG-REN-1, at 27; D.P.U. 21-91, Exhs. AG-REN-CP-Surrebuttal-1, at 9, 10; AG-REN-1, at 27-28). Therefore, the Department finds it appropriate to limit the availability of EVSE rebates to publicly accessible sites, which serve the general public and provide access to the greatest number of customers. Accordingly, the Department directs NSTAR Electric and National Grid to restrict the availability of EVSE rebates to publicly accessible sites.

The Department must now determine how to define publicly accessible sites. The Companies propose to define publicly accessible consistent with G.L. c. 25A, § 16, which places no restriction on the applicable fees to access the parking space or the number of hours per day the parking space must be made available for public access (D.P.U. 21-90, RR-DPU-1; D.P.U. 21-91, RR-DPU-2; D.P.U. 21-92, RR-DPU-3). In contrast, the Attorney General supports adoption of the NY PUC's definition of publicly accessible, which defines publicly accessible EV charging stations as those that are accessible to the public without an access fee or restricted access, except for paid municipal parking (D.P.U. 21-90, Attorney General Track 1 Brief at 28-29; D.P.U. 21-90, AG-REN-1, at 40-41; D.P.U. 21-91, Attorney General Track 1 Brief at 32-33; D.P.U. 21-91, AG-REN-1, at 43; D.P.U. 21-92, Attorney General Track 1 Brief at 20-21; D.P.U. 21-92, AG-REN-1, at 36). The Companies and several intervenors argue that the NY PUC definition of publicly accessible contradicts the definition of "public electric vehicle charging station" in G.L. c. 25A, § 16, eliminates privately-owned public parking from EV program eligibility, complicates the EV programs and incentive level eligibility, and eliminates a program participant's flexibility to determine the timing of access by the public (D.P.U. 21-90, ChargePoint Track 1 Brief at 1, 10-11; D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 17-19; D.P.U. 21-92, ChargePoint Track 1 Brief at 1, 13-14; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Brief at 11-12; D.P.U. 21-90, Electrify America Track 1 Brief at 8; D.P.U. 21-91, Electrify America Track 1 Brief at 9; D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 14; D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 23-26, 37; D.P.U. 21-92, Unitil Track 1 Brief at 37-38).

The Department recognizes the importance of publicly accessible EV charging to achieving the Commonwealth's transportation electrification and decarbonization goals. Nevertheless, the Department also acknowledges that some restrictions on public access and parking fees may be necessary for the economic and operational viability of a charging station (D.P.U. 21-90, Exh. CP-KGM-Surrebuttal-1, at 5-7; RR-DPU-1; D.P.U. 21-90, RR-DPU-2; D.P.U. 21-92, RR-DPU-3). To determine the appropriate definition, the Department considers the MassEVIP program. Like the Companies' proposed public and workplace programs, the MassEVIP program is an incentive program designed to incentivize the installation of public EV charging stations.⁴⁹ To qualify for funding through the MassEVIP program, the MassEVIP program participant must allow the general public practical access to, and use of, the parking space and charging station for seven days per week, 24 hours per day. The MassEVIP program participant is permitted to charge a parking fee and, if the location has access restrictions, may reduce the hours of public access to no less than twelve hours per day, seven days per week.⁵⁰

Given the similarities between the Companies' public and workplace offerings and the MassEVIP program, the Department determines that aligning the definition of publicly

⁴⁹ MassDEP administers the MassEVIP Public Access Charging program, one of several rolling grant programs aimed at making EVs and EV charging stations more widely available across Massachusetts. The MassEVIP Public Access Charging Program provides incentives for property owners or managers with publicly accessible parking to acquire and install Level 1 and Level 2 EV charging stations. Non-residential locations with publicly accessible parking are eligible to enroll in the program. See <https://www.mass.gov/how-to/apply-for-massevip-public-access-charging-incentives> (last visited December 13, 2022).

⁵⁰ See MassEVIP Public Access Charging Program Application available at https://massgov.formstack.com/forms/massevip_pac_20 (last visited December 13, 2022).

accessible parking between the Companies' public and workplace offerings and the MassEVIP program will promote a consistent parking experience for EV owners across the Commonwealth. The Department also finds that this definition strikes an appropriate balance between the use of ratepayer funds to promote publicly accessible EV charging in the Commonwealth and the flexibility necessary for program participants to operate their parking facilities in an economically viable manner. Accordingly, the Department directs the Companies to incorporate MassEVIP's definition of publicly accessible into their public and workplace offerings. In sum, and consistent with our findings above in Section III.C.4.a, we approve: (1) 100 percent EVSE rebates for publicly accessible sites in EJ communities that meet the EJ criteria based on income; (2) 75 percent EVSE rebates for publicly accessible sites in EJ communities that meet any of the other EJ criteria; (3) 50 percent EVSE rebates for municipality-owned publicly accessible sites for ports three through ten; and (4) 50 percent EVSE rebates for non-municipality-owned publicly accessible sites for ports five through ten (D.P.U. 21-90, Exh. ES-KB-1, at 45; D.P.U. 21-91, Exh. NG-EVPP-1, at 45).

c. Residential Segment

i. Residential One to Four-Unit Dwellings

NSTAR Electric and National Grid each propose to offer EVSE rebates to all residential customers, with enhanced rebates to residential customers on their low-income discount rate or residing in an EJ community (D.P.U. 21-90, Exh. ES-KB-1, at 49-50; D.P.U. 21-91, Exh. NG-EVPP-1, at 55-56). Specifically, NSTAR Electric and National Grid propose to offer a rebate of up to a \$300 per residential customer enrolled in their managed charging offerings towards the cost of a networked Level 2 EVSE and a rebate of 100 percent to residential

customers on the low-income discount rate or residing in an EJ community who enroll in the managed charging offerings, up to a cap of \$1,700 for one-unit homes and \$2,700 for two to four-unit homes (D.P.U. 21-90, Exh. ES-KB-1, at 50, 55; D.P.U. 21-91, Exh. NG-EVPP-1, at 56). (D.P.U. 21-90, Exh. ES-KB-1, at 50, 55; D.P.U. 21-91, Exh. NG-EVPP-1, at 56). Unitil's proposal consists solely of 100 percent EVSE rebates to residential customers on its low-income discount rate who enroll in its residential EV TOU rate, up to \$1,700 (D.P.U. 21-92, Exhs. CSVG-1 (Rev.) at 32-33 & n.39; AG 3-3).

The Attorney General recommends restricting the residential EVSE rebates to low- and moderate-income customers in order to target spending towards customer that are the least likely to be served by the competitive market (D.P.U. 21-90, Attorney General Track 1 Brief at 42 & App., Table B; D.P.U. 21-91, Attorney General Track 1 Brief at 48, & App., Table B; D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 10; D.P.U. 21-92, Attorney General Track 1 Brief, at 30; Attorney General Track 1 Reply Brief at 8).⁵¹ The Companies and GECA oppose the Attorney General's recommendations to limit EVSE rebates to only a subset of residential customers (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 44-47; D.P.U. 21-90/ D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Reply Brief at 9-10; D.P.U. 21-92, Unitil Track 1 Brief at 39-41; D.P.U. 21-92, Unitil Track 1 Reply Brief at 8-10; D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 3-4, 7-9). CLF

⁵¹ The Attorney General proposes to define moderate-income as an annual household income of between 61 percent and 80 percent of the state annual median income, which is consistent with the definition of moderate-income customers in NSTAR Electric's and National Grid's respective energy efficiency programs (D.P.U. 21-90, Exhs. AG-REN-1, at 66; AG 6-5; D.P.U. 21-91, Exhs. AG-REN-1, at 73; AG 6-5).

also disagrees with the Attorney General's recommendation and suggests that the Companies instead implement a sliding scale of incentives that provides higher incentives to residential program customers based on the number of EJ criteria that a community meets (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Reply Brief at 10-11). The Companies and several intervenors argue that restricting enrollment in the residential programs to low- and moderate-income customers would preclude most residents in the Commonwealth from participating in the programs, thereby limiting their effectiveness (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Reply Brief at 8; D.P.U. 21-90, CEP Track 1 Brief at 2, 16-18; D.P.U. 21-91, CEP Track 1 Brief at 2, 18-19; D.P.U. 21-90/ D.P.U. 21-91, GECA Track 1 Brief at 3-4, 7-9; D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 44-47; D.P.U. 21-90/ D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Reply Brief at 9-10; D.P.U. 21-92, Unitil Track 1 Brief at 39-41; D.P.U. 21-92, Unitil Track 1 Reply Brief at 8-10). Unitil adds that an income-based eligibility screening or multi-tiered incentives could impose additional administrative constraints and costs, or delay program implementation (D.P.U. 21-92, Unitil Track 1 Brief at 55-56; Unitil Track 1 Reply Brief at 9-10).

The Attorney General based her recommendation, in part, on statistics from the MOR-EV program, which show that MOR-EV program funding has disproportionately benefited households in wealthier municipalities in the Commonwealth (D.P.U. 21-90, Exh. AG-REN-1, at 27; D.P.U. 21-91, Exh. AG-REN-1, at 28). The Department is persuaded that, without some parameters, the Companies' residential programs may disproportionately benefit higher-income

customers. At the same time, the Department acknowledges that an income-based eligibility screening could increase the administrative burden and costs of the EV programs.

While the Department is not opposed to including EVSE rebates for moderate-income customers, the Department determines that it is impractical and premature for the Companies to incorporate an income-based eligibility screening for moderate-income customers as part of their residential segment offerings at this time. As acknowledged by the Attorney General, NSTAR Electric and National Grid have not yet developed income-verification methods for their respective energy efficiency programs (D.P.U. 21-90, RR-CLF-1; D.P.U. 21-91, RR-CLF-1; D.P.U. 21-92, RR-CLF-1). Accordingly, the Department declines to adopt the Attorney General's recommendation.

The Department also declines to apply a sliding scale of incentives based on satisfaction of the EJ criteria for residential one to four-unit dwellings. The Department recognizes that not all customers residing in one to four-unit properties, including those in EJ communities that meet the EJ criteria based on income, have an annual median household income of less than 65 percent of the statewide annual median household income. Instead, the Department finds it appropriate to limit the availability of residential program EVSE rebates for one to four-unit properties to low-income customers, who face the greatest financial barriers to EV adoption. Accordingly, the Department approves Unitil's proposal to provide 100 percent EVSE rebates to residential customers in one to four-unit dwellings who qualify for its low-income residential discount rate and are enrolled in its EV TOU rate, up to the company's proposed project cap. Additionally, the Department limits NSTAR Electric's and National Grid's EVSE rebates for residential customers to those residential customers enrolled in the companies' respective

low-income discount rates and enrolled in their managed charging programs and that these residential customers are eligible for a rebate of 100 percent of EVSE costs. The Department acknowledges that limiting EVSE rebates to low-income residential customers in one to four-unit dwellings precludes a significant number of residential customers from EVSE rebates through these programs; however, as approved in Section III.C.3.a, above, all residential customers are eligible to receive make-ready rebates for EV charging infrastructure, which comprises the majority of costs associated with EV charging station deployment. Further, as noted above, the Commonwealth has established multiple EVSE rebate programs, which may provide rebates to a broader range of customers.

ii. MUDs

NSTAR Electric and National Grid propose to offer EVSE incentives to MUDs through their proposed residential segment offerings (D.P.U. 21-90, Exh. ES-KB-1, at 50-51; D.P.U. 21-91, Exh. NG-EVPP-1, at 65-67).⁵² The Attorney General supports a higher level of

⁵² NSTAR Electric proposes the standard use case for infrastructure at MUDs be sized to accommodate 20 EV charging ports (D.P.U. 21-90, Exh. DPU 8-28). Neither NSTAR Electric nor National Grid propose any cap or limit on eligibility for rebates to install EV infrastructure to accommodate EVSE to be installed in the future (*i.e.*, “future-proofing”) (D.P.U. 21-90, Exhs. ES-KB-1, at 60; DPU 8-28; DPU 12-2; D.P.U. 21-91, Exhs. NG-EVPP-1, at 57; DPU 11-2; RR-DPU-11, Att.; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 2, at 346-352). The Department did not contemplate rebates for future-proofing purposes in previously approved EV programs and has denied the use of ratepayer funds for such purposes. D.P.U. 20-64-A at 20. The Department acknowledges that some level of infrastructure upgrades to enable charging ports to be installed in the future at MUD sites may be cost-effective in the long-term. As part of these new EV programs, the Department cautions the Companies that, if a company seeks cost recovery for future-proofing, the company must justify the basis for the associated infrastructure upgrades and submit testimony and supporting exhibits demonstrating that such upgrades are reasonable and the associated costs are eligible EV program expenditures. The Department cautions the Companies that a failure to provide

incentives for publicly accessible MUDs, MUDs located in EJ communities, or MUDs that are an affordable housing facility or where at least 50 percent of the households are low- or moderate-income (D.P.U. 21-90, Attorney General Track 1 Brief at 42; D.P.U. 21-91, Attorney General Track 1 Brief at 48). The Companies and CLF disagree with the Attorney General's recommendation to narrow the eligibility of MUDs for rebates, arguing that MUDs have significant overlap with low-income customers and EJ communities and MUD parking lots serve residents and their visitors (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 47-48; D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Reply Brief at 9-10; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Reply Brief at 7-8). CEP asserts that MUD customers face some of the greatest barriers to EVSE installation due to split incentives and lack of clear cost-sharing structures between property owners and tenants (D.P.U. 21-90, Exh. CEP-1, at 50; D.P.U. 21-91, Exh. CEP-1, at 53-54).

In Section III.C.4.a, above, the Department approved rebates for 100 percent of EVSE costs for MUDs in communities that meet the EJ criteria based on income, but limited EVSE rebates for MUDs in communities that meet an EJ criterion other than income to 75 percent of EVSE costs and to 50 percent for MUDs in non-EJ communities. The tiered EVSE incentive levels prioritize communities that meet the EJ criteria based on income while still incentivizing EV charging deployment in MUDs in other locations. Further, the Department notes the overlap between MUDs, low-income individuals, and EJ communities (D.P.U. 21-90,

clear, cohesive, and reviewable evidence demonstrating eligibility will result in disallowance of targeted cost recovery. D.P.U. 17-13, at 58, citing Massachusetts Electric Company, D.P.U. 95-40, at 7 (1995); Boston Gas Company, D.P.U. 93-60, at 26-27 (1993); The Berkshire Gas Company, D.P.U. 92-210, at 24 (1993).

Exh. ES-KB-Rebuttal-1 (Rev.) at 49; D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 58).

Accordingly, the Department finds that this approach addresses the Attorney General's concerns and, therefore, we decline to adopt her further recommendations for the MUD offerings.

d. Fleet Segment

NSTAR Electric proposes to offer fleet EVSE rebates for light-duty fleets and for medium- and heavy-duty fleets enrolled in its medium- and heavy-duty fleet pilot offering (D.P.U. 21-90, ES-KB-1, at 67-68, 73-74). National Grid proposes to offer EVSE incentives to all fleet types (D.P.U. 21-91, NG-EVPP-1, at 73, 76).⁵³ The Attorney General supports eliminating fleet segment incentives for all private fleets except small private fleets operating in EJ communities (D.P.U. 21-90, Attorney General Track 1 Brief at 47; D.P.U. 21-91, Attorney General Track 1 Brief at 52; D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 12-13). CLF recommends that the Department direct National Grid to dedicate at least 50 percent of its proposed fleet segment budget to supporting public transit fleets that operate primarily in EJ communities (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Brief at 18-19, 36). The Companies and EVgo oppose the Attorney General's recommendation and assert that private fleets contribute significantly to GHG emissions and, therefore, their enrollment in the fleet offering is necessary to achieve the Commonwealth's decarbonization goals (D.P.U. 21-90/ D.P.U. 21-91, EVgo Track 1 Brief at 10, 12; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Reply Brief at 6-7, 8; D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 51-52).

⁵³ Unutil does not propose a fleet segment offering.

As stated above, the Department recognizes that, as the competitive EV market grows, the need for financial incentives for private customers may diminish. See D.P.U. 13-182-A at 13 (finding that a utility proposal must meet a need unlikely to be met by the competitive market). Although the Department acknowledges that private fleets are likely a significant contributor to GHG emissions in the Commonwealth, the Department also recognizes that private fleets are likely to have greater resources with which to transition to EVs than public fleets and are also more likely to have their needs met by the competitive market (D.P.U. 21-90, Exh. AG-RENC-P-Surrebuttal-1, at 39; D.P.U. 21-91, Exh. AG-RENC-P-Surrebuttal-1, at 39). On the other hand, public fleet customers face some of the greatest barriers to EVSE installation due to lack of funds and unique charging needs (D.P.U. 21-90, Exhs. AG-REN-1, at 41; CEP-1, at 50; D.P.U. 21-91, Exhs. AG-REN-1, at 44; CEP-1, at 53-54). Previously, in D.P.U. 18-150, at 392-393, the Department limited participation in National Grid's fleet advisory services program to public transit and government fleets and encouraged the company to prioritize eligible fleets that provide services in disadvantaged communities. For the reasons stated above, and consistent with D.P.U. 18-150, at 392-393, the Department finds it appropriate to restrict the availability of EVSE rebates to public fleets only.

5. Networking Rebates

NSTAR Electric and National Grid propose to provide networking rebates to eligible public, workplace, and MUD customers while Unitil does not (D.P.U. 21-90, Exh. ES-KB-1, at 46; D.P.U. 21-91, Exh. NG-EVPP-1, at 45; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 37). The Attorney General recommends limiting networking rebates to publicly accessible sites and publicly accessible MUDs (D.P.U. 21-90, Attorney General Track 1 Brief, App. Tables A-B;

D.P.U. 21-91, Attorney General Track 1 Brief, App. Tables A-B). NSTAR Electric and National Grid argue that, as a recurring cost, networking fees present a significant barrier to EV adoption (D.P.U. 21-90, Exh. ES-KB-1, at 46; D.P.U. 21-91, Exh. NG-EVPP-1, at 45). The companies also contends that networking allows customers to more effectively locate and efficiently use chargers via mapping and queuing in EV charging applications and provides the companies with charging data which can be leveraged for current EV program refinements and future EV program design (D.P.U. 21-90, Exh. ES-KB-1, at 46; D.P.U. 21-91, Exh. NG-EVPP-1, at 45).

The Department recognizes the value networking provides (D.P.U. 21-90, Exh. ES-KB-1, at 46; D.P.U. 21-91, Exh. NG-EVPP-1, at 45). The Department finds that rebates for ongoing, recurring costs will help to address the financial barriers to EV charging infrastructure deployment (D.P.U. 21-90, Exh. ES-KB-1, at 46; D.P.U. 21-91, Exh. NG-EVPP-1, at 45). The Department also notes that no party to these proceedings object to the companies' proposal to offer networking rebates as part of their EV programs. Based on the foregoing, the Department approves the companies' networking rebates proposal (D.P.U. 21-90, Exh. ES-KB-1, at 46; D.P.U. 21-91, Exh. NG-EVPP-1, at 45). Nonetheless, consistent with our findings and directives limiting EVSE rebates to publicly accessible sites in Section III.C.4.b, above, the Department directs NSTAR Electric and National Grid to provide networking rebates only to publicly accessible sites and MUDs.

6. Program Design Construct

a. EV Program Term

NSTAR Electric and National Grid propose a four-year EV program term while Unitil proposes a five-year EV program term (D.P.U. 21-90, Exh. ES-KB-1, at 7; D.P.U. 21-91,

Exh. NG-EVPP-1, at 10; D.P.U. 21-92, Exh. CSVG-1, at 33). The Attorney General asserts that a three-year EV program term is more appropriate because the EV industry is experiencing tremendous growth, EV-related technological is rapidly advancing, and state and federal funding is becoming increasingly available to support EV adoption (D.P.U. 21-90, Attorney General Brief at 25; D.P.U. 21-91, Attorney General Brief at 28-29; D.P.U. 21-90/D.P.U. 21-91, Attorney General Reply Brief at 15; D.P.U. 21-92, Attorney General Brief at 17).

NSTAR Electric and National Grid developed their proposed four-year EV program budgets based on assumptions and forecasts of the number of EV charging stations needed in each market segment to support the adoption of EVs consistent with the Commonwealth's ZEV MOU goals (D.P.U. 21-90, Exh. ES-JB-Rebuttal-1 (Rev.) at 6; D.P.U. 21-91, Exh. ES-JB-Rebuttal-1 (Rev.) at 6). Specifically, NSTAR Electric and National Grid used their experiences with their existing EV programs, their service territory size, the National Renewable Energy Laboratory's EV infrastructure projection tool ("EVI-Pro Lite tool"), and expected EV sales to size their proposed EV programs (D.P.U. 21-90, Exh. ES-KB-1, at 22-24; D.P.U. 21-91, Exh. NG-EVPP-1, at 24-26). Unitil developed its five-year EV program budget based on data from the MORE-EV program, forecasts developed using the EVI-Pro Lite tool, and expected EV sales (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 17, 38).

The term of a program is an important consideration. A program term that is too lengthy risks misalignment with the current state of the EV market or technological advances in the EV industry. On the other hand, a program term that is too short may jeopardize the Companies' ability to achieve the EV program goals (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 8; D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 10). The Attorney General concedes that she

did not analyze the impact that her recommendation to reduce the term of the EV programs to three years could have on achieving the Commonwealth's ZEV MOU goals (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 3, at 606). The Companies, on the other hand, based the term of their EV programs on reasonable assumptions and forecasts developed, in part, on the EVI-Pro Lite tool to determine the number of EV charging ports needed in each market segment to support the adoption of EVs consistent with the Commonwealth's ZEV MOU goals (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 6-8; D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 8; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 38).

Based on these considerations, the Department finds that a four-year term for NSTAR Electric's and National Grid's EV programs and a five-year term for Unitil's EV program is appropriate and consistent with the Commonwealth's overall energy and emission reduction goals. Therefore, the Department approves a four-year term for NSTAR Electric's Phase II EV program and National Grid's Phase III EV program, and a five-year term for Unitil's EV program.⁵⁴

b. Outside Funding Requirements

NSTAR Electric and National Grid propose to require customers approved for make-ready and EVSE rebates through the companies' EV programs to apply for MassEVIP rebates and other available state or federal funding that is directly aligned with the companies'

⁵⁴ The Department recognizes that the approved EV program terms will overlap, in part, with the initial electric sector modernization plans pursuant to G.L. c. 164, § 92B. Accordingly, consistent with G.L. c. 164, § 92B(c)(ii), the companies shall include a summary of the investments approved herein as previously Department-approved investments within their electric sector modernization plans.

EV program offerings (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 26; D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 30). The companies also propose to retain the flexibility to modify this requirement if funding from third-party sources is depleted or delayed beyond a one or two-month period (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 26; D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 30; D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, Tr. 2 at 295, 299-300). Additionally, NSTAR Electric and National Grid propose to require customers to report whether they receive funding from third-party sources and to deduct any duplicative funding for the same offering from the utility side of the customer offering (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 30; D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 35; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 2 at 300). Unitil proposes to inform customers about the availability of third-party rebates and incentives and to encourage customers to apply for them but does not propose to require customers to obtain outside funding as a condition to participation in the company's EV program (D.P.U. 21-92, Exh. CVG-Rebuttal-1 (Rev.) at 14; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 2, at 319).

The Attorney General recommends that the Department direct the Companies to require customers to: (1) apply for applicable state and federal funding; (2) certify that they did so and reduce the rebate and incentive level received through the EV programs by the corresponding amount received from external funding sources; (3) ensure that customers' total incentives do not exceed their actual infrastructure and EVSE costs; and (4) coordinate with state program administrators on the availability of external funding sources (D.P.U. 21-90, Attorney General Track 1 Brief at 24; D.P.U. 21-91, Attorney General Track 1 Brief at 27; D.P.U. 21-92, Attorney General Track 1 Brief at 16). The Companies and a number of intervenors oppose the Attorney

General's recommendations (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 27-29; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 13; D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 4; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 4; D.P.U. 21-92, ChargePoint Track 1 Reply Brief at 3-4; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Brief at 4-5, 12; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Reply Brief at 1-4, 8; D.P.U. 21-90, Electrify America Track 1 Brief at 10, 12; D.P.U. 21-91, Electrify America Track 1 Brief at 12, 14; D.P.U. 21-90/D.P.U. 21-91, Electrify America Track 1 Reply Brief at 8, 9).

In D.P.U. 20-69-A at 46, the Department stated that, to ensure the prudent expenditure of ratepayer funds, any EV charging infrastructure program proposal should not be duplicative of other EV charging infrastructure build-out incentive programs offered in the Commonwealth. Further, the Department notes that the General Court has required the formation of an EV Coordinating Council to coordinate the implementation of an EV charging infrastructure deployment plan. St. 2022, c. 179, § 81. Consistent with our findings in D.P.U. 20-69-A, the Department finds that it is reasonable and appropriate to require customers to apply for MassEVIP rebates and other state or federal funding to the extent that it is available and aligned with the Companies' EV program offerings and to report any amounts received (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 26; D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 30). This requirement will help to limit the use of ratepayer funds where funding from other sources is available for the same purpose. Therefore, the Department directs the Companies to require customers to apply for available MassEVIP and other state or federal funding to the extent that it is available and aligned with the Companies' EV program offerings and to report the receipt of

any such funding to the Companies. We find that this approach is sufficient and decline to require any additional certification.

The Department also determines that the Companies must deduct any third-party funding received by the customer from the EV program rebates provided to the customer (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 30; D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 35).

The Department determines that the total amount of third-party funding received must be applied against the combined make-ready and EVSE incentives that a customer is eligible to receive through the EV program absent outside funding regardless of whether the outside funding received was designated for utility-side infrastructure, customer-side infrastructure, or EVSE costs (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 30; D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 35). The Department also directs the Companies to ensure that the combined rebate amount provided by the outside funding sources and by the Companies does not exceed the customer's actual infrastructure and EVSE costs. The Department determines that these requirements for outside funding ensures that ratepayer-funded incentives do not result in a potential windfall for program participants at the expense of ratepayers.

Finally, in D.P.U. 20-64-A at 26, the Department stated that mandating site hosts to seek or exhaust outside funding sources prior to enrolling in the EV program, or as a prerequisite to receiving a rebate through the program, may have unintended consequences, such as potentially deterring deployment of EV charging infrastructure upgrades due to regulatory burdens. Consistent with these findings, the Department declines to impose a strict requirement at this time, as recommended by the Attorney General, that would result in a disallowance of cost recovery of rebates provided to program participants who fail to apply for third-party funding.

Given the still-developing EV industry, such action could jeopardize the effectiveness of the EV programs (D.P.U. 21-92, Exh. CVG-Rebuttal-1 (Rev.) at 14;

D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 2, at 319). Additionally, the Department finds it reasonable to allow the Companies the flexibility to modify the requirement for customers to apply for third-party funding if funding from third-party sources becomes depleted or is delayed beyond a one or two-month period (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 26;

D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 30;

D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 2 at 295, 299-300).

c. Budget Flexibility

NSTAR Electric and National Grid seek flexibility to move EV program funding between offerings within each program segment and move up to 20 percent of EV program funds from one program segment to another without prior Department approval in order to respond to changes in the EV charging market and customers' needs (D.P.U. 21-90, Exh. ES-KB-1, at 89; D.P.U. 21-91, Exh. NG-EVPP-1, at 118; D.P.U. 21-90/ D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 76). The companies also seek flexibility to adjust components within the program segments, including incentive and rebate levels, customer eligibility requirements, and the distribution of port types without prior Department approval (D.P.U. 21-90, Exh. ES-KB-1, at 89-90; D.P.U. 21-91, Exh. NG-EVPP-1, at 118). The Attorney General opposes NSTAR Electric's and National Grid's request for budget and programmatic flexibility without prior Department approval and stakeholder review (D.P.U. 21-90, Attorney General Track 1 Brief at 20-23; D.P.U. 21-91, Attorney General Track 1 Brief at 22-26). DOER recommends that the Department allow NSTAR Electric and National Grid to propose shifts in

EV program budget and other appropriate programmatic changes in their annual reports with an appropriate demonstration of program utilization, changing market trends, and customer preferences (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 8, 14).

In 2022-2025 Grid Modernization Plans, D.P.U. 21-80-A/D.P.U. 21-81-A/D.P.U. 21-82-A at 76-77, 88-89, 97-98 (October 7, 2022) (“Grid Mod Track 1 Order”), the Department permitted the Companies to shift not more than 15 percent of their total grid modernization budget between each investment category to respond to evolving market conditions. The Department also allowed the Companies to shift spending between years over the four-year term of the program, subject to the 15 percent budget cap variance for each investment category. Grid Mod Track 1 Order at 77, 89, 97-98. Finally, the Department stated that any spending over the overall total budget cap variance in each category is not eligible for targeted recovery and, instead, may be recovered by the Companies in a base distribution rate proceeding subsequent to a prudency finding by the Department. Grid Mod Track 1 Order at 77, 89, 98.

Here, the Department also determines that allowing the companies a certain level of flexibility to adjust their program segment budgets in response to EV market trends and customer preferences will improve overall program implementation. However, the Department shares the Attorney General’s concern that a significant shift in EV program funding from one program segment to another could jeopardize the effectiveness of certain segments for the benefit of others. Therefore, consistent with Grid Mod Track 1 Order, the Department allows NSTAR Electric and National Grid the flexibility to shift spending among and between program segments by not more than 15 percent of its total approved EV program budget. NSTAR Electric and

National Grid may shift spending between years over the four-year term of their EV programs, subject to the 15 percent cap. While Unitil did not seek budget flexibility, and notwithstanding the modest scale of its EV program, the Department determines that it is important to provide the company some flexibility to deviate from its budget estimates and projections to respond to changes that inevitably will take place over the term of the EV program. Accordingly, Unitil may shift spending between program segments and between years over the five-year term of its EV program, subject to a 15 percent cap. Further, any spending over a company's total approved EV program budget or above the 15 percent cap for each program segment is not eligible for targeted cost recovery through the EV program factor for NSTAR Electric and National Grid or through the GMF for Unitil and, instead, may be recovered by the Companies in a base distribution rate proceeding subsequent to a prudence finding by the Department.⁵⁵ The Department expects the Companies to report any EV program budget shifting among and between program segments in their annual reports accompanied by an explanation for the basis for the budget shifting.

Regarding NSTAR Electric's and National Grid's request for the flexibility to adjust customer eligibility criteria, incentive and rebate levels, and port target distributions without prior Department approval, the Department shares the Attorney General's concern that any such change could have significant consequences for the EV programs. The Department also recognizes that changes to customer eligibility criteria, incentive and rebate levels, and port

⁵⁵ As discussed in Section V.C.1, below, the Department directs NSTAR Electric to recover EV program expenditures through an annual reconciling EV program factor and Unitil to recover EV program expenditures through its annual reconciling grid modernization factor.

target distributions may be appropriate due to evolving market trends and customer preferences. In 2024, the Companies must file their respective electric sector modernization plans with the Department for review. Pursuant to G.L. c. 164, § 92B, these plans must include each company's proposals to improve the distribution system to facilitate transportation electrification. Accordingly, the Companies may propose adjustments to their EV programs consistent with the requirements of G.L. c. 164, § 92B as part of their electric sector modernization plans.

d. EJ Community Targets

A number of intervenors urge the Department to consider binding deployment targets for EV charging ports in EJ communities or a requirement that a percentage of the Companies' EV program budgets be reserved for EJ communities (D.P.U. 21-90, Attorney General Track 1 Brief at 15, 18-19; D.P.U. 21-91, Attorney General Track 1 Brief at 18, 21-22; D.P.U. 21-92, Attorney General Track 1 Brief at 13, 14; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Brief at 4, 29, 34, 36; D.P.U. 21-90, CEP Track 1 Brief at 20; D.P.U. 21-91, CEP Track 1 Brief at 20; D.P.U. 21-90/D.P.U. 21-91, CEP Track 1 Reply Brief at 9-10). The Attorney General specifically recommends a 40 percent binding port deployment target for NSTAR Electric and National Grid, with additional ports dedicated to low-income customers, and a 100 percent binding port deployment target for Unitil (D.P.U. 21-90, Attorney General Track 1 Brief at 15, 18-19; D.P.U. 21-91, Attorney General Track 1 Brief at 18, 21-22; D.P.U. 21-92, Attorney General Track 1 Brief at 13, 14). The Attorney General additionally recommends that NSTAR Electric and National Grid conduct 40 percent of their EV ready site plans for MUDs in EJ

communities (D.P.U. 21-90, Attorney General Track 1 Brief at 15; D.P.U. 21-91, Attorney General Track 1 Brief at 18).

The Companies, DOER, and Electrify America oppose binding EV charging port deployment targets and, instead, support programmatic flexibility that can respond to community and stakeholder feedback (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 10; D.P.U. 21-90, Electrify America Track 1 Brief at 6; D.P.U. 21-91, Electrify America Track 1 Brief at 6-7; D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 65-66; D.P.U. 21-92, Unitil Track 1 Brief at 35-36). The companies also oppose the Attorney General's recommendation to require 40 percent of EV ready site plans to be conducted for MUDs in EJ communities because it is not based on EJ community demand, but they commit to working with EJ stakeholders in order to meet the evolving needs of EJ community residents (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 66).

In discharging its responsibilities under chapters 25 and 164 of the General Laws, the Department must prioritize, among other things, equity, with respect to itself and the entities it regulates. G.L. c. 25, § 1A. Further, as part of any new or revised EV charging infrastructure program proposal, the Department expected the Companies to use their experience implementing existing programs to further increase the accessibility of EV chargers in EJ communities and to consider appropriate measures to decrease barriers to the installation of EV chargers in all communities across their service territories, including EJ communities. D.P.U. 20-69-A at 46, 49-50. Here, the issue before us is the appropriate level to establish for deployment targets in EJ communities and whether these targets should be binding.

Generally, to ensure an equitable distribution of EV program benefits and maximize the public interest, the Department finds that EV charging port deployment targets for EJ communities is appropriate. Nonetheless, the Department acknowledges the voluntary nature of the public and workplace, MUD, and fleet programs and, thus, the level of participation in EJ communities cannot be predicted with any certainty. The Department therefore declines to make EV charging port deployment targets for EJ communities, or a certain percentage of EV ready site plans for MUDs in EJ communities, binding.

Next, the Department must determine the appropriate non-binding EV charging port deployment target for EJ communities. To do so, we consider the Companies' Phase I EV program targets for EJ communities as well as the characteristics of each company's service territory. For their Phase I EV program, the Department approved a deployment target of up to ten percent of the EV charging infrastructure in EJ communities for NSTAR Electric and ten percent of the Level 2 charging sites for National Grid. D.P.U. 17-05, at 473, 478; D.P.U. 17-13, at 24, 30. NSTAR Electric exceeded its proposed EJ community deployment target for its Phase I EV program and installed 15 percent of ports in communities that met two or more EJ criteria and 18 percent of ports in communities that met one or more EJ criteria (D.P.U. 21-90, Exh. AG 6-1, Att. (a)). Similarly, in its Phase I EV program, National Grid exceeded its proposed EJ community deployment target and installed 21 percent of stations in communities that met two or more EJ community criteria and 46 percent of stations in communities that met one or more EJ community criteria (D.P.U. 21-91, Exh. AG 6-1, Atts. (a), (b)).

Further, NSTAR Electric estimates that 35 percent of its residential and commercial customers live or operate in a community that meets at least one of the Commonwealth's EJ criteria while National Grid estimates that 28 percent of its residential and 29 percent of its commercial customers live or operate in a community that meets at least one of the Commonwealth's EJ criteria (D.P.U. 21-90, Exh. DPU 2-3, Atts. (c), (d); D.P.U. 21-91, Exh. DPU 2-3, Atts. (c), (d)). Therefore, the Department finds that an EV charging port deployment and EV ready site plan target of 35 percent for NSTAR Electric and 28.5 percent for National Grid for EJ communities is appropriate for NSTAR Electric's and National Grid's public and workplace and MUD programs, as these figures represent the percentage of customers living and operating in an EJ community across the companies' service territories. The Department also finds that an EV charging port deployment target of 40 percent for EJ communities is appropriate for NSTAR Electric's and National Grid's fleet programs, as proposed by National Grid (D.P.U. 21-91, Exh. NG-EVPP-1, at 13).⁵⁶

Finally, to allow the Department and stakeholders to monitor the companies' progress in achieving their EV charging port deployment targets, the Department directs the companies to include EV charging port deployment data in EJ communities in their annual reports.⁵⁷

⁵⁶ Unitil maintains that 65 percent of its service territory is located in the city of Fitchburg, which meets three of the Commonwealth's EJ community criteria (i.e., English isolation, income, and minority status) (D.P.U. 21-92, Exhs. CSVG-1 (Rev.) at 32-33 & n.39; AG 2-2 (Rev.); AG 3-3). Given the characteristics of Unitil's service territory, coupled with the enhanced rebates proposed for low-income residential customers, as discussed above in Section III.C.4.c.i, the Department finds it unnecessary to establish port deployment targets in EJ communities for Unitil.

⁵⁷ As discussed in Section IV.A.3.a, below, the Department intends to establish performance metrics in a compliance phase of these proceedings and anticipates

e. Eligibility of Phase I EV Program Participants

NSTAR Electric and National Grid propose to allow program participants who previously participated in their respective Phase I EV programs to apply for additional EV program incentives and rebates through their Phase II and Phase III EV programs, respectively (D.P.U. 21-90, Exh. DPU 8-20; D.P.U. 21-91, Exh. DPU 9-18). No party briefed these issues.

For the following reasons, the Department limits EVSE rebates and networking rebates to new program participants and prior program participants that propose deployment of EV charging stations in a different site from the EV charging sites deployed as part of earlier phases of the EV program. The Department expects that the additional incentive of EVSE rebates and networking rebates for new program participants, or a new site for prior program participants, will encourage EV charging stations to be deployed in a variety of new locations. As such, EV drivers will have more options for where to charge, which, in turn, will support further EV adoption in the Commonwealth. Additionally, we note that make-ready costs constitute the largest proportion of the costs associated with deployment of EV charging facilities and, thus, continued eligibility of prior program participants for make-ready rebates as part of the EV programs we approve in this Order will serve as a strong incentive for prior program participants should they seek to expand their existing EV charging facilities notwithstanding their ineligibility for EVSE rebates or networking rebates at those sites.

including metrics on ports deployed in EJ communities. We note that progress in achieving the port deployment targets in EJ communities would also be an appropriate area for assessment as part of the EV program evaluation plan.

f. Residential Managed Charging Requirement

NSTAR Electric proposes to require residential customers to enroll in the ConnectedSolutions program, a load management program offered through the company's energy efficiency program, that incentivizes customers to reduce electricity demand (D.P.U. 21-90, Exh. ES-KB-1, at 56-58). National Grid proposes to require residential customers to enroll in either its energy efficiency ConnectedSolutions program or its off-peak charging rebate program, a load management program offered through the company's Phase II EV program, that incentivizes customers to charge their EVs during off-peak times (D.P.U. 21-91, Exh. NG-EVPP-1, at 62-63). No party briefed these issues.

In D.P.U. 15-120/D.P.U. 15-121/D.P.U. 15-122, at 101 and D.P.U. 20-69-A at 47-48, the Department stated that it is important that EV customers are provided with appropriate pricing signals, through load management incentive programs, to encourage the EV charging behavior that will advance the Commonwealth's climate goals and the Department's grid modernization objectives. The Department also stated that establishing these pricing signals now can help prepare EV customers to navigate the future electric grid where EV charging and discharging may play a greater role in reducing system peak and local peak demand. D.P.U. 20-69-A at 48.

The Department determines that the companies' proposal to require residential program customers to enroll in their load management programs is consistent with the Department's directives in D.P.U. 20-69-A. Therefore, the Department approves a requirement for NSTAR Electric and National Grid residential program customers to enroll in the companies' respective load management programs as a precondition to EV program participation. For example, all

residential customers, including those not on the low-income discount rate, must enroll in a managed charging program to be eligible for make-ready incentives.

However, the Department is concerned that the companies' proposals could unjustly reward the companies through performance incentives the companies would be eligible to receive through the energy efficiency programs and result in a change to the underlying assumptions in the benefit-cost ratio analyses for the companies' respective ConnectedSolutions programs⁵⁸ (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 4, at 832, 838-839). Therefore, the Department directs the companies to explain how each relevant component of the benefit-cost ratio analyses will account for the mandatory enrollment of residential program customers in the ConnectedSolutions programs and describe the method by which the companies will exclude the participation of these customers from the calculation of energy efficiency performance incentives as part of their next energy efficiency annual report.

7. Marketing and Outreach Plan

The Companies each propose a marketing and outreach plan (D.P.U. 21-90, Exh. ES-KB-1, at 86-87; D.P.U. 21-91, Exh. NG-EVPP-1, at 114-115; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 43-44). The Attorney General recommends that NSTAR Electric and National Grid submit detailed marketing and outreach plans for stakeholder input and Department review and approval during a compliance phase of these proceedings (D.P.U. 21-90,

⁵⁸ A benefit-cost ratio is a test to determine the cost-effectiveness of an energy efficiency program and involves a calculation of the total benefits and the total costs to determine whether the overall benefits of the program exceed the costs. Updating Energy Efficiency Guidelines, D.P.U. 20-150, App. A, § 3.4 (2021); Electric Industry Energy Efficiency Cost Effectiveness, D.T.E. 98-100, at 4 (1999); G.L. c. 25, §§ 19(a)-(c), 21(b)(3).

Attorney General Track 1 Brief at 77; D.P.U. 21-91, Attorney General Track 1 Brief at 90-92). NSTAR Electric and National Grid contend that such plans are unnecessary because the companies have committed to working with stakeholders on the development of their marketing and outreach strategies (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 74).

The Department has recognized that customer education, marketing, and outreach are crucial to enabling the successful implementation of utility programs. D.P.U. 12-76-B at 2. Furthermore, the Department acknowledges that stakeholder input on marketing and outreach strategies is valuable, particularly in reaching hard to reach customers and underserved and overburdened populations. Nonetheless, for the following reasons, the Department determines that further process on the proposed marketing and outreach plans is unnecessary and declines to adopt the Attorney General's recommendation.

The Companies intend to conduct marketing and outreach through their existing communication channels and by leveraging community and stakeholder relationships to target hard to reach customers, underserved and overburdened populations, as well as other customer segments (D.P.U. 21-90, Exh. ES-KB-1, at 86-89; D.P.U. 21-91, Exh. NG-EVPP-1, at 114-117; D.P.U. 21-92, Exh. CSVG-1, at 43-52). Further, the Companies intend to engage an advertising vendor to develop their marketing and outreach plans (D.P.U. 21-90, Exh. ES-KB-1, at 88; D.P.U. 21-91, Exh. NG-EVPP-1, at 116; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 48). NSTAR Electric and National Grid have also committed to work with stakeholders to develop their marketing and outreach plans (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 74; D.P.U. 21-90, Exh. AG 4-20; RR-AG-3; D.P.U. 21-91, Exh. AG 4-20;

RR-AG-4). As such, the Department expects the Companies to incorporate stakeholder input into their marketing and outreach plans. Additionally, because customer education, marketing, and outreach activities should not remain static, the Department expects the Companies to refine their marketing and outreach efforts based on evolving market trends, customer preferences, lessons learned, and continued dialogue with stakeholders. The Department directs the Companies to submit their respective marketing and outreach plans with their first annual report filing and to explain in the annual report how stakeholder input was incorporated into their plans. The Department further directs the Companies to identify lessons learned, strategy changes, and other relevant information about their marketing and outreach plans in the annual reports.

8. Other Company Offerings and Proposals

a. Fleet Assessment Services

NSTAR Electric proposes to offer fleet assessment services for up to 100 private and non-profit fleet customers and National Grid proposes to offer fleet assessment services for up to 150 private and non-profit fleet customers and 25 incremental public fleet assessments through 2025 (D.P.U. 21-90, Exh. ES-KB-1, at 67, 69, 70; D.P.U. 21-91, Exh. NG-EVPP-1, at 76, 83). The Attorney General recommends that the Department direct the companies to limit fleet assessment services to publicly-owned fleets and small private fleets that operate in EJ communities because large private fleets have more financial flexibility to electrify their fleets without ratepayer funding (D.P.U. 21-90, Attorney General Track 1 Brief at 45; D.P.U. 21-91, Attorney General Track 1 Brief at 50-51).

As stated above, the Department recognizes that, as the competitive EV market grows, the need for financial incentives for private customers may diminish. See, D.P.U. 13-182-A

at 13 (finding that a utility proposal must meet a need unlikely to be met by the competitive market). Although the Department acknowledges that private fleets are likely a significant contributor to GHG emissions in the Commonwealth, the Department also recognizes that private fleets are likely to have greater resources with which to transition to EVs than public fleets and are also more likely to have their needs met by the competitive EV market (D.P.U. 21-90, Exh. AG-REN-CP-Surrebuttal-1, at 39; D.P.U. 21-91, Exh. AG-REN-CP-Surrebuttal-1, at 39). Additionally, the Department notes that, in D.P.U. 18-150, at 392-393, the Department limited participation in National Grid's fleet advisory services program to public transit and government fleets and encouraged the company to prioritize eligible fleets that provide services in disadvantaged communities. Consistent with our directives in D.P.U. 18-150 and our findings and directives limiting EVSE rebates to public fleets in Section III.C.4.d, above, the Department allows NSTAR Electric and National Grid to provide fleet assessment services to public fleets only and encourages the companies to prioritize eligible fleets that provide services in EJ communities. The Department approves each company's respective fleet assessment services budget proposal, with the exception of the online fleet assessment tools discussed below, and subject to our directives above. Notwithstanding our denial of fleet assessment services for non-public fleets, the Department does not reduce the proposed budgets for fleet assessment services, with the exception of the online fleet assessment tools discussed below, but directs the companies to dedicate the associated budget amounts for non-public fleets to public fleets.

b. Online Fleet Assessment Tools

NSTAR Electric and National Grid propose to develop online fleet planning and TCO tools for fleet customers (D.P.U. 21-90, Exh. ES-KB-1, at 69-70; D.P.U. 21-91, Exh. NG-EVPP-1, at 76-77). NSTAR Electric and National Grid maintain that their experience with distribution and transmission planning, and preexisting relationships with fleet customers places them in a unique position to perform fleet assessment services and assist with the transition to an electric fleet (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 53-54). Further, the companies argue that the online fleet assessment tools will simplify information gathering for all fleet operators (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 53-54).

DOER supports approval of NSTAR Electric's and National Grid's online fleet assessment proposals but recommends that the companies coordinate with MassCEC on program implementation (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 24-25). The Attorney General, however, opposes the proposed online fleet planning and TCO tools, arguing that they offer nothing unique from other private and public fleet assessment services currently available from public and private vendors and could interfere with the competitive market (D.P.U. 21-90, Attorney General Track 1 Brief at 46; D.P.U. 21-91, Attorney General Track 1 Brief at 51).

In D.P.U. 20-69-A at 46, the Department stated that, to ensure the prudent expenditure of ratepayer funds, any EV charging infrastructure program proposal should not be duplicative of other EV charging infrastructure build-out incentive programs offered in the Commonwealth. The Department determines that our directive against duplicative programs is equally applicable

to offerings such as the online fleet assessment tools proposals. As noted by the Attorney General, several public and private online fleet assessment tools currently exist, including the MassCEC fleet advisory services program, IEQ Mobility's EV feasibility assessment tool, ICF's fleet electrification tool, and Argonne National Lab's AFLEET tool (D.P.U. 21-90, Exh. AG-REN-1, at 77; D.P.U. 21-91, Exh. AG-REN-1, at 84). The Department finds no record evidence that clearly distinguishes NSTAR Electric's and National Grid's proposed online fleet assessment tools from those already in existence. Accordingly, the Department concludes that the companies have not clearly demonstrated that the proposed online fleet assessment tools do not merely duplicate other online fleet assessment tools currently available. Consequently, the Department concludes that the proposed online fleet assessment tools could interfere with the competitive EV market and denies these proposals. The Department directs NSTAR and National Grid to reduce their EV program budgets accordingly.

c. NSTAR Electric EJ Community Car Sharing Program

NSTAR Electric proposes to partner in an electric car sharing program in EJ communities (D.P.U. 21-90, Exh. ES-KB-1, at 72-73). The Attorney General contends that the proposed car sharing program should be denied as outside of the scope of the normal business operations of a utility and that the company can better support transportation electrification through other EV program offerings (D.P.U. 21-90, Attorney General Track 1 Brief at 67). NSTAR Electric replied that few car sharing programs are specifically designed to serve low-income customers (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 68-69).

The Department acknowledges that car sharing programs designed to serve low-income customers serve an important function and provide benefits, including a reduction in air pollution

and additional transportation options for those least likely to be served by the competitive market (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 61). However, we agree with the Attorney General that a car sharing program is outside the scope of a utility's normal business operations. Accordingly, the Department denies the proposed electric car sharing program and directs NSTAR Electric to reduce its budget accordingly.

d. NSTAR Electric Medium- and Heavy-Duty Fleet Pilot

NSTAR Electric proposes a pilot program to offer make-ready and EVSE rebates for medium- and heavy-duty fleets that serve EJ communities (D.P.U. 21-90, Exh. ES-KB-1, at 73-74). In Sections III.C.3.a & III.C.4.a, above, the Department addressed make-ready and EVSE incentives for medium- and heavy-duty fleets. The Attorney General contends that the Department should direct the company to expand its medium- and heavy-duty fleet pilot to provide financial support for mass transit (D.P.U. 21-90, Attorney General Track 1 Brief at 45). Additionally, a number of intervenors assert that the Department should direct NSTAR Electric to develop a medium- and heavy-duty fleet make-ready program (D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, CLF Track 1 Brief at 18, 19, 21; D.P.U. 21-90, CEP Track 1 Brief at 18; D.P.U. 21-91, CEP Track 1 Brief at 19; D.P.U. 21-90/D.P.U. 21-91, CEP Track 1 Reply Brief at 8; D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 4, 16).

NSTAR Electric's medium- and heavy-duty fleet pilot as proposed includes funding for EV charging infrastructure and EVSE for school buses, community transport services, and last mile delivery fleets among other medium- and heavy-duty fleet vehicles (D.P.U. 21-90, Exh. ES-KB-1, at 73). The medium- and heavy-duty fleet pilot program would, therefore, provide financial support for mass transit, as recommended by the Attorney General, and we

determine no modification is necessary. Consistent with our findings and directives in Section III.C.4.d, above, the medium and heavy-duty fleet pilot program rebates are limited only to public fleets.

Turning to arguments that NSTAR Electric should develop a medium- to heavy-duty fleet program, NSTAR Electric maintains that it will develop an offering to enable medium- to heavy-duty fleet electrification after the second year of its fleet assessment services (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 69-70). Given that the company does not currently have data on or experience with medium- and heavy-duty fleet electrification in its service territory, the Department determines that it would be reasonable for the company to evaluate data gathered over the first two years of its pilot program in considering a medium- and heavy-duty fleet make-ready proposal (D.P.U. 21-90, Exhs. ES-KB-Rebuttal-1 (Rev.) at 61). Therefore, the Department declines to direct NSTAR Electric to propose a medium- and heavy-duty fleet make-ready program at this time.

e. NSTAR Electric EJ Community Charging Hub

NSTAR Electric proposes to install four to five DCFC charging hubs in EJ communities (D.P.U. 21-90, Exh. ES-KB-1, at 46-47). The Attorney General recommends that the Department approve NSTAR Electric's EJ community charging hub proposal with several modifications (D.P.U. 21-90, Attorney General Track 1 Brief at 64-66). NSTAR Electric states that is amendable to limiting the number of DCFC charging hubs as part of its proposal from five to four and to engaging with stakeholders to identify the locations for deployment of the DCFC charging hubs (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 61-62; D.P.U. 21-90/ D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 67). The company also

states that it will issue an RFP to solicit interested owners and operators of the DCFC charging hubs to ensure a consistent and coordinated approach to siting and deployment (D.P.U. 21-90, Exh. ES-KB-1, at 47). Furthermore, the company states that it proposes to use traffic pattern and charging analyses in its future network planning efforts (D.P.U. 21-90, RR-AG-5).

The Department recognizes the many benefits of DCFC charging hubs in EJ communities, including increasing the fast EV charging options for underserved communities, especially those without access to at-home charging (D.P.U. 21-90, Exhs. AG 4-24; CLF-ES 1-1). Given the novelty of the proposal, the Department determines that it is appropriate to provide NSTAR Electric the flexibility to determine whether to deploy four or five DCFC charging hubs as circumstances warrant. Further, the Department finds it reasonable for NSTAR Electric to engage with EJ community stakeholders prior to issuing a RFP for vendors to own and operate the DCFC charging hubs. Accordingly, the Department approves NSTAR Electric's DCFC charging hub proposal and expects the company to incorporate stakeholder input into the RFP process. The Department also expects NSTAR Electric in any future EV charging infrastructure program proposal to include proposals to mitigate barriers that impede the recruitment of DCFC site hosts for strategic locations in the Commonwealth.

f. Proprietary Charging Networks

National Grid proposes to offer make-ready incentives for proprietary networks as part of its proposed EV program while NSTAR Electric does not (D.P.U. 21-91, Exh. NG-EVPP-1, at 43-44). The Attorney General and GECA recommend that the Department reject National Grid's proposed incentives for proprietary charging networks because they are designed to benefit only a certain subset of customers, primarily wealthy individuals, and program funding

should be reserved for universal EV charging equipment that does not exclude any subset of EV drivers (D.P.U. 21-91, Attorney General Brief at 39-41; D.P.U. 21-90/D.P.U. 21-91, GECA Brief at 13). Tesla supports National Grid's proposal to provide incentives for proprietary networks and urges the Department to direct NSTAR Electric to allow proprietary networks to participate in its proposed EV program (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 1 Brief at 4, 7, 8; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Reply Track 1 Brief at 2, 9). National Grid argues that the Department should reject the Attorney General's and GECA's recommendations while NSTAR Electric opposes Tesla's recommendation to require the company to provide financial incentives for proprietary networks (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 70-71).

As stated above, the Department recognizes that, as the competitive EV market grows, financial incentives for private customers will likely diminish. See D.P.U. 13-182-A at 13 (finding that a utility proposal must meet a need unlikely to be met by the competitive market). Currently, proprietary Tesla chargers comprise a significant portion of the EV chargers installed in NSTAR Electric's and National Grid's respective service territories (D.P.U. 21-90, Exh. CEP 1-21; D.P.U. 21-91, Exh. NG-EVPP-1, at 43). Specifically, proprietary DCFC stations already make up more than one third of all DCFC stations in National Grid's service territory, which includes 32 Tesla DCFC ports (D.P.U. 21-91, Exhs. NG-EVPP-1, at 43; AG 2-20). Further, over 60 percent of proprietary network installations in the Commonwealth are located in NSTAR Electric's service territory and were installed without ratepayer investment (D.P.U. 21-90, Exh. CEP 1-21). Additionally, adapters exist that allow EVs with proprietary ports to charge at non-proprietary Level 2 chargers, and adapters for DCFC stations are also

possible but are not currently available (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 4, at 723-727). Therefore, the Department determines that the competitive market is adequately meeting the needs of EVs that use proprietary chargers and will continue to do so in the immediate future.

Additionally, the Department is concerned that incentives for the installation of proprietary networks that are dedicated to a single vehicle brand is an inappropriate use of ratepayer funds and would disproportionately benefit higher-income customers (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 1, at 128; Tr. 4, at 725). Accordingly, in order to ensure that ratepayer funds are spent on charging sites that benefit the largest number of customers, the Department denies National Grid's proposal to provide financial incentives for proprietary networks through its Phase III EV program and rejects Tesla's recommendation to require NSTAR Electric to include incentives for proprietary chargers.

Finally, we are not persuaded by Tesla's argument that exclusion of Tesla chargers from participation in NSTAR Electric's Phase II EV program requires a 50 percent reduction in the company's public and workplace program budget because, according to Tesla, the company relied on the assumption that Tesla vehicles can charge at universal EV chargers to determine the size of the proposal (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 1 Brief at 7-8; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 1 Reply Brief at 5). The Department determines that NSTAR Electric appropriately sized its public and workplace program and that the company made no assumptions about the composition of any individual EV manufacturer in its service territory (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 2, at 246, 252). Accordingly,

the Department declines to adopt Tesla's recommendation to reduce NSTAR Electric's public and workplace program budget by 50 percent.

g. National Grid Level 1 Charger Offering

National Grid proposes to provide the infrastructure necessary to facilitate the deployment of approximately 500 public and workplace Level 1 charging ports for long dwell-time parking (D.P.U. 21-91, Exh. NG-EVPP-1, at 40). National Grid maintains that Level 1 chargers are important in the context of larger projects where Level 1 chargers would support long dwell-time vehicle use cases at a relatively low cost (D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 48; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 4, at 876-877). ChargePoint opposes National Grid's proposal because of the greater benefits offered by Level 2 chargers and, according to ChargePoint, the approaching obsolescence of Level 1 chargers (D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 6, 14).

The Department recognizes that Level 1 chargers can serve as a cost-effective charging option for customers, particularly in the context of larger projects seeking to provide multiple charging options (D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 48; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 4, at 876-877). We also note that other programs still seek to spur development of Level 1 charging stations, indicating that Level 1 chargers are not obsolete.⁵⁹ Accordingly, the Department approves National Grid's proposal to provide

⁵⁹ Mass.gov, Apply for MassEVIP Workplace & Fleet Charging Incentives, <https://www.mass.gov/how-to/apply-for-massevip-workplace-fleet-charging-incentives> (last visited December 21, 2022).

funding for the infrastructure upgrades needed to deploy multiple Level 1 charging ports in special cases of long-dwell time parking.

h. Off-Peak Charging Rebate Program

National Grid proposes to extend its existing off-peak charging rebate program through 2025 and to expand the program to include up to an additional 1,000 fleet EVs in the off-peak charging rebate program and an automated, flexible scheduling of EV charging functionality (D.P.U. 21-91, Exh. NG-EVPP-1, at 87). The Attorney General supports National Grid's off-peak rebate program proposal with several modifications, including: (1) allowing participation via telematics and networked EVSE; (2) expanding the off-peak charging rebate program to public, workplace, and MUD customers; (3) implementing the flexible schedule offering within six months of Department approval; and (4) developing an evaluation plan for the proposed flexible schedule offering (D.P.U. 21-91, Attorney General Track 1 Brief at 59-60). GECA recommends that the Department require National Grid to increase the level of its proposed off-peak charging rebates and extend the rebate to include weekends (D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 4, 10-12). Additionally, NSTAR Electric does not include an off-peak charging rebate program as part of its EV program proposal, but GECA urges the Department to require NSTAR Electric to do so (D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 12).

As an initial matter, the Department finds that allowing customers to participate in the off-peak rebate offering via telematics and networked EVSE may eliminate the need for an additional device to participate in the offering and has the potential to reduce program costs (D.P.U. 21-91, Exh. AG-REN-1, at 100). National Grid is amenable to allowing customers to

participate in its off-peak charging rebate program via telematics and networked EVSE, and we therefore direct the company to make the necessary revisions to do so (D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 37). Further, National Grid is amenable to developing a program evaluation plan for its flexible schedule offering and has already outlined potential research objectives and metrics (D.P.U. 21-91, Exhs. NG-EVPP-Rebuttal-1 (Rev.) at 37; AG 3-21). The Department finds it appropriate to include an assessment of the effectiveness of its flexible scheduling offering in its off-peak charging rebate program as part of the third-party evaluation that we require in Section IV.B.3, below. The Department, however, declines to mandate a date certain by which the company must offer its flexible scheduling offering. Rather, the Department expects the Companies to act with deliberate speed to implement and deploy all offerings that we approve herein.

Second, the Department declines to require an expansion of off-peak charging rebates to public, workplace, and MUD customers who operate EVSEs. Rebates and incentives must be designed in a manner to encourage the behavior sought by those who receive the rebates or incentives. Here, it is EV drivers who decide when to charge their vehicles, not EVSE operators, and the Attorney General fails to specify clearly how the incentives paid to EVSE operators would be translated to charging behavior changes in the EV drivers that they serve.

Accordingly, the Department determines that the Attorney General's recommendation needs to be further developed to have the impact intended and we decline to direct National Grid to expand its off-peak charging rebate program to public, workplace, and MUD customers with EVSE at this time.

Next, National Grid first seeks to evaluate the data from its off-peak charging rebate program before considering increasing the level of its proposed off-peak charging rebates and extending the rebate to include weekends, as recommended by GECA (D.P.U. 21-91, Exhs. GECA-NG 2-2; GECA-NG 3-2; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 4, at 851-853). The Department determines that National Grid's approach is reasonable and appropriate. National Grid's off-peak charging rebate program proposal builds on its experiences with the off-peak charging rebate program approved as part of the company's Phase II EV program in D.P.U. 18-150, and National Grid seeks to test customers' responsiveness to the currently proposed rebate pricing (D.P.U. 21-91, Exh. NG-EVPP-1, at 85-86; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 4, at 851). Data collected from the off-peak charging rebate program will allow the company to refine the program design and adjust incentive levels based on lessons learned through the program (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 4, at 851). Accordingly, the Department declines to adopt GECA's recommended modifications.

Likewise, the Department declines to require NSTAR Electric to develop an off-peak charging rebate program proposal as part of its Phase II EV program at this time. NSTAR Electric currently offers a residential demand response offering as part of its energy efficiency program, which, like National Grid's proposed off-peak charging rebate program, incentivizes customers to modify their EV charging behavior during periods of high demand on the company's distribution system (D.P.U. 21-90, Exh. ES-KB-1, at 56). The Department finds it reasonable for NSTAR Electric to evaluate the data from National Grid's off-peak charging rebate program before determining whether to develop a similar off-peak charging rebate

program in addition to its current residential demand response offering (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 39; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 4, at 853).

i. National Grid Pole-Mounted EVSE Program

National Grid proposes to install, own, and operate approximately 200 ports on company-owned electric distribution poles in up to ten municipalities over the course of the four-year Phase III EV program (D.P.U. 21-91, Exh. NG-EVPP-1, at 47-48). At the end of the four-year EV program, the company proposes to sell the pole-mounted EVSE to the municipalities in which the electric distribution poles are located or on the open market (D.P.U. 21-91, Exh. NG-EVPP-1, at 47).

The Attorney General and ChargePoint recommend that the Department deny the pole-mounted EVSE offering (D.P.U. 21-91, Attorney General Track 1 Brief at 74-77; D.P.U. 21-91, ChargePoint Brief at 1, 8-12; D.P.U. 21-91, ChargePoint Reply Brief at 7). DOER, on the other hand, supports the pole-mounted EVSE program proposal (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Brief at 22).

National Grid based its pole-mounted EVSE program on its experiences with its pole-mounted EVSE demonstration project in the city of Melrose (D.P.U. 21-91, Exh. NG-EVPP-1, at 48). Initial results from the demonstration project showed an approximately 70 percent reduction in EVSE installation costs compared to ground-mounted chargers (D.P.U. 21-91, Exh. NG-EVPP-1, at 48). The company also notes that the third-party pole attachments required several highly specialized tasks for which the city of Melrose was not equipped to handle and, therefore, the company provided the necessary support to complete the process (D.P.U. 21-91, Exh. NG-EVPP-1, at 49). National Grid also states that the city of

Melrose incurred several additional costs to comply with the third-party pole attachments process (D.P.U. 21-91, Exh. NG-EVPP-1, at 49). Based on its experience through its partnership with the city of Melrose, National Grid maintains that a similar third-party pole attachments process may be burdensome for other municipalities and hinder scaling up this product (D.P.U. 21-91, Exh. NG-EVPP-1, at 49).

The Department recognizes the benefits associated with pole-mounted EVSE, which include reduced costs associated with pole-mounted EVSE deployments compared to traditional EVSE and the increased charging options for customers without access to at-home charging (D.P.U. 21-91, Exhs. NG-EVPP-1, at 48; NG-EVPP-Rebuttal-1 (Rev.) at 79). The Department also acknowledges that the company's experience with the pole-mounted EVSE demonstration project demonstrates the complexities of coordinating the pole attachments process among multiple parties (D.P.U. 21-91, Exhs. NG-EVPP-1, at 49-50; NG-EVPP-Rebuttal (Rev.), at 50-51). However, a real potential exists for utility owned EVSE to hinder the development of the competitive market. Here, the company did not provide an EV charging rate proposal for use of the pole-mounted EVSE chargers. Furthermore, the record is unclear whether the private market would be unable to address the gap in pole-mounted EVSE charging options in the absence of utility ownership. D.P.U. 13-182-A at 13. The Department determines that the company has failed to demonstrate that its proposal would meet a need regarding the advancement of EVs in the Commonwealth that is not likely to be met by the competitive EV charging market and would not hinder the development of the competitive EV charging market.

D.P.U. 13-182-A at 13. Therefore, the Department denies the pole-mounted EVSE program proposal and directs National Grid to reduce its budget accordingly.⁶⁰

j. National Grid School Bus Rebate Program

National Grid proposes to offer rebates for approximately 300 electric school buses operating in EJ communities to fund the incremental purchase price of an electric school bus (D.P.U. 21-91, Exh. NG-EVPP-1, at 74). The Attorney General and DOER oppose the school bus rebate program while a number of intervenors urge the Department to approve it (D.P.U. 21-91, Attorney General Reply Brief at 78; D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, DOER Brief at 23-24; D.P.U. 21-91, CEP Track 1 Brief at 19; D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, CLF Track 1 Reply Brief at 6-7; D.P.U. 21-90/D.P.U. 21-91, GECA Track 1 Brief at 15).

As noted above, to ensure the prudent expenditure of ratepayer funds, any EV charging infrastructure program proposal should not be duplicative of other EV charging infrastructure build-out incentive programs offered in the Commonwealth. D.P.U. 20-69-A at 46. Here, National Grid concedes that its program overlaps with MassCEC's proposal to operate a similar school bus rebate program to incentivize the purchase of electric school buses that operate in EJ communities (D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1, at 25). National Grid also acknowledges that federal funding is available through the Infrastructure Investments and Jobs Act for the purchase of electric school buses (D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1,

⁶⁰ The Department encourages the company to conduct outreach to the municipalities within its service territory to determine whether other municipalities may be interested in a similar pole-mounted EVSE partnership akin to the city of Melrose demonstration project.

at 26-27). Given the significant overlap between the company's proposed school bus rebate program and the federal and state funding designated for that same purpose, the Department finds that the school bus rebate program is duplicative. The Department also questions the appropriateness of electric ratepayers funding the purchase of electric vehicles. Based on the foregoing, the Department denies the proposed school bus rebate program and directs the company to reduce its budget accordingly.

k. National Grid Utility-Owned DCFCs in EJ Communities

National Grid proposes to build, own, and operate up to 20 150-kW DCFC ports in up to ten pre-identified underserved or high-need EJ communities if gaps in DCFC deployment exist at the mid-point of the EV program (D.P.U. 21-91, Exh. NG-EVPP-1, at 46-47). Prior to deploying the DCFCs, the company proposes to provide notice to station developers that these gaps in DCFC deployment exist six months in advance to allow the private market to address these gaps before the company does (D.P.U. 21-91, Exh. NG-EVPP-1, at 46-47).

The Attorney General and ChargePoint oppose National Grid's proposal to own and operate DCFCs in EJ communities and assert that the company did not demonstrate that there will be a market failure to provide DCFCs in EJ communities, DCFC installation in EJ communities would not occur without utility ownership, or the proposed number of utility-owned DCFCs is appropriate (D.P.U. 21-91, Attorney General Track 1 Brief at 74-75; D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 8, 12-13). Instead, ChargePoint recommends that National Grid report to the Department and stakeholders on the development of DCFCs in EJ communities at the mid-point of the EV program and submit a proposal for utility ownership of

DCFCs in EJ communities if gaps in DCFC deployment in those locations exist at that time (D.P.U. 21-91, ChargePoint Track 1 Brief at 13).

The Department recognizes the many benefits of DCFCs in EJ communities, including increasing fast EV charging options for underserved communities (D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 (Rev.) at 79). However, as the company concedes, it is unclear whether gaps in DCFC deployment in EJ communities will exist at the mid-point of the company's Phase III EV program (D.P.U. 21-90, Exh. NG-EVPP-1, at 46-47). Based on the hypothetical nature of the proposal, the Department finds it inappropriate to approve National Grid's proposal to own and operate DCFCs in EJ communities at this time. Therefore, the Department denies the company's proposal and directs National Grid to reduce its budget accordingly.

1. National Grid Transformer Surcharge Waiver Request

National Grid proposes changes to its G-1 tariff to reflect its make-ready proposal (D.P.U. 21-91, Exh. NG-CRP-3 (proposed M.D.P.U. No. 1472)). The Department has reviewed the proposed tariff change to waive the transformer surcharge for G-1 customers that required a larger dedicated transformer funded through the make-ready components in the EV Phase I and Phase III EV programs (D.P.U. 21-91, Exhs. NG-EVPP-1, at 95; NG-CRP-3 (proposed M.D.P.U. No. 1471)). We find these proposed changes to be reasonable, and, therefore, we approve the changes. The company shall file a revised G-1 tariff, as appropriate, for Department review and approval no later than January 15, 2023.

m. National Grid Utility-Side Expansion Budget

National Grid proposes a \$15 million budget for utility-side upgrades to accommodate estimated large-scale fleet loads on the company's distribution system (D.P.U. 21-91, Exh. NG-EVPP-1, at 83). The Attorney General recommends that the Department reject National Grid's \$15 million utility-side system expansion budget because it is tantamount to a request for an increase in rates above those authorized in the company's last base distribution rate case in D.P.U. 18-150 and inconsistent with traditional ratemaking practices (D.P.U. 21-91, Attorney General Track 1 Brief at 53). National Grid argues that the Department should approve its utility-side system expansion budget proposal because the distribution system upgrades would be necessary for all customers on the local distribution network and would be a shared cost for all ratepayers and its base distribution rates do not include funding for projects related to large-scale fleet electrification (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 55-56).

The Department determines that costs associated with distribution system upgrades are not appropriate for recovery through an annual reconciling mechanism, such as the EV program factor. Such capital improvements are more appropriately recovered through base distribution rates or another cost recovery mechanism. Accordingly, the Department finds that the proposed utility-side system expansion budget is inconsistent with established ratemaking practices and rejects the company's utility-side system budget expansion proposal.

Lastly, during the pendency of our review in these proceedings, the 2022 Clean Energy Act was enacted on August 11, 2022. The 2022 Clean Energy Act establishes a new regulatory construct regarding electric sector grid modernization. As a result, each electric company must

develop an electric sector modernization plan to proactively upgrade its distribution system to, among other things, accommodate increased transportation electrification. G.L. c. 21N; G.L. c. 164, § 92B(a). Each electric company must file their first plan with the newly established Grid Modernization Advisory Council by September 1, 2023, and every five years thereafter, and not later than 150 days before filing of the plan with the Department. G.L. c. 164, § 92B(d). The Department must rule on the plan within seven months of submittal. G.L. c. 164, § 92B(d). The Department observes that National Grid's utility-side system expansion proposal, as well as other EV program proposals, fall within the parameters of the electric sector modernization plans.

n. Workforce Development and Electrician Training

The Companies propose to co-sponsor two offerings: (1) a workforce development initiative to support underrepresented entrants to the EV workforce, and (2) an electrician training initiative to upskill electricians (D.P.U. 21-90, Exh. ES-KB-1, at 74-78; D.P.U. 21-91, Exh. NG-EVPP-1, at 96-99; D.P.U. 21-92, Exh. CSVG-1, at 52-56). The Department recognizes the importance of a diverse workforce and acknowledges the need for training for historically underrepresented populations in the workforce. However, as the Companies acknowledge, the proposed workforce development and electrician training programs are voluntary in nature, and whether underrepresented populations participate in the programs is beyond the Companies' control (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1 (Rev.) at 58; D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1, at 77). Therefore, even though the objective of the proposal is commendable, the Department is reluctant to commit ratepayer funds to proposals where achievement of the intended outcome is uncertain. In sum, the Department denies the proposed

workforce development and electrician training proposals and directs the Companies to reduce their budgets accordingly.

9. Other Intervenor Recommendations

a. EV Charging Data Requirements

NSTAR Electric and National Grid propose to collect charging data from public and workplace Level 2 EVSE, public DCFCs, and residential customers but neither company has finalized the data collection and reporting requirements for their proposed EV programs (D.P.U. 21-90, Exh. AG 3-11; D.P.U. 21-91, Exh. AG 3-11; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 2, at 281-283). A number of intervenors raise concerns with data collection and reporting protocols for the EV programs (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 22-23; D.P.U. 21-90, CEP Track 1 Brief at 17; D.P.U. 21-91, CEP Track 1 Brief at 19; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 1 Brief at 6-9, 12; D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 7; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 8; D.P.U. 21-90, Electrify America Track 1 Brief at 9, 11; D.P.U. 21-91, Electrify America Track 1 Brief at 10, 14). In addition, ChargePoint recommends that the Department include appropriate language in its Order protecting confidential customer information collected through the EV programs from public disclosure or misuse (D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 7; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 8).

The Department acknowledges the intervenors' concerns regarding data collection and reporting protocols. The Department expects the Companies to work cooperatively with stakeholders to reach consensus on as many data collection and reporting protocols as possible. To the extent a consensus cannot be reached on certain issues, the Companies shall identify all

issues on which the Companies and stakeholders have reached consensus and any outstanding issues for which the Companies and stakeholders could not reach a consensus position, including a description of respective positions, in their first annual report. The Department will determine next steps to resolve the remaining issues at that time.

b. Program Neutrality

ChargePoint contends that the Companies should provide program participants a choice of at least two EVSE and network and software providers and to ensure that marketing materials and outreach efforts are implemented in a competitively neutral manner (D.P.U. 21-90, ChargePoint Track 1 Brief at 1, 18-19, 20; D.P.U. 21-91, ChargePoint Track 1 Brief at 1, 26, 27; D.P.U. 21-92, ChargePoint Track 1 Brief at 1, 7, 16). These programmatic adjustments are reasonable to ensure no negative impact on the development of the competitive market and the Companies are amendable to implementing the recommendations (D.P.U. 21-90, Exh. ES-KB-Rebuttal-1, at 38; D.P.U. 21-91, Exh. NG-EVPP-Rebuttal-1 at 42, 59; D.P.U. 21-92, Exh. CVG-Rebuttal-1 at 33, 35). The Department directs the Companies to implement these recommendations and provide program participants with at least two options for EVSE providers and network and software providers as well as ensure that marketing materials and outreach efforts are competitively neutral.⁶¹ Additionally, the Department encourages

⁶¹ The Department notes that NSTAR Electric and National Grid currently maintain a list of qualified EVSE vendors on their websites. The Department expects Unitil to develop and maintain a similar qualified EVSE vendor list on its website. NSTAR Electric Preferred Vendor List, available at <https://www.eversource.com/content/wma/residential/save-money-energy/clean-energy-options/electric-vehicles/charging-stations/preferred-vendor-list> (last visited December 15, 2022). National Grid Approved EV Contractor List, available at <https://www.nationalgridus.com/media/pdfs/bus-ways-to-save/ev/ee8467-ev-approved-contractor-list.pdf> (last visited December 15, 2022).

NSTAR Electric and National Grid to work cooperatively with EV charging network providers who seek to use their own contractors for customer-side make-ready work; including consideration of an alternative process for qualifying EV charging network contracting firms for customer side make-ready work provided that safety and other utility requirements are met. Doing so could help to contain construction costs (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 4, at 660-661).

c. Unitil Fleet Offering

Unitil does not propose a fleet make-ready program as part of its EV program proposal. Consequently, CLF recommends that the Department direct Unitil to develop and propose a fleet make-ready pilot program to support mass transit electrification (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 1 Brief at 18, 25, 36). While Unitil agrees that mass transit electrification is important, the company states that it does not have the data or the experience to conduct a municipal fleet program as part of its first EV program proposal (D.P.U. 21-92, Unitil Track 1 Brief at 54)

Mass transit electrification will be crucial to meeting the Commonwealth's decarbonization goals. Nevertheless, given the lack of expertise with EV charging infrastructure program implementation, the absence of EV program implementation data, as well as the relatively small scale of Unitil's first EV program proposal, the Department determines that mandating the development and implementation of a municipal fleet proposal at this time is not an efficient use of time or resources. Accordingly, the Department declines to require Unitil to develop a fleet make-ready program at this time.

d. Rebate Choice

Electrify America asserts that EV program applicants should have the option to choose whether to apply for one or more of the available financial incentives, i.e., utility-side work, customer-side work, or EVSE (D.P.U. 21-90, Electrify America Track 1 Brief at 10, 12; D.P.U. 21-91, Electrify America Track 1 Brief at 11, 14). The Department notes that Electrify America raised this issue for the first time on brief and the Department has no basis to assess the reasonableness of the recommendation. Therefore, the Department declines to direct the Companies to implement this change to their EV programs.

e. Strategic Deployment of EVSE

In D.P.U. 20-69-A at 47, the Department directed the Companies to include proposals to mitigate barriers that impede the recruitment of DCFC site hosts for strategic locations in the Commonwealth in any new EV program charging infrastructure program proposal. The Department also directed the Companies to incorporate analyses of traffic and EV charging patterns to identify priority locations for future public EV charging stations. D.P.U. 20-69-A at 47. The Attorney General asserts that the Companies did not comply with these directives because they have not yet identified strategic locations for deployment of DCFCs or analyzed traffic and EV charging patterns to identify strategic locations for public EV charging stations (D.P.U. 21-90, Attorney General Track 1 Brief at 66; D.P.U. 21-91, Attorney General Track 1 Brief at 75). The Attorney General urges the Department to direct the Companies to include proposals to mitigate barriers that impede the recruitment of DCFC site hosts for strategic locations in the Commonwealth and incorporate analyses of traffic and EV charging patterns to

identify priority locations for future public EV charging stations as part of their next EV program proposals (D.P.U. 21-91, Attorney General Track 1 Brief at 75-76).

The Companies do not yet have charging gap analyses that identify gaps in the public charging network that are well-suited for new EVSE investment (D.P.U. 21-90, RR-DPU-8; D.P.U. 21-91, RR-DPU-9; D.P.U. 21-92, RR-DPU-10). NSTAR Electric and National Grid note, however, that the Commonwealth is currently conducting a RFP selection process for a vendor to study statewide corridor charging site selection, site design, outreach, and many other deliverables as part of its request for funding under the Infrastructure Investment and Jobs Act and that the study has the potential to identify priority locations for future public EV charging stations in the companies' service territories (D.P.U. 21-90, RR-DPU-8; D.P.U. 21-91, RR-DPU-9).

As more data becomes available to the Companies, the Department expects the Companies to coordinate and develop a plan to incorporate analyses of traffic and EV charging patterns to identify priority locations for future public EV charging stations. Additionally, the Department directs the Companies to include traffic and EV charging pattern analyses in their annual reports.

f. NSTAR Electric Coordination with Compact for Residential Offering

The Attorney General and the Compact urge the Department to direct NSTAR Electric to permit Compact customers to participate in the company's residential offering and coordinate with the Compact to develop a managed charging program (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 1 Reply Brief at 22; D.P.U. 21-90, Compact Track 1 Reply Brief at 5; D.P.U. 21-90, Compact Track 1 Brief at 1-2, 4, 6, 8, 9). NSTAR Electric states that residential

program customers must enroll in the company's managed charging program to participate in the residential offering and that the Compact does not currently have its own EV managed charging program (D.P.U. 21-90, Exh. ES-KB-1, at 56). If the Compact proposes to administer a managed charging program, NSTAR Electric states that it will consider whether the Compact's program includes comparable elements to the company's ConnectedSolutions program and satisfies the company's requirement for residential offering customers to enroll in a managed charging program (D.P.U. 21-90, Exh. CLC-ES 1-1). The Department encourages NSTAR Electric to work cooperatively with the Compact to find an adequate managed charging solution to allow Compact customers the opportunity to participate in the company's residential offering.⁶²

g. Default Pricing Arrangement for Public and Workplace Offering

CEP supports a default arrangement by which site hosts would pass through time-varying price signals to drivers with an opt-out to allow site hosts to implement their own pricing plans (D.P.U. 21-90, CEP Track 1 Brief at 20-21; D.P.U. 21-91, CEP Track 1 Brief at 21; D.P.U. 21-90/D.P.U. 21-91, CEP Track 1 Reply Brief at 11). In D.P.U. 13-182-A at 8, the Department held that owners and operators of EVSE are not subject to the Department's jurisdiction as a distribution company or an electric company and that there are no other provisions of G.L. c. 164 under which the Department can assert authority over owners and operators of EVSE or EV charging service. The Department, therefore, does not have

⁶² Any demand reduction offering proposed by NSTAR Electric or the Compact must comply with the laws and rules governing their respective energy efficiency programs. G.L. c. 25, § 21; Energy Efficiency Guidelines, D.P.U. 20-150-A (2021).

jurisdiction to set the default rates by which site hosts charge their customers. D.P.U. 13-182-A at 8. Accordingly, the Department declines to adopt CEP's recommended default pricing arrangement between EV program site hosts and their customers.

h. Utility-Ownership of EVSE for MUDs in EJ Communities

CEP recommends that the Department consider utility ownership of EV charging stations for MUDs in EJ communities to address barriers to EV adoption at MUDs (D.P.U. 21-90, CEP Track 1 Brief at 17-18; D.P.U. 21-91, CEP Track 1 Brief at 19). ChargePoint opposes CEP's recommendation (D.P.U. 21-90, ChargePoint Track 1 Brief at 13-14; D.P.U. 21-90, ChargePoint Track 1 Reply Brief at 5-6; D.P.U. 21-91, ChargePoint Track 1 Brief at 21-22; D.P.U. 21-91, ChargePoint Track 1 Reply Brief at 6-7).

In these proceedings, NSTAR Electric and National Grid propose to offer EVSE rebates for MUD customers with five or more units (D.P.U. 21-90, Exh. ES-KB-1, at 6, 51; D.P.U. 21-91, Exh. NG-EVPP-1, at 9). The Companies, however, do not propose to own EVSEs in MUDs in EJ communities as part of their EV program proposals and no evidence has been proffered in order for the Department to assess whether utility ownership of EVSE for MUDs in EJ communities would meet a need regarding the advancement of EVs in the Commonwealth that is not likely to be met by the competitive EV charging market and not hinder the development of the competitive EV charging market. D.P.U. 13-182-A at 13. For these reasons, the Department declines to adopt CEP's recommendation.

i. Load Management Plan

Given the absence of a comprehensive load management plan within the Companies' EV programs proposals, the Attorney General recommends that the Department direct the

Companies to convene a load management working group within 30 days following the Department's Order in this proceeding, to coordinate on the development of a comprehensive load management plan for Department review by June 2023, and to open a proceeding into load management to establish a timeline and approach for developing and implementing more advanced managed charging programs and the transition of the proposed DCA rates to future demand charge rate designs that will be enabled through the full deployment of AMI meters (D.P.U. 21-90, Attorney General Track 1 Brief at 51, 53, 54; D.P.U. 21-91, Attorney General Track 1 Brief at 56-57, 63; D.P.U. 21-92, Attorney General Track 1 Reply Brief at 11, 13; D.P.U. 21-90, Attorney General Track 2 Brief at 28, 31; D.P.U. 21-91, Attorney General Track 2 Brief at 32, 42; D.P.U. 21-92, Attorney General Track 2 Brief at 38, 45; D.P.U. 21-92, Attorney General Track 2 Reply Brief at 15-16, 17-18).

FreeWire supports the Attorney General's recommendations but Electrify America disagrees with the recommendations because it contends that any future EV-related load management programs should be coordinated with the Companies' energy efficiency programs and informed by actual EV charging data collected during program operation (D.P.U. 21-90, FreeWire Track 1 Brief at 14-15; D.P.U. 21-90, FreeWire Track 2 Brief at 9-11, 13; D.P.U. 21-91, FreeWire Track 2 Brief at 9-10, 12; D.P.U. 21-90, Electrify America Track 1 Brief at 6-8; D.P.U. 21-91, Electrify America Track 1 Brief at 7-9; D.P.U. 21-90, Electrify America Track 2 Brief at 9-11; D.P.U. 21-91, Electrify America Track 2 Brief at 9-11; D.P.U. 21-90, Electrify America Track 2 Reply Brief at 5-7; D.P.U. 21-91, Electrify America Track 2 Reply Brief at 5-7). The Companies assert that the Attorney General's recommendation to open a generic proceeding on load management and to transition the proposed DCA rates to more

advanced AMI-enabled rates is unnecessary and outside the scope of these proceedings (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 26; D.P.U. 21-92, Unifil Track 1 Reply Brief at 11). NSTAR Electric and National Grid, however, are amenable to developing a framework for EV-related load management as part of their annual reports or to convening a load management working group (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 26-27). NSTAR Electric and National Grid recommend that the companies first capture and report on initial lessons learned during the first year of program implementation before convening a load management working group because lessons learned during the initial phase of the EV programs will help inform the stakeholder engagement (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 31; D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 26-27).

As noted above, the 2022 Clean Energy Act was enacted during the course of these proceedings. As part of the electric section modernization plans required pursuant to the 2022 Clean Energy Act, each electric company must prepare five- and ten-year forecasts and a demand assessment through 2050 to account for future trends in the adoption of renewable energy, DERs, and energy storage and electrification technologies. G.L. c. 164, §92B(c). Additionally, the electric companies must include a summary of investments and solicit input, such as planning scenarios and modeling, from stakeholders and submit their proposals for input from the newly established Grid Modernization Advisory Council. G.L. c. 164, § 92B(c)(ii) & (iii), (d). Further, the 2022 Clean Energy Act created an EV Coordinating Council to develop and implement an EV charging station deployment plan, including state-wide transportation

electrification planning efforts. G.L. c. 179, § 81(a). Finally, the energy efficiency programs, pursuant to G.L. c. 25, § 21, include comprehensive demand reduction and management programs. See 2022-2024 Three-Year Plans Order, D.P.U. 21-120 through D.P.U. 21-129, at 113-120 (January 31, 2022).

The 2022 Clean Energy Act provides a coordinated and comprehensive statewide planning framework to address a broad range of grid modernization and transportation electrification issues, including load management planning and load forecasting, that will include stakeholder input and involvement. Accordingly, given the requirements of, and the actions to be undertaken pursuant to, the 2022 Clean Energy Act, as well as the existing framework for developing demand reduction programs pursuant to G.L. c. 25, § 21, the Department determines that a separate generic proceeding before the Department is unnecessary, redundant, and an inefficient use of resources.

10. Conclusion

Based on the findings above, for NSTAR Electric's Phase II EV program, the Department approves a combined four-year budget of \$188 million consisting of: (1) public and workplace segment (\$109.1 million); (2) residential segment (\$52.7 million); (3) fleet assessment services (\$1.25 million); (4) medium- and heavy-duty EJ community fleet pilot (\$3 million); (5) company staffing (\$9.6 million); (6) marketing (\$10.1 million); (7) IT and back-office system upgrades (\$280,000); and (8) program evaluation (\$2 million) (D.P.U. 21-90, Exh. ES-KB-3).

For National Grid's Phase III EV program, the Department approves a combined four-year budget of \$206 million consisting of: (1) public and workplace segment (\$94.7 million); (2) residential segment (\$64.1 million); (3) fleet segment (\$30 million);

(4) off-peak charging rebate program (\$3.8 million); (5) company staffing (\$9.2 million); (6) IT and back-office system upgrades (\$1.8 million); and (7) program evaluation (\$2.4 million) (D.P.U. 21-91, Exhs. NG-EVPP-1, at 123; NG-EVPP-2).

For Unitil's EV program, the Department approves a combined five-year budget of \$998,000 consisting of: (1) public segment (\$538,000); (2) residential segment (\$300,000); and (3) marketing and outreach (\$160,000) (D.P.U. 21-92, Exhs. CSVG-1 (Rev.) at 32-33, 36, 50; CSVG-9).

Finally, the EV program budget for each company approved herein is a cap. Any spending over the cap will not be eligible for targeted cost recovery. NSTAR Electric and National Grid may shift spending between program segments and between years over the four-year term of their EV programs and Unitil may shift spending between program segments and between years over the five-year term of its EV program, subject to our directives on budget shifting in Section III.C.6.c, above. In Section V.C.1, below, the Department establishes the method by which each company shall recover its EV program expenditures.

IV. METRICS, EVALUATION PLAN, AND REPORTING

A. Performance Metrics

1. Description of the Proposals

a. Statewide Metrics

NSTAR Electric and National Grid propose seven statewide performance metrics to track: (1) the total number of charging sites developed; (2) the total number of ports installed by port type (i.e., Level 2 and DCFC) by market segment (e.g., public, workplace, MUD, fleet, and EJ community); (3) program financial support provided to DCFC stations; (4) program financial

support provided to stations in EJ communities; (5) the total number of participants in the workforce development and electrician training program; (6) EVSE utilization (e.g., kWh delivered per port per year); and (7) carbon dioxide emissions avoided from EVs relative to internal combustion engine vehicles (D.P.U. 21-90, Exh. ES-KB-1, at 38; D.P.U. 21-91, Exh. NG-EVPP-1, at 37-38). Unitil proposes to track six of the seven statewide metrics, excluding the metric on total number of participants in the workforce development and electrician training program (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 11-12).

b. Company-Specific Metrics

NSTAR Electric proposes five company-specific performance metrics to track: (1) the total number of residential charger rebates distributed; (2) the total number of residential make-ready rebates distributed; (3) the total number of residential low-income and EJ community offerings distributed; (4) the number of medium- and heavy-duty ports deployed and vehicles electrified; and (5) the number of car sharing vehicles supported (D.P.U. 21-90, Exh. ES-KB-1, at 38-39).

National Grid proposes six company-specific performance metrics to track: (1) the total number of residential charger rebates distributed; (2) the total number of residential make-ready rebates distributed; (3) the total number of residential low-income and EJ community offerings distributed; (4) the total number of pole-mounted EVSE installed; (5) the total number of fleet assessments completed; and (6) the total number of electric school buses enabled (D.P.U. 21-90, Exh. ES-KB-1, at 38-39).

Unitil proposes one company-specific performance metric. Specifically, Unitil proposes to track the total number of customers enrolled in the company's residential EV TOU rate

(D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 12).

c. Performance Incentive Mechanisms

NSTAR Electric and National Grid also propose a performance incentive mechanism (“PIM”) comprised of two independent metrics, a Level 2 EVSE cost containment metric and a DCFC cost containment metric (D.P.U. 21-90, Exh. ES-KB-1, at 79, 81; D.P.U. 21-91, Exh. NG-EVPP-1, at 100-101, 102). The companies propose to establish a baseline for the Level 2 EVSE cost containment metric and DCFC cost containment metric based on a cost per port and a cost per kW, respectively, and measure the baseline against actual port and kW deployments to determine any savings against the cost targets (D.P.U. 21-90, Exh. ES-KB-1, at 81; D.P.U. 21-91, Exh. NG-EVPP-1, at 102, 104). Each company proposes to retain a 30 percent share of any cost savings achieved through the PIM (D.P.U. 21-90, Exh. ES-KB-1, at 81; D.P.U. 21-91, Exh. NG-EVPP-1, at 102). NSTAR Electric proposes to cap the total cost containment incentive at \$7 million over the four-year EV program term while National Grid proposes to cap the total cost containment incentive at \$8 million over the four-year EV program term (D.P.U. 21-90, Exh. ES-KB-1, at 81; D.P.U. 21-91, Exh. NG-EVPP-1, at 103).

In addition, National Grid proposes a particulate matter emission reduction PIM, the clean fleet, clean air PIM, designed to reduce the particulate matter emissions of the vehicles supported by the fleet program (D.P.U. 21-91, Exh. NG-EVPP-1, at 100-101, 106). National Grid proposes to establish a baseline mix of vehicles and particulate matter emissions abatement threshold targets of five percent, ten percent, and 15 percent above the baseline mix of vehicles (D.P.U. 21-91, Exh. NG-EVPP-1, at 106-107). The company would then calculate the incremental health benefits of the particulate matter emissions reductions achieved through the

PIM based on the company's actual mix of deployed vehicles under the fleet program (D.P.U. 21-91, Exh. NG-EVPP-1, at 107). The company proposes to retain a 30 percent share of any savings above the threshold targets achieved through the PIM (D.P.U. 21-91, Exh. NG-EVPP-1, at 107).

2. Positions of the Parties

a. Attorney General

The Attorney General contends that NSTAR Electric's and National Grid's proposed cost containment PIM should be rejected because: (1) it does not meet the Department's standard of review for PIM approval; (2) the use of Phase I EV program data may skew the baseline costs in the companies' favor; (3) market changes outside of the companies' control may result in cost reductions irrespective of the companies' cost-containment efforts; (4) it may disincentivize the companies from pursuing projects in strategic or high utilization locations that may be more costly than other projects; (5) there are no penalties for underperformance; and (6) the financial reward for achieving the target cost reductions is too high and accounts for a significant portion of the proposed EV program budgets (D.P.U. 21-90, Attorney General Track 1 Brief at 70-72; D.P.U. 21-91, Attorney General Track 1 Brief at 82-84).

Instead, if the Department wants to consider approval of the cost containment PIM, the Attorney General recommends that the Department do so in a separate adjudicatory proceeding in which the Department considers and evaluates policy goals and other incentives and metrics (D.P.U. 21-90, Attorney General Track 1 Brief at 68; D.P.U. 21-91, Attorney General Track 1 Brief at 79). Further, should the Department approve the cost containment PIM, the Attorney

General argues that the baseline costs should be adjusted annually and account for abnormal or unusual costs (D.P.U. 21-90, Attorney General Track 1 Brief at 70-71).

The Attorney General asserts that National Grid's proposed clean fleet, clean air PIM does not meet the Department's standard of review for PIMs and should, therefore, be rejected because: (1) the proposed baseline and targets are subjective and arbitrary; (2) the targets rely on total lifetime emissions reduction estimates rather than on a more accurate metric, such as actual utilization rates of the vehicles; (3) outside factors, such as EV purchase prices, government incentives, and the availability of EVs, may result in emission reductions regardless of the company's actions, thereby rewarding National Grid for outcomes over which it did not play a distinct and clear role; (4) the company's EV program offerings should be designed and administered in a manner that maximizes emission reductions; and (5) there are no penalties for underperformance (D.P.U. 21-91, Attorney General Track 1 Brief at 85-87).

b. Other Intervenors

DOER opposes approval of the companies' proposed cost containment PIM because it does not incentivize the companies to maximize the amount of infrastructure deployed while reacting to the uncertainties of the growing EV market and may allow the companies to benefit financially for cost reductions outside of their control (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 26). Further, DOER argues that the cost baselines using Phase I EV program data are insufficient to address cost uncertainties for the EV programs proposed in this proceeding (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 26). Instead, DOER argues that NSTAR Electric and National Grid should be incentivized to deploy more EVSE than their annual goals or targets (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER

Track 1 Brief at 26). Similarly, DOER urges the Department to deny National Grid's proposed clean fleet, clean air PIM because: (1) the PIM does not advance specific public policy objectives; (2) the PIM provides an incentive for the company for actions that it should take in the regular course of business; (3) there are other criteria for electrification that should also be included in fleet prioritization, including feasibility of electrification, the presence of EJ communities, and cost savings for fleet managers to identify fleets that are suitable for immediate electrification; and (4) the current PIM design may incentivize the company to focus on electrification of certain fleets that are not the best candidates for immediate financial support (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 27).

CEP recommends that the Department modify the proposed cost containment PIM with appropriate safeguards to prevent the installation of EV chargers with limited or reduced capabilities, deployment of EV chargers in locations that require fewer distribution or make-ready upgrades but are not sited to maximize utilization, and the installation of a large number of ports per site to capture economies of scale at the expense of distributing installations more evenly or equitably (D.P.U. 21-90, CEP Track 1 Brief at 21; D.P.U. 21-91, CEP Track 1 Brief at 21; D.P.U. 21-90/D.P.U. 21-91, CEP Track 1 Reply Brief at 11-12). CEP asserts that the Department should deny National Grid's proposed clean fleet, clean air PIM because it lacks a meaningful baseline (D.P.U. 21-91, CEP Track 1 Brief at 21-22; D.P.U. 21-90/D.P.U. 21-91, CEP Track 1 Reply Brief at 12).

c. NSTAR Electric and National Grid

NSTAR Electric and National Grid contend that the Department should reject the Attorney General's and CEP's recommendation to deny the cost containment PIM because:

(1) the baseline is based on actual costs from the companies' Phase I EV programs and can be sufficiently monitored, quantified, and verified; (2) the baseline includes a built-in performance hurdle to address inflation; (3) EVSE rebate costs and cost per port calculations are not included in the PIM, so the proposed PIM does not create a disincentive to make investments in EJ communities; (4) the PIM will incentivize the companies to allocate incremental financial or human resources to support cost-reducing approaches over and above what is required to successfully manage the program and proactively drive down customer-funded infrastructure support over time based on market signals; and (5) the companies' share of any cost savings would be limited to 30 percent (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 81-82; D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Reply Brief at 12-13).

Regarding its clean fleet, clean air PIM, National Grid argues that: (1) the baseline aligns with the budgeted distribution of vehicles in the fleet program and was developed based on a third-party market forecast; (2) fleet vehicles have a disproportionate impact on air quality compared to passenger vehicles; (3) the PIM is designed to ensure that the company will not be compensated unless it outperforms the emission reductions expected to be achieved under the program in the absence of the PIM; and (4) vehicle availability changes, fleet specific EVSE technology and design, large-scale decision making, and the company's fleet assessment services all provide the company the ability to influence the mix of fleet vehicle procurement (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 82-83; D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Reply Brief

at 12-13). National Grid therefore requests that the Department approve its clean fleet, clean air PIM.

3. Analysis and Findings

a. Performance Metrics

Performance metrics and reporting are key components of ensuring the transparency of the Companies' EV program implementation and performance. In these proceedings, the Companies propose five state-wide implementation metrics and two state-wide program benefit metrics, as well as company-specific metrics (D.P.U. 21-90, Exh. ES-KB-1, at 38; D.P.U. 21-91, Exh. NG-EVPP-1, at 37-38; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 11-12). As an initial matter, the Department declines to approve the proposed EV program metrics at this time. The Department finds that additional work is needed in collaboration with stakeholders to develop performance metrics that appropriately track the Companies' implementation of their respective EV programs and the associated benefits. Accordingly, the Department will convene an EV stakeholder process and work with the parties through public comments and, as needed, technical conferences and further process in the instant proceedings to finalize the EV program performance metrics.

b. Performance Incentive Metrics

i. Introduction

To determine whether a PIM is appropriate, the Department relies on a two-prong test: (1) whether the PIM satisfies certain threshold principles; and (2) whether the PIM meets the design guidelines. D.P.U. 18-150, at 120-121. First, the Department must determine whether the PIM satisfies the threshold principles designed to weigh whether an action addressed in the

PIM is appropriate to consider for performance incentives. D.P.U. 18-150, at 120. In making this determination, the Department has found that performance incentives can serve as a useful regulatory mechanism when used to positively influence distribution company behavior in the advancement of important public policy goals that are not directly aligned with a distribution company's public service obligations. D.P.U. 18-150, at 120, citing Net Metering, SMART Provision, and the Forward Capacity Market, D.P.U. 17-146-B at 15-16, 56-59 (2019); see also Incentive Regulation, D.P.U. 94-158, at 54 (1995). Conversely, performance incentives are generally not appropriate where the affected activity is within the distribution company's public service obligations. Boston Edison Company/Cambridge Electric Light Company/Commonwealth Electric Company, D.T.E./D.P.U. 06-107-B at 55-60 (2009); see also Western Massachusetts Electric Company, D.T.E. 04-40/D.T.E. 04-109/D.T.E. 05-10, at 5-6 (2006). The Department has found that, to be considered on its design merits, a PIM must first be found to meet the threshold principles that: (1) it advances specific public policy goals, and (2) the affected activity is clearly outside a distribution company's public service obligations. D.P.U. 18-150, at 121.

Second, upon determining that a PIM meets these threshold principles, the Department must determine whether the proposed PIM meets appropriate design guidelines. D.P.U. 18-150, at 121. The Department has determined that an appropriately designed incentive mechanism must: (1) be designed to encourage program performance that best achieves the Commonwealth's energy goals; (2) be designed to enable a comparison of (i) clearly defined goals and activities that can be sufficiently monitored, quantified, and verified after the fact, to (ii) the cost of achieving the target to the potential quantifiable benefits; (3) be available only for

activities where the distribution company plays a distinct and clear role in bringing about the desired outcome; (4) be consistent across all electric and gas distribution companies, where possible, with deviations across companies clearly justified; (5) be created to avoid perverse incentives; and (6) ensure that the distribution company is not rewarded for the same action through another mechanism. D.P.U. 18-150, citing D.P.U. 17-13, at 42-43, 46; Investigation into Updating Energy Efficiency Guidelines, D.P.U. 08-50-A at 49-50 (2009); D.P.U. 94-158, at 52-66.

ii. Cost Containment PIM

NSTAR Electric and National Grid each propose a cost containment PIM to incentivize the companies to contain the make-ready costs associated with their proposed Phase II and Phase III EV programs, respectively, below the average make-ready costs from the companies' respective Phase I EV programs (D.P.U. 21-90, Exh. ES-KB-1, at 81-82; D.P.U. 21-91, Exh. NG-EVPP-1, at 102-103). Several intervenors recommend that the Department deny the proposed cost containment PIM (D.P.U. 21-90, Attorney General Track 1 Brief at 70-72; D.P.U. 21-91, Attorney General Track 1 Brief at 82-84; D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, DOER Track 1 Brief at 26; D.P.U. 21-90, CEP Track 1 Brief at 21; D.P.U. 21-91, CEP Track 1 Brief at 21; D.P.U. 21-90/D.P.U. 21-91, CEP Track 1 Reply Brief at 11-12).

The Department finds that the proposed cost containment PIM does not meet our design guidelines. Specifically, the Department is concerned that the proposed cost containment PIM would include outlier and other atypical Phase I EV program cost data in the calculation of the cost-containment baselines, which may skew the cost targets in the companies' favor (D.P.U. 21-90, Exh. DPU 6-2; D.P.U. 21-91, Exh. DPU 6-2). Additionally, the Department is

concerned that, given the nascent state of the EV charging market, cost targets based on data from the companies' respective Phase I EV programs may not be representative of make-ready costs over the course of the companies' respective new EV program terms proposed in the instant proceedings (D.P.U. 21-90, Exh. AG-REN-1, at 104; D.P.U. 21-91, Exh. AG-REN-1, at 117-118). Stated differently, without a proposed mechanism by which to update the cost-containment baselines during the course of the new EV programs to reflect current make-ready infrastructure costs (i.e., an update to the cost-containment baselines based on actual make-ready infrastructure costs at regular intervals), the cost-containment baselines may not align with the current EV charging market. As a result, an accurate determination of the cost savings achieved under the proposed cost containment PIM cannot be sufficiently monitored, quantified, and verified after the fact. Accordingly, the Department determines that the proposed cost containment PIM is inconsistent with our second PIM design guideline to enable a comparison of (i) clearly defined goals and activities that can be sufficiently monitored, quantified, and verified after the fact, to (ii) the cost of achieving the target to the potential quantifiable benefits.

Additionally, there are many factors outside of the companies' control that may result in significant changes to the make-ready costs of the EV programs over the proposed four-year EV program terms, including price inflation and equipment cost changes (D.P.U. 21-90, Exh. DPU 6-1; D.P.U. 21-91, Exh. DPU 6-1). Accordingly, the proposed cost containment PIM also does not satisfy the Department's third PIM design guideline that requires the distribution company to play a distinct and clear role in bringing about the desired outcome.

Finally, the Department shares CEP's concern that the cost containment PIM may incentivize the companies to commit to projects in locations that require fewer distribution or make-ready upgrades but are not sited to maximize EV charger utilization or that require a large number of ports per site to capture economies of scale at the expense of distributing EV charger installations more evenly or equitably (D.P.U. 21-90, Exh. CEP-1, at 77; D.P.U. 21-91, Exh. CEP-1, at 79). The proposed cost containment PIM, therefore, does not adhere to our fifth PIM design guideline of avoiding perverse incentives.

In conclusion, the cost containment PIM does not satisfy many of the PIM design guidelines. Therefore, the Department denies the companies' proposed cost containment PIM. Nevertheless, the Department expects the companies to minimize the financial impacts of the proposed EV programs on ratepayers.

As mentioned in Section IV.A.3.a, above, the Department intends to convene a stakeholder process on performance metrics. The Department expects the companies to propose metrics to track and report on EV program cost data as part of the stakeholder process.

iii. Clean Fleet, Clean Air PIM

National Grid proposes a clean fleet, clean air PIM to incentivize the company to achieve certain particulate matter emissions abatement threshold targets by influencing the mix of fleet vehicle procurement through its fleet program and fleet assessment services (D.P.U. 21-91, Exh. NG-EVPP-1, at 107). A number of intervenors urge the Department to reject the proposed clean fleet, clean air PIM (D.P.U. 21-91, Attorney General Track 1 Brief at 85-87; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 27; D.P.U. 21-91, CEP Track 1 Brief at 21-22; D.P.U. 21-90/D.P.U. 21-91, CEP Track 1 Reply Brief at 12). The

Department finds that the proposed clean fleet, clean air PIM is not adequately designed and is inconsistent with our second and third PIM design guidelines. Specifically, the Department shares the Attorney General's concern that the clean fleet, clean air PIM could reward the company even if actual particulate matter emissions reductions are higher than expected (e.g., if a fleet program participant shifts fleet vehicles to EVs but does not keep or utilize them) (D.P.U. 21-91, Attorney General Brief at 85-86; D.P.U. 21-91, Exh. DPU 6-6). Additionally, while we acknowledge that the proposed fleet program may have some effect on particulate matter emissions reductions in the company's service territory, the company failed to sufficiently demonstrate how its actions (i.e., devoting additional financial or human resources to support the fleet program) would play a clear and distinct role in the achievement of the proposed particulate matter emissions reductions targets (D.P.U. 21-91, Exh. DPU 6-7). Moreover, there are many factors outside of the company's control that may result in the company achieving its particulate matter abatement targets without company intervention, such as relative vehicle prices, government incentives, and shifts in economic activity (D.P.U. 21-91, Exh. DPU 6-5). Therefore, the Department denies National Grid's proposed clean fleet, clean air PIM.

B. Evaluation Plan

1. Description of the Proposals⁶³

a. NSTAR Electric

NSTAR Electric proposes a \$2.0 million budget to hire an independent, third-party evaluation expert to conduct a comprehensive evaluation of the Phase II EV program, which

⁶³ Unitil did not propose an evaluation plan.

would focus on, but not be limited to: (1) tracking, documenting, and assessing program performance and participation; (2) understanding the experiences of participating customers in each of the program components; (3) assessing barriers to non-program participants, and identify opportunities to engage them; (4) characterizing the experiences of low-income customers and other disadvantaged groups within each program; (5) evaluating accessibility of charging stations for customers across the company's service territory; (6) studying how program incentives, rebates, and funding sources affect the adoption of EV charging stations and fleet vehicle conversion; (7) identifying program barriers and barriers to electric fleet adoption; and (8) determining how program elements affect customers' charging behaviors at home, in public, and at workplaces (D.P.U. 21-90, Exh. ES-KB-1, at 90, 91, 93). Among other things, the evaluation expert may: (1) conduct periodic surveys of a broad or targeted sample of the company's customers, both residential and non-residential; (2) complete pre- and post-surveys of residential and commercial customers who frequent residential charging stations and site host facilities; (3) conduct surveys or interviews of participating and non-participating site hosts; (4) collect and analyze program and EV charging data; and (5) complete in-depth interviews with program and support staff, external stakeholders, market actors, and industry experts (D.P.U. 21-90, Exh. ES-KB-1, at 92). Additionally, the company proposes to coordinate with the independent evaluator to develop or modify research tasks and identify areas of continued process improvement (D.P.U. 21-90, Exh. ES-KB-1, at 93). NSTAR Electric states that it coordinated with National Grid on many aspects of their evaluation plan proposals (D.P.U. 21-90, Exh. ES-KB-1, at 90-93).

b. National Grid

National Grid proposes a \$2.4 million budget to hire an independent, third-party evaluator to evaluate its Phase III EV program (D.P.U. 21-91, Exh. NG-EVPP-1, at 119, 122). National Grid's evaluation report proposal includes the same focus areas and evaluation activities as NSTAR Electric's evaluation report proposal (D.P.U. 21-91, Exh. NG-EVPP-1, at 119-120). The company states that it will coordinate with the independent evaluator to develop additional research tasks and identify areas of continued process improvement (D.P.U. 21-91, Exh. NG-EVPP-1, at 122). National Grid states that it coordinated with NSTAR Electric on many aspects of their evaluation plan proposals (D.P.U. 21-91, NG-EVPP-1, at 119-122).

2. Positions of the Parties

a. Attorney General

The Attorney General asks the Department to direct NSTAR Electric and National Grid to file a detailed program evaluation plan in a compliance phase of these proceedings for Department and stakeholder review and Department approval (D.P.U. 21-90, Attorney General Track 1 Brief at 73; D.P.U. 21-91, Attorney General Track 1 Brief at 87-88). In the program evaluation plan, the Attorney General recommends that NSTAR Electric and National Grid develop and report on the following: (1) metrics to track the achievement of equitable access to the benefits of clean transportation; (2) metrics related to port deployment and cost, including the number of ports serving mass transit, the number of publicly accessible ports, and the number of each of those ports installed in EJ communities, plus anonymized data on the utility- and customer-side make-ready and EVSE costs for each project; (3) metrics related to load

management, such as aggregate EV charging load profile by customer segment, percentage of on-peak to off-peak charging, the timing and size of peak EV charging load, and percentage of EV program customers participating in managed charging programs; and (4) metrics to meaningfully track the success of the workforce development and electrician training program and ensure accountability for the diversity and equity initiatives, such as demographic information, and demographic targets for program participation (D.P.U. 21-90, Attorney General Track 1 Brief at 75; D.P.U. 21-91, Attorney General Track 1 Brief at 90).

b. NSTAR Electric and National Grid

NSTAR Electric and National Grid disagree with the Attorney General's recommendation for submission of a detailed proposed evaluation plan because their evaluation proposal is consistent with that proposed in the 2019-2022 Massachusetts statewide energy efficiency strategic evaluation plan and because the Department and stakeholders will have the opportunity to review an annual evaluation report as part of their annual cost recovery filings (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 77-78).

3. Analysis and Findings

The Department has recognized the value of the information provided through the development and publication of evaluation reports, stating that a systematic collection and analysis of information to document the impact of the EV programs in terms of costs and benefits is necessary to improve the effectiveness of the investments. D.P.U. 17-05, at 484; see also D.P.U. 17-13, at 39 (stating that ongoing evaluation of the EV programs is essential to ensure that the components of the programs fulfill their intended purpose and to provide opportunities to make adjustments to the program that may improve results). Previously, the

Department approved third-party evaluations of NSTAR Electric's and National Grid's respective Phase I EV programs. D.P.U. 17-05, at 484; D.P.U. 17-13, at 39.

In these proceedings, the Department acknowledges the importance of the Companies' proposed EV programs in achieving the Commonwealth's transportation electrification and decarbonization goals and determines that effective program evaluations will be critical to ensuring both the success of the EV programs and the attainment of the Commonwealth's EV adoption and GHG reduction goals. With this in mind, once performance metrics are finalized, the Department will require the Companies to develop a joint state-wide program evaluation plan for Department approval and stakeholder input and will determine next steps at that time.⁶⁴

C. Annual Reports

1. Description of the Proposals

Each company proposes to file an annual report with the Department at the end of each program year (D.P.U. 21-90, Exh. ES-KB-1, at 93; D.P.U. 21-91, Exh. NG-EVPP-1, at 121; D.P.U. 21-92, Exh. CSVG-1, at 35). NSTAR Electric and National Grid propose to summarize the results from their evaluation plans in their respective annual reports (D.P.U. 21-90, Exh. ES-KB-1, at 93; D.P.U. 21-91, Exh. NG-EVPP-1, at 121). In its annual report, Unitil proposes to outline the number of residential customer participants in the program, incentives

⁶⁴ As noted above, Unitil did not propose an evaluation plan as part of its EV program proposal, however, the Department determines that it is appropriate to require one as part of our approval. Unitil may seek recovery of costs associated with the evaluation plan through the GMF. The Department will review the reasonableness and prudence of any such costs at the end of the program term.

distributed, third-party partners within the program, and periodic findings related to embedded EVSE meters and future use cases (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 35).

2. Positions of the Parties

a. Intervenors

DOER asserts that the Department should direct the Companies to include specific details and recommendations in their annual reports including: (1) the effectiveness of each make-ready market segment with an annual adjustment to the budgets and goals as appropriate; (2) descriptions of outreach to EJ communities and low-income community organizations, recommendations on adjusting or setting specific goals for EJ communities based on stakeholder and customer feedback, and metrics demonstrating programmatic effectiveness; (3) for NSTAR Electric and National Grid, a metric that tracks the number of the residential one to four-unit EJ community rebates and incentives that were provided to customers that were also on the low-income residential electric rate; (4) customer preferences and equity; (5) growth of the competitive market and any appropriate programmatic changes based on that growth; (6) overlap between EV program funding and offerings and state and federal funding and offerings and a description of actions taken to address the overlap, including budget reductions or budget shifting; (7) the length of the program; (8) for NSTAR Electric and National Grid, all make-ready program charging data and a description of how the data is being used to develop peak demand reduction and maximize flexible load through managed charging programs; (9) for NSTAR Electric and National Grid, the effectiveness of their managed charging programs, including a timeframe for implementation of managed charging programs for non-fleet vehicles, and any progress in developing new managed charging programs; (10) for NSTAR Electric and

National Grid, a description of coordination efforts with MassCEC on the companies' fleet assessment services offerings and any recommended improvements to the offerings; and (11) data regarding enrollment of both new and existing EV charging facility customers in the DCA rates, data and descriptions of outreach efforts, including the specific methods of outreach used, insights into the effectiveness of the DCA rates, and possible tariff revisions to the DCA rates to improve program performance (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 6-15, 19-21, 25; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 2 Brief at 9, 14).

Additionally, DOER suggests that the Department review the annual reports along with any intervenor comments and, as appropriate, direct the Companies to make changes to their respective EV programs and associated budgets and the DCA rates (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 10, 12, 14; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 2 Brief at 14, 15). DOER also recommends that the Department seek and incorporate low-income and EJ community and stakeholder feedback on any programmatic changes to the EV programs and direct the Companies to incorporate data from EJ community rebates and community outreach to design and implement future equity-based programs (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 1 Brief at 11 & n.36).

CEP recommends that the Department require the Companies to track and annually report on site host data, load profiles by site, number of charging sessions recorded, costs to drivers to utilize each station, charging station location organized by site host type, installation and equipment costs, and EV infrastructure deployment in EJ communities (D.P.U. 21-90, CEP Track 1 Brief at 21; D.P.U. 21-91, CEP Track 1 Brief at 22; D.P.U. 21-90/D.P.U. 21-91, CEP

Track 1 Reply Brief at 13). Additionally, the Compact recommends that NSTAR Electric track and report on commitments and installations made through all EV program segments in a manner consistent with its Phase I EV program tracking and reporting requirements (D.P.U. 21-90, Compact Track 1 Brief at 2, 7-8, 9; D.P.U. 21-90/D.P.U. 21-91, Compact Track 1 Reply Brief at 1-2).

3. Analysis and Findings

To allow the Department and stakeholders to monitor the status of the Companies' EV programs, DCA rate offerings, and Unitil's residential EV TOU rate offering, the Department directs the Companies to submit annual reports that document their performance during the applicable year. D.P.U. 15-120/D.P.U. 15-121/D.P.U. 15-122, at 112. The Companies' annual reports will be due on or before May 15th of each year. The first EV annual report shall be due on May 15, 2024. The Department will convene a working group as part of the performance metrics stakeholder process to develop the contents of the annual reports, described above in Section IV.A.3.a.

V. EV CHARGING PROGRAM COST RECOVERY AND BILL IMPACTS

A. Description of the Proposals

1. NSTAR Electric

NSTAR Electric proposes to recover its Phase II EV program costs through its existing annual reconciling GMF with expenditures for customer-side make-ready infrastructure deferred to a regulatory asset and recovered through the GMF over a five-year period (D.P.U. 21-90, Exh. ES-RWF-1, at 4-6). The company proposes to apply carrying charges at its weighted average cost of capital to the balance of deferred customer-side make ready costs that have not

been recovered through the GMF (D.P.U. 21-90, Exh. ES-RWF-1, at 7-8). The company also proposes revisions to its approved GMF cost recovery tariff to incorporate its cost recovery deferral proposal (D.P.U. 21-90, M.D.P.U. No. 73C (proposed)).

Further, NSTAR Electric developed an illustrative bill impact analysis of the Phase II EV program costs for residential customers and estimates that, over the course of the Phase II EV program, an eastern Massachusetts residential customer using an average of 516 kWh of electricity per month would experience a monthly bill increase of \$0.15 in year one, \$0.21 in year two, \$0.19 in year three, and \$0.19 in year four (D.P.U. 21-90, Exh. DPU 4-1, Att. (f) at 1). A western Massachusetts residential customer using an average of 516 kWh of electricity per month would experience a monthly bill increase of \$0.15 in year one, \$0.20 in year two, \$0.20 in year three, and \$0.19 in year four (D.P.U. 21-90, Exh. DPU 4-1, Att. (f) at 3).

2. National Grid

National Grid proposes to recover its Phase III EV program costs through its existing annual reconciling EV program factor, M.D.P.U. No. 1447, with expenditures for customer-side make-ready infrastructure deferred to a regulatory asset and recovered through the EV program factor over a five-year period (D.P.U. 21-91, Exh. NG-CRP-1, at 6-8). The company proposes to apply carrying charges at its weighted average cost of capital to the balance of deferred customer-side make-ready costs that have not been recovered through the EV program factor (D.P.U. 21-91, Exh. NG-CRP-1, at 8). Further, the company proposes certain revisions to its approved EV cost recovery tariff to incorporate a description of its Phase III EV program, the additional categories of incremental costs in its Phase III EV program, and its proposed PIMs (D.P.U. 21-91, Exhs. NG-CRP-1, at 8-10; NG-CRP-2).

Additionally, the company developed an illustrative bill impact analysis of the Phase III EV program costs for residential customers (D.P.U. 21-91, Exh. AG 5-5). The company estimates that, over the course of the Phase III EV program, a residential customer using an average of 600 kWh of electricity per month would experience a monthly bill increase of \$0.85 in year one, \$0.59 in year two, \$0.79 in year three, and \$1.03 in year four (D.P.U. 21-91, Exhs. AG 5-5, Att. 3, at 2; AG 5-5, Att. 4, at 2; AG 5-5, Att. 5, at 2; AG 5-5, Att. 6, at 2).

3. Unitil

Unitil proposes to recover utility-side make-ready infrastructure investments through its annual reconciling Capital Cost Adjustment Mechanism (“CCAM”) and to defer remaining costs to a regulatory asset, with carrying costs accrued at the weighted average cost of capital, for recovery in its next base distribution rate proceeding (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 56-57).

Unitil submitted bill impact analyses showing estimated increases from its proposed EV program (D.P.U. 21-92, Exhs. DPU 5-2, Att. 1; DPU 5-3, Att. 1; RR-DPU-4, Att. 1). Assuming all charging sites were installed in year one, the bill impact of the company’s proposed EV program results in an estimated monthly bill increase for a typical residential customer of approximately \$0.16 per month for EV costs recovered through the CCAM and an estimated monthly bill increase of approximately \$0.23 per month for EV costs deferred as a regulatory asset to be collected through base distribution rates (D.P.U. 21-92, Exh. DPU 5-3, Att. 1; RR-DPU-4, Att. 1).

B. Positions of the Parties

1. Attorney General

The Attorney General recommends that the Department deny the Companies' request to defer recovery of certain EV program expenditures and to amortize them with a carrying charge because: (1) the proposed approach is inconsistent with the Department's Uniform System of Accounts; (2) deferral of program costs is inconsistent with the mechanism utilized for energy efficiency expenditures; and (3) the carrying charges that would accrue on the deferred costs would outweigh the benefits to ratepayers of deferring those costs (D.P.U. 21-90, Attorney General Track 1 Brief at 79-80; D.P.U. 21-91, Attorney General Track 1 Brief at 94-95; D.P.U. 21-92, Attorney General Track 1 Brief at 31-32).

2. NSTAR Electric and National Grid

NSTAR Electric and National Grid urge the Department to approve their proposed EV program cost recovery proposals because: (1) the deferral of make-ready infrastructure costs behind the customer meter for a period of five years will moderate customer bill impacts; (2) the Department approved a similar deferral proposal for the companies' pension adjustment mechanism ("PAM"); and (3) extending the period of recovery for certain program expenses provides an opportunity for EV program costs to be recovered along a timeline in which favorable impacts from EV adoption could grow in parallel and offset customer bill impacts (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 1 Brief at 86-88).

3. Unitil

Unitil argues that the Department should approve its cost recovery proposal because: (1) deferral of customer-side EV program expenses would enable these expenditures to be

recovered around the same time that EV program revenues will become available, which would minimize customer bill impacts, and (2) Unitil must file its next base distribution rate case with the Department by no later than the end of 2024 (D.P.U. 21-92, Unitil Track 1 Brief at 48-49).

C. Analysis and Findings

1. Cost Recovery Proposals

The Companies each propose to defer certain EV program costs to regulatory assets to be recovered at a later time with carrying costs at the weighted average cost of capital approved in their last base distribution rate cases (D.P.U. 21-90, Exh. ES-RWF-1, at 6-8; D.P.U. 21-91, Exhs. NG-JG at 4-6; NG-CRP-1, at 8; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 57). Department precedent does not allow for the deferral of prospective expenses. Aquarion Water Company of Massachusetts, D.P.U. 12-26, Letter from General Counsel (April 25, 2012); Bay State Gas Company, D.P.U. 12-25, at 339-342 (2012); Aquarion Water Company of Massachusetts, D.T.E. 04-77, at 7 (2005); Aquarion Water Company of Massachusetts, D.T.E. 03-127, at 11 (2004). Thus, the Department will not typically preapprove a deferral request prior to a company incurring the expense it seeks to defer.

In response to the companies' assertion that the Department approved similar deferral requests for the companies' respective PAMs, the Department approved the companies' pension and post-retirement benefits other than pensions ("PBOP") proposals for a limited period (i.e., a three-year recovery period) pursuant to Statement of Financial Accounting Standards ("SFAS") 71 and based on the specific facts of that proceeding.⁶⁵ Commonwealth Electric

⁶⁵ In December 1982, the Financial Accounting Standards Board issued SFAS 71, effective 1983, which established standards for accounting for the effects of certain types of

Company, Cambridge Electric Light Company, and Boston Edison Company, D.T.E. 03-47-A at 24 (2003). In that proceeding, the issue before the Department involved the appropriate mechanism for recovery of recurring pension and PBOP costs in a manner that would minimize harm from the application of accounting rules under unusual economic circumstances.

D.T.E. 03-47-A at 25. The Department stated that a failure to adopt a pension and PBOP reconciling mechanism would inevitably trigger an equity write-down entailing significant and impairing financial consequences for the companies. D.T.E. 03-47-A at 25, 26. In the instant matters, the Department determines that the Companies would not suffer from any impairing financial consequences if the Department does not grant the deferral proposals and that the same exigent circumstances do not exist. Therefore, the Department's approval of the deferral proposals in D.T.E. 03-47-A do not support the Companies' deferral proposals in these proceedings.

In addition, the Department has reviewed the bill impact analyses provided by the Companies with the estimated customer bill impacts from approval of the Companies' proposed EV programs under a scenario in which the Companies defer some EV program costs and a scenario in which they do not (D.P.U. 21-90, Exh. DPU 4-1, Att. (a) & (f); D.P.U. 21-91, Exhs. AG 5-5; DPU 5-2; D.P.U. 21-92, Exhs. DPU 5-3, Att. 1; DPU 7-2, Atts. 2-6). Based on

regulation. D.T.E. 03-47-A at 3. SFAS 71 sets forth the specific criteria that must be met for a regulated company to establish a regulatory asset. D.T.E. 03-47-A at 3. A regulatory asset is an incurred cost for which a regulatory agency, such as the Department, allows a regulated company to record a deferral to be considered for recovery in the future. D.T.E. 03-47-A at 3 n.2. Recognition of a regulatory asset, preserved for later decision as to future recovery, is a common feature of utility regulation at both state and federal level. D.T.E. 03-47-A at 3 n.2.

our review, the Department finds that the Companies' deferral proposals do not yield sufficient benefits to ratepayers to justify approval of the long-term carrying costs associated with the deferral proposals. Additionally, in Sections III.C.8, above, the Department has denied certain aspects of NSTAR Electric's and National Grid's proposed Phase II and Phase III EV programs, respectively, which reduces the overall EV program budgets and assists in moderating the customer bill impacts associated with the companies' proposed EV programs. For these reasons, the Department denies the Companies' request to defer recovery of certain EV program expenditures and amortize them with carrying charges.

Additionally, in D.P.U. 17-05, at 500-501, the Department approved a \$45 million budget for NSTAR Electric's Phase I EV program. Here, NSTAR Electric proposes a \$191.9 million Phase II EV program budget, a more than four-fold program budget increase (D.P.U. 21-90, Exh. ES-KB-2). Given the substantial increase in the size and scope of the company's Phase II EV program as compared to its Phase I EV program, the Department finds that increased transparency and a focused review of the company's Phase II EV program costs are necessary. Therefore, the Department establishes a separate reconciling cost recovery mechanism for targeted recovery of EV program costs and directs NSTAR Electric to recover its Phase II EV program expenditures through an EV program factor rather than through the GMF. NSTAR Electric shall submit a proposed EV program factor tariff for Department review and approval no later than January 15, 2023. NSTAR Electric shall also file a revised GMF tariff to remove all references to its EV program no later than January 15, 2023. The Department further directs NSTAR Electric to create a separate line item on customers' bills to reflect EV program-related charges. The EV program factor shall not be included in the following kWh charges: (1) basic

service; (2) distribution; (3) transmission; (4) transition; (5) energy efficiency; or (6) renewable energy. For the majority of net metering facilities, the charges that constitute a customer's net metering credit include some or all of the following kWh charges: (1) basic service; (2) distribution; (3) transmission; and (4) transition. 220 CMR 18.04. Accordingly, for the purposes of the net metering credit calculation, net metering credits shall exclude the EV program factor line item. See D.P.U. 17-13, at 61. The company may seek recovery for the costs necessary to create this new line item on customers' bills in its next annual EV program cost recovery filing.⁶⁶

Turning to National Grid, the company currently recovers its Phase I and Phase II EV program expenditures through its approved EV program factor. D.P.U. 17-13, 56-60. The Department directs the company to continue recovery of its EV program costs, including the costs associated with the Phase III EV program approved herein, through its annual reconciling EV program factor. National Grid shall submit compliance tariff revisions for the Department's review no later than January 15, 2023.

Regarding Unutil, to promote transparency and reduce the administrative burden on the Department, we find it appropriate for the company to recover all EV program expenditures through a single reconciling mechanism. The total budget of Unutil's proposed five-year EV program is \$1.02 million (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 32-33, 40, 56). Given the relative size and scope of Unutil's proposed EV program, the Department finds that it is not

⁶⁶ NSTAR Electric estimates that it will incur \$524,000 in costs to modify its billing and back-office systems to create a new EV program reconciling mechanism (D.P.U. 21-90, Exh. DPU 9-1).

administratively efficient or economical for Unitil and its customers⁶⁷ to direct the company to establish a separate EV cost recovery factor at this time. Therefore, the Department directs Unitil to recover its EV program costs through its GMF.⁶⁸ We note that recovery of Unitil's EV program costs through the GMF aligns with the Department's decision to require Unitil to recover its AMI implementation plan costs in its GMF. 2022-2025 Grid Modernization Plans, D.P.U. 21-80-B/D.P.U. 21-81-B/D.P.U. 21-82-B at 282-285 (November 30, 2022) ("Grid Mod Track 2 Order").

Consistent with these findings, Unitil shall submit a revised GMF tariff for Department review and approval no later than January 15, 2023. The revised GMF tariff shall clearly distinguish between grid modernization investments and costs and EV program investments and costs.

As noted above, the Department held a joint public hearing in these proceedings on September 14, 2021. Unitil, however, did not meet the prescribed deadline for publication of the Notice of Public Hearing. To correct this defect, the Department issued a second Order of Notice in D.P.U. 21-92, to which Unitil made return of service and proof of publication on October 5, 2021, and the Department held a second public hearing on October 12, 2021.

⁶⁷ Unitil estimates that it would cost \$7,500 and take approximately 125 labor hours to update its billing and back-office systems to create a new EV program reconciling mechanism and \$2,000 and ten labor hours to create a separate line item on customers' bills reflecting EV program-related charges (D.P.U. 21-92, Exh. DPU 6-5(d)).

⁶⁸ Cost recovery through the GMF is consistent with the cost recovery mechanism the Department approved for NSTAR Electric's Phase I EV program. D.P.U. 15-120/D.P.U. 15-121/D.P.U. 15-122, at 187.

Because the second public hearing was necessitated by Unitil's omission, the Department disallows recovery from ratepayers for any costs associated with the second public hearing.

2. Bill Impacts

a. NSTAR Electric

According to the bill impact analyses provided by NSTAR Electric under the scenario in which no Phase II EV program expenditures are deferred, a typical Eastern Massachusetts residential customer with an average monthly electric usage of 516 kWh would experience an average annual bill increase of \$0.82 in 2025 and a typical Western Massachusetts residential customer with an average monthly electric usage of 516 kWh would experience an average annual bill increase of \$0.81 in 2025 (D.P.U. 21-90, Exh. DPU 4-1, Att. (a)). Based on our review, the Department finds that the bill impacts without deferral are reasonable and will result in just and reasonable rates.

b. National Grid

Without deferral, a typical Massachusetts Electric Company residential customer with an average monthly electric usage of 600 kWh would experience an average annual bill increase of \$3.52 in 2026 (D.P.U. 21-91, Exh. DPU 5-2, Att. 7, at 2). After review, the Department finds that the bill impacts without deferral are reasonable and will result in just and reasonable rates.

c. Unitil

With no deferral of EV program costs, a typical Unitil residential customer with an average monthly electric usage of 600 kWh would experience an average annual bill increase of \$3.96 in 2026 (D.P.U. 21-92, Exh. DPU 7-2, Atts. 2-6). The Department finds that the bill impacts are reasonable and will result in just and reasonable rates.

3. Annual Factor Filings

Above, the Department establishes the method by which each company shall recover its EV program expenditures. The Companies shall file annual rate adjustment and reconciliation filings.⁶⁹ Such filings shall be submitted to the Department as follows: (1) for NSTAR Electric, on or before by May 15 with rates effective July 1; (2) for National Grid, on or before May 15, with rates effective July 1; and (3) for Unitil, on or before April 15, with rates effective June 1.

To be eligible for recovery, the Companies must demonstrate that all EV program expenditures are incremental, reasonable, prudently incurred, and used and useful (where applicable). D.P.U. 17-13, at 61. The Companies must also describe any cost variances, as defined in the Companies' respective capital authorization policies, demonstrate that the proposed EV program costs sought for recovery are calculated appropriately, and provide bill impacts. D.P.U. 17-13, at 61. Consistent with Section III.C.6.b, above, the Companies must describe any offsets from alternative government or outside funding received for the EV program investments. The Department will review the Companies' actual EV program expenditures annually to determine if they are reasonable and prudently incurred.⁷⁰

⁶⁹ The Companies may request to defer the annual prudence review in a given year if their EV program expenses for the program year are too small to generate an EV program factor for NSTAR Electric and National Grid or a GMF for Unitil. Grid Modernization, D.P.U. 15-120-B/D.P.U. 15-121-B/D.P.U. 15-122-B/D.P.U. 19-23/ D.P.U. 19-36, at 2, 30 (2019).

⁷⁰ With each annual EV program or GMF factor filing, the Companies shall provide testimony and supporting exhibits, including full project documentation of all EV program capital projects placed into service during the plan investment year and documentation of O&M expenses, describing in detail how the proposed costs meet the eligibility requirements set forth in the present filing.

In addition, all O&M expenses proposed for recovery must be: (1) incremental to the representative level of O&M expenses recovered through base distribution rates, and (2) solely attributable to EV program expenses. D.P.U. 17-13, at 57. A failure to provide clear, cohesive, and reviewable evidence demonstrating eligibility will result in disallowance of targeted cost recovery. D.P.U. 17-13, at 58.

In D.P.U. 12-76-B at 23 and D.P.U. 15-120/D.P.U. 15-121/D.P.U. 15-122, at 218, the Department found that a representative level of O&M costs is already recovered through base distribution rates and, therefore, allowing recovery of costs through a targeted cost recovery mechanism increases the risk that a company could recover a portion of these costs more than once. Accordingly, the Department directs the Companies to develop a rigorous method to demonstrate that only incremental EV program-related costs are proposed for targeted cost recovery. Each company shall make an annual EV program adjustment and reconciliation filing comprised of: (1) actual, eligible expenditures from the prior EV program year, and (2) a reconciliation component in the following year and beyond. Interest on over- or under-recovery of the revenue requirement shall be calculated on the average monthly balance using the customer deposit rate.

D. Conclusion

In Section V.C.2, above, the Department found that the bill impacts from the proposed EV programs are reasonable and will result in just and reasonable rates. Consistent with our findings and directives, above, in Section V.C.1, NSTAR Electric shall recover its Phase II EV program expenses through a new EV program factor, National Grid shall recover its Phase III EV program expenses through its existing EV program factor, and Unitil shall recover its EV

program expenses through its existing GMF. The Companies shall file by January 15, 2023 revised tariffs consistent with the directives contained herein. Additionally, as discussed in Section V.C.1, the Department disallows recovery from ratepayers for any costs associated with the second public hearing on Unital's EV proposal.

VI. ELECTRIC SECTOR GRID MODERNIZATION PLANS

As discussed above, on January 15, 2021, Governor Baker signed into law the Transportation Act that required each electric distribution company to file by July 14, 2021 at least one proposed commercial tariff or program for Department review using alternatives to traditional demand-based rate structures to facilitate faster charging for light-duty, heavier-duty, and fleet electric vehicles. St. 2021, c. 383, § 29. Then, on March 26, 2021, Governor Baker signed into law the 2021 Climate Act which established new interim goals for emission reductions and a commitment to achieve net zero GHG emissions by 2050. St. 2021, c. 8, § 8.

Consistent with the new legislation, in D.P.U. 20-69-A at 40-41, 49, the Department directed each company to file an EV proposal consisting of: (1) any new or expanded EV charging infrastructure proposal, and (2) a commercial EV rate design proposal addressing alternatives to demand charges. In the instant proceedings, on July 14, 2021, the Companies filed new EV charging infrastructure program proposals and demand charge alternative proposals to support EV adoption in the Commonwealth. On August 11, 2022, during the course of these proceedings, Governor Baker signed into law the 2022 Clean Energy Act. The Clean Energy Act requires the Companies to submit proposals to the Department on or before August 11, 2023 for approval to offer a TOU rate designed to reflect the cost of providing

electricity to a consumer charging an EV at an EV charging station at different times of the day.

St. 2022, c. 179, § 90.

Additionally, the 2022 Clean Energy Act establishes an EV Coordinating Council to implement an EV charging infrastructure deployment plan. St. 2022, c. 179, § 81(a). The EV Coordinating Council is required to assess and report on strategies and plans necessary to deploy EV charging infrastructure to establish an equitable, interconnected, accessible, and reliable EV charging network. St. 2022, c. 179, § 81(a). The deployment plan will facilitate:

- (1) compliance with the GHG emissions limits and sub-limits set pursuant to G.L. c. 21N, § 3, 3A, with emphasis on compliance with the emissions limits and sub-limits set for 2025 and 2030;
- (2) attainment of the numerical benchmarks for EVs and EV charging stations set pursuant to G.L. c. 21N, § 5;
- (3) cessation, by December 31, 2035, of in-state sales of non-zero-emission vehicles; and
- (4) advancement of access to, and affordability of, EV charging and fueling.

St. 2022, c. 179, § 81(a). The EV Coordinating Council is also required to seek data and input related to EV charging stations, fueling stations and related infrastructure, equipment, equipment maintenance, and technology, from stakeholders, including investor-owned electric utilities.

St. 2022, c. 179, § 81(a). Finally, the EV Coordinating Council is required to issue an initial assessment to the senate and house committees on ways and means and the joint committee on telecommunications, utilities, and energy not later than August 11, 2023 and shall consider and revise its assessment at least once every two years. St. 2022, c. 179, § 81(d).

The 2022 Clean Energy Act also established a new regulatory construct regarding electric sector grid modernization that incorporates, among other thing, considerations of transportation electrification. Specifically, each electric company must develop an electric sector

modernization plan to proactively upgrade its distribution system and where applicable the transmission system to: (1) improve grid reliability, communications and resiliency; (2) enable increased, timely adoption of renewable energy and DERs; (3) promote energy storage and electrification technologies necessary to decarbonize the environment and economy; (4) prepare for future climate-driven impacts on the transmission and distribution systems; (5) accommodate increased transportation electrification, increased building electrification and other potential future demands on distribution and, where applicable, transmission systems; and (6) minimize or mitigate impacts on the ratepayers of the Commonwealth, thereby helping the commonwealth realize its statewide GHG emissions limits and sub-limits under G.L. c. 21N. G.L. c. 164, § 92B(a); see also G.L. c. 164, § 1 (defining “electric company”).

The electric sector modernization plans must describe multiple elements, including:

- (1) improvements to the electric distribution system to increase reliability and strengthen system resiliency to address potential weather- and disaster-related risks; (2) the availability and suitability of new technologies including, but not limited to, smart inverters, advanced metering and telemetry, and energy storage technology for meeting forecasted reliability and resiliency needs, as applicable; (3) patterns and forecasts of DER adoption in the company’s territory and upgrades that might facilitate or inhibit increased adoption of such technologies;
- (4) improvements to the distribution system that will enable customers to express preferences for access to renewable energy resources; (5) improvements to the distribution system that will facilitate transportation or building electrification; (6) improvements to the transmission or distribution system to facilitate achievement of the statewide GHG emissions limits under G.L. c. 21N; (7) opportunities to deploy energy storage technologies to improve renewable

energy utilization and avoid curtailment; (8) alternatives to proposed investments, including changes in rate design, load management and other methods for reducing demand, enabling flexible demand, and supporting dispatchable demand response; and (9) alternative approaches to financing proposed investments, including, but not limited to, cost allocation arrangements between developers and ratepayers and, with respect to any proposed investments in transmission systems, cost allocation arrangements and methods that allow for the equitable allocation of costs to, and the equitable sharing of costs with, other states and populations and interests within other states that are likely to benefit from said investments. G.L. c. 164, § 92B(b). For all proposed investments and alternative approaches, each electric company must identify customer benefits associated with the investments and alternative approaches including safety; grid reliability and resiliency; facilitation of the electrification of buildings and transportation; integration of DERs, avoided renewable energy curtailment; reduced GHG emissions and air pollutants; avoided land use impacts; and minimization or mitigation of impacts on the ratepayers of the Commonwealth. G.L. c. 164, § 92B(b).

An electric company must also prepare five- and ten-year forecasts and a demand assessment through 2050 to account for future trends such as in the adoption of renewable energy, DERs, and energy storage and electrification technologies. G.L. c. 164, § 92B(c). Further, the electric company must submit its first plan for review to the Grid Modernization Advisory Council by September 1, 2023, and thereafter every five years on a schedule to be determined by the Department, and not later than 150 days before filing the plan with the Department. G.L. c. 164, § 92B(d). The Grid Modernization Advisory Council must return the plan to the electric company with recommendations no later than 70 days before the company

files it plan with the Department. G.L. c. 164, § 92B(d). An electric company must submit its final electric sector modernization plan along with the Grid Modernization Advisory Council's recommendations to the Department in accordance with the Department's established schedule. G.L. c. 164, § 92B(d). The Department must consider the plan and hold a public hearing for interested parties to be heard, and rule on the plan within seven months of submittal.

G.L. c. 164, § 92B(d). In order to be approved, a plan must provide net benefits for customers, as well as meet the criteria enumerated in G.L. c. 164, § 92B(a)(i)-(vi). G.L. c. 164, § 92B(d).

Pursuant to the 2022 Clean Energy Act, the Department is required to direct each electric company to develop an electric sector modernization plan within 30 days of the Act's effective date. St. 2022, c. 179, § 75. In compliance with this requirement, the Department issued a Letter Order on September 12, 2022 ("Letter Order"). In particular, the Department directed each electric company to develop and file with the Grid Modernization Advisory Council by September 1, 2023, an electric sector modernization plan consistent with the 2022 Clean Energy Act for the Grid Modernization Advisory Council's review, input, and recommendations. Letter Order at 1. Each company must file its final electric-sector modernization plan with the Department no later than January 29, 2024, with a list of each recommendation proposed by the Grid Modernization Advisory Council and an explanation of whether and why each recommendation was: (1) adopted; (2) adopted as modified; or (3) rejected. Letter Order at 1. In addition, each company must include with its filing a proposal of how it intends to proactively upgrade its distribution system to enable increased, timely adoption of renewable energy and DERs. Letter Order at 2. The Department will review the company's proposal through an adjudicatory proceeding. Letter Order at 2.

In consideration of the passage of the 2022 Clean Energy Act, the Department immediately closed its investigation and stakeholder process assessing electric distribution companies' optimal solutions for long-term planning for the interconnection of DG facilities. D.P.U. 20-75-C (September 12, 2022). In doing so, the Department determined that the 2022 Clean Energy Act effectively establishes a statutory, long-term system planning requirement for enabling DER development to increase timely adoption of renewable energy and DERs. Distributed Energy Resource Planning and Assignment and Recovery of Costs for the Interconnection of Distributed Generation, D.P.U. 20-75-C at 3 (2021). The Department noted that it would review other ongoing investigations and stakeholder processes to determine whether any should be discontinued in light of this new process for electric system planning established in the 2022 Clean Energy Act. Letter Order at 2.

As a result, upon resolution of the instant proceedings, inclusive of the process to establish final performance metrics discussed in Section IV.A.3.a, the contents of the annual report discussed in Section IV.C.3, and any specifics for the evaluation plan discussed in Section IV.B.3, the Department's review of investments in EV charging infrastructure and related transportation electrification proposals that would have been investigated pursuant to our existing regulatory construct will instead be filed pursuant to the requirements established in the 2022 Clean Energy Act.⁷¹

⁷¹ The Department notes that the budgets approved in this Order are capped, and, based on the content and timing of any future proposals made pursuant to G.L. c. 164, § 92B, a transition process may or may not need to be developed to maintain continuity of the EV programs, similar to the transition process for the energy efficiency programs subject to Chapter 169 of the Acts of 2008, An Act Relative to Green Communities. See, e.g.,

VII. DEMAND CHARGE ALTERNATIVE PROPOSALS

A. Description of the Proposals

NSTAR Electric proposes to offer for a ten-year period two new rate schedules, Rates EV-1 and EV-2, to all separately-metered EV charging sites (D.P.U. 21-90, Exh. ES-RDC-1, at 5, 10-11). Rate EV-1 consists of a customer charge and per kWh base distribution rate and would be available to EV charging sites with a billing demand of no more than 200 kW for twelve consecutive billing months (D.P.U. 21-90, Exh. ES-RDC-1, at 5, 10, 18, 20). Rate EV-2 consists of a customer charge, per kWh base distribution rate, and a demand charge and would be made available to EV charging sites with a billing demand above 200 kW for twelve consecutive billing months (D.P.U. 21-90, Exh. ES-RDC-1, at 5, 10, 18, 20-21).

National Grid proposes revisions to two general service tariffs, Rates G-2 and G-3, to offer for a ten-year period DCA pricing schedules to all separately-metered EV charging sites (D.P.U. 21-91, Exh. NG-DCA-1, at 9-10, 14-15). Rate G-2 consists of a customer charge, demand charge, and per kWh base distribution rate and would be available to EV charging sites with a billing demand of no more than 200 kW for twelve consecutive billing months and monthly kWh usage greater than 10,000 (D.P.U. 21-91, Exhs. NG-DCA-1, at 13; NG-DCA-2, at 1-3). Rate G-3 consists of a customer charge, demand charge, and per kWh base distribution rate and would be available to EV charging sites with a billing demand in excess of 200 kW for twelve consecutive billing months (D.P.U. 21-91, Exh. NG-DCA-1, at 13).

Boston Gas Company, Colonial Gas Company, and Essex Gas Company, D.P.U. 08-109, at 10 (2009).

Unitil proposes revisions to two general service tariffs, Rates GD-2 and GD-3, to offer for a ten-year period tiered DCA rates to separately-metered general delivery service customers (D.P.U. 21-92, Exh. JDT-1, at 6, 9). Rate GD-2 consists of a customer charge, demand charge, and per kWh base distribution rate and would be available to EV charging sites with a monthly usage between 850 kWh and 120,000 kWh and at least 4 kW of demand (D.P.U. 21-92, Exhs. JDT-1, at 6; JDT-3). Rate GD-3 consists of a customer charge, demand charge, and a base distribution rate with an on-peak per kWh charge and an off-peak per kWh charge and would be available to EV charging sites with at least 120,000 kWh of monthly usage (D.P.U. 21-92, Exhs. JDT-1, at 6; JDT-2).

Under all of the DCA rate proposals, the base distribution demand and energy charges would operate on a sliding scale (i.e., as load factor increases, the demand charge increases and the energy charge decreases) (D.P.U. 21-90, Exh. ES-RDC-1, at 5, 18-19; D.P.U. 21-91, Exh. NG-DCA-1, at 10, 23-24; D.P.U. 21-92, Exhs. JDT-1, at 6; JDT-2).

The Companies initially proposed to limit enrollment in the DCA rates to customers whose metered account was limited exclusively to EV charging load (D.P.U. 21-90, Exh. ES-RDC-1, at 10, 20-21; D.P.U. 21-91, Exh. NG-DCA-1, at 13-14; D.P.U. 21-92, Exh. JDT-1, at 9). During the course of these proceeding, the Companies amended their proposals to permit the ancillary load needed for the direct operation of the EV charging station to qualify for the DCA rates (D.P.U. 21-90, Exh. ES-RDC-Reb-1, at 14; D.P.U. 21-91, Exh. NG-DCA-Reb-1, at 16; D.P.U. 21-92, Exh. JDT-Rebuttal-2, at 20).

The Companies propose to structure their DCA rates by load factor bracket as follows:

- (1) a 100 percent demand charge discount for customers with load factors between zero percent

and five percent; (2) a 75 percent demand charge discount for customers with load factors between five percent and ten percent; and (3) a 50 percent demand charge discount for customers with load factors between ten percent and 15 percent (D.P.U. 21-90, Exh. ES-RDC-1, at 18-19; D.P.U. 21-91, Exh. NG-DCA-1, at 22-23; D.P.U. 21-92, Exhs. JDT-1, at 7; JDT-2). Customers with a 15 percent or greater average load factor over a twelve-month period would not be eligible to receive a demand charge discount for that year (D.P.U. 21-90, Exhs. ES-RDC-1, at 14; ES-RDC-2, at 2; D.P.U. 21-91, Exhs. NG-DCA-1, at 16, 18; NG-DCA-2, at 1-3; D.P.U. 21-92, Exhs. JDT-1, at 7; JDT-2).

New EV charging sites with no prior account history with the Companies would initially be assigned to the price schedule associated with the lowest load factors (i.e., load factor between zero percent and five percent) (D.P.U. 21-90, Exh. ES-RDC-1, at 12; D.P.U. 21-91, Exh. NG-DCA-1, at 15; D.P.U. 21-92, Exh. JDT-1, at 9-10). Existing EV charging sites with account history with the Companies would be assigned to the price schedule reflecting their twelve-month average load factor (D.P.U. 21-90, Exh. ES-RDC-1, at 12; D.P.U. 21-91, Exh. NG-DCA-1, at 14; D.P.U. 21-92, Exh. JDT-1, at 9-10). NSTAR Electric and National Grid propose to assess each customer's average monthly load factor over the preceding twelve months on or before June 1 of each year to determine whether the customer account should be reassigned to a different price schedule (D.P.U. 21-90, Exh. ES-RDC-1, at 12, 15; D.P.U. 21-91, Exh. NG-DCA-1, at 10, 16, 19). Unitil proposes to review each customer's average monthly load factor over the preceding twelve months on or before May 1 of each year to determine whether the customer account should be reassigned to a different price schedule (D.P.U. 21-92, Exh. JDT-1, at 9-10).

Eligible customers would be permitted to enroll in the DCA rates during the first nine years the rates are in operation, after which enrollment would be closed to new customers (D.P.U. 21-90, Exh. ES-RDC-1, at 11; D.P.U. 21-91, Exh. NG-DCA-1, at 14-15; D.P.U. 21-92, Exh. JDT-1, at 9). At the conclusion of the ten-year DCA rate terms, customers enrolled in the DCA rates would be returned to the otherwise applicable general service rates (D.P.U. 21-90, Exh. ES-RDC-1, at 11; D.P.U. 21-91, Exh. NG-DCA-1, at 15; D.P.U. 21-92, Exh. JDT-1, at 9).

NSTAR Electric and National Grid estimate that it would take six months following Department approval of the DCA rates to accurately program their billing systems to set up the required functionality to implement the DCA rates and train their customer service representatives on the new rates (D.P.U. 21-90, Exh. RDC-1, at 17-18; D.P.U. 21-91, Exh. NG-DCA-1, at 22). Unitil anticipates that it would take three months following Department approval to update its billing system to implement the DCA rates and train its customer service representatives on the new rates (D.P.U. 21-92, Exh. JDT-1, at 21). The Companies' state that incremental revenue generated under the DCA rates will offset revenue shortfalls in the Companies' revenue decoupling mechanisms (D.P.U. 21-90, Exh. ES-RDC-1, at 17; D.P.U. 21-91, Exh. NG-DCA-1, at 21; D.P.U. 21-92, Exh. JDT-1, at 8). The Companies state that, to the extent feasible, they coordinated on the development of their DCA rate proposals (D.P.U. 21-90, Exh. ES-RDC-3; D.P.U. 21-91, Exh. NG-DCA-4; D.P.U. 21-92, Exh. JDT-3).

B. Positions of the Parties

1. Rate Design Issues

a. Load Factors

i. Attorney General

The Attorney General urges the Department to direct the Companies to maintain a small, substantially reduced demand charge for customers with load factors between zero percent and five percent (e.g., a 75 percent demand charge discount) because it would: (1) incentivize the development of EV charging stations while sending appropriate price signals to customers regarding their share of the unit cost of local distribution facilities, and (2) reduce the cross-subsidization between customers enrolled in the DCA rates and those who are not (D.P.U. 21-90, Attorney General Track 2 Brief at 9-12; D.P.U. 21-91, Attorney General Track 2 Brief at 13-16; D.P.U. 21-92, Attorney General Track 2 Brief at 19-21; D.P.U. 21-92, Attorney General Track 2 Reply Brief at 9).

ii. CLF

CLF recommends that the Department direct the Companies to expand the load factor brackets such that a full demand charge would not be imposed until the customer's utilization rate or load factor exceeds 30 percent because: (1) it would accelerate EV charging deployment and enable the Commonwealth to reach its GHG emissions reduction mandates; (2) it is consistent with the recommendations in the Rocky Mountain Institute ("RMI") report; (3) a 30 percent utilization rate represents a mature EV market, which is a more appropriate usage level by which to spread higher or full demand charges across customers; and (4) other intervenors agree that the Companies should expand the proposed load factor brackets

(D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 2 Brief at 8-15, 24). CLF also asserts that the Department should direct the Companies to use utilization rates rather than load factors to determine demand charge thresholds because load factors may not reflect the actual use of that location and the ability of that location to recover demand charges (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 2 Brief at 8 n.11).

Additionally, CLF contends that the Department should reject the Attorney General's recommendation to impose a 25 percent demand charge on customers with a load factor under five percent because: (1) demand charges present a substantial barrier to EV charging station viability at low load factors; (2) it could discourage EV charging station investments and imperil the Commonwealth's ability to achieve its 2025 and 2030 transportation electrification goals and climate mandates; (3) other intervenors and the Companies oppose the Attorney General's recommendation; and (4) at low EV adoption levels, any cross-subsidization between customers is likely to be minimal (D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, CLF Track 2 Brief at 15-19, 24; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 2 Reply Brief at 4-7).

iii. Tesla and EVgo

Tesla and EVgo recommend that the Department direct the Companies to expand the DCA rates to offer the same demand discount rate to customers with a load factor between 16 percent to 25 percent as those with load factors between ten percent and fifteen percent (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 2 Brief at 5, 12; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 2 Brief at 4, 10; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 2 Reply Brief at 2, 6; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 2 Reply Brief at 4-5). Tesla argues that its proposal would ensure that customers have a smoother transition from the

DCA rates to rates with a demand charge component (D.P.U. 21-90/ D.P.U. 21-91/D.P.U. 21-92, Tesla Track 2 Brief at 5, 8, 16). EVgo adds that the proposal comports with best practices from other jurisdictions that have approved EV charging rates and would accelerate the achievement of the Commonwealth's ambition GHG emissions reductions and transportation electrification targets (D.P.U. 21-90/D.P.U. 21-91, EVgo Track 2 Brief at 4, 6; D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, Tesla Track 2 Reply Brief at 6; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 2 Reply Brief at 5).

iv. ChargePoint

ChargePoint requests that the Department direct the Companies to modify their DCA rates as follows: (1) an EV charging site with load factors between zero percent and five percent would not incur a demand charge; (2) an EV charging site with load factors between five percent and ten percent would receive a demand charge discount rate of 75 percent; (3) an EV charging site with load factors between ten percent and 20 percent would receive a demand charge discount rate of 50 percent; and (4) an EV charging site with load factors between 20 percent to 30 percent would receive a demand charge discount rate of 25 percent (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, ChargePoint Track 2 Brief at 3-4, 9-10). According to ChargePoint, its proposal is consistent with RMI's report, which recommends phasing-in demand charges over time and finds that 30 percent utilization is an appropriate usage level at which to impose a full demand charge (D.P.U. 21-90/ D.P.U. 21-91/D.P.U. 21-92, ChargePoint Track 2 Brief at 18). Further, ChargePoint contends that its proposal will foster EV growth and EVSE deployment in the Commonwealth and lower investment barriers to EV adoption (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, ChargePoint Track 2 Brief at 19).

v. Electrify America

Electrify America asserts that the Department should direct the Companies to calculate customers' load factors over a twelve-month period rather than on a month-to-month basis because an annual load factor calculation would mitigate the risk of year-to-year cost volatility (D.P.U. 21-90, Electrify America Track 2 Brief at 6-7, 16; D.P.U. 21-91, Electrify America Track 2 Brief at 6-7, 15). If the Department declines to adopt its proposal, Electrify America recommends that the Department expand the load factor brackets in a manner consistent with that proposed by Tesla, EVgo, and ChargePoint (D.P.U. 21-90, Electrify America Track 2 Brief at 7; D.P.U. 21-91, Electrify America Track 2 Brief at 7; D.P.U. 21-90, Electrify America Track 2 Reply Brief at 2; D.P.U. 21-91, Electrify America Track 2 Reply Brief at 3).

Electrify America also urges the Department to require NSTAR Electric and National Grid to change the proportion of demand charges relative to usage charges in the end-state EV-2 rate for NSTAR Electric and G-2 and G-3 rates for National Grid for customers with load factors that exceed 15 percent to less than \$8.00 per kW with an increase in volumetric charges (D.P.U. 21-90, Electrify America Track 2 Brief at 9, 16; D.P.U. 21-91, Electrify America Track 2 Brief at 8-9, 15).

vi. FreeWire

FreeWire argues that the DCA rates should, at a minimum, collect the cost of the customer's impact on the Companies' distribution systems at all load factor brackets because reducing or eliminating the demand charges for some EV charging customers will unfairly shift potentially significant costs onto all other distribution customers (D.P.U. 21-90, FreeWire Track 2 Brief at 4-5; D.P.U. 21-91, FreeWire Track 2 Brief at 4-5). Further, according to

FreeWire, the record does not sufficiently detail the costs of the DCA proposals or the magnitude of the effect that the demand charge discount rates will have on EVSE deployment

(D.P.U. 21-90, FreeWire Track 2 Brief at 5-6; D.P.U. 21-91, FreeWire Track 2 Brief at 5-6).

Accordingly, FreeWire recommends that the Department find that the DCA rate proposals are not just and reasonable and deny them (D.P.U. 21-90, FreeWire Track 2 Brief at 5, 13;

D.P.U. 21-91, FreeWire Track 2 Brief at 12; D.P.U. 21-90/D.P.U. 21-91, FreeWire Track 2

Reply Brief at 5). FreeWire also contends that the Department should reject the recommendation

from other intervenors to expand the availability of demand charge discounts to customers with

higher load factors because: (1) the RMI report relied on outdated information; (2) it is improper

to design utility rates based on an assumption of how an EVSE station operator will price EV

charging; and (3) it would further exacerbate the cross-subsidization of EV charging rates by

non-participating customers (D.P.U. 21-90/ D.P.U. 21-91, FreeWire Track 2 Reply Brief at 2-3).

vii. NSTAR Electric and National Grid

NSTAR Electric and National Grid oppose the Attorney General's recommendation to revise the zero percent to five percent load bracket to include a demand charge because:

(1) demand charges for the lowest load factor bracket are a significant barrier to EV charger

deployment; (2) it would impede progress in the deployment of faster EV charging stations; and

(3) a demand charge is unnecessary for customers in this load factor bracket because they are

contributing to distribution system costs through the energy charge (D.P.U. 21-90/ D.P.U. 21-91,

NSTAR Electric and National Grid Joint Track 2 Reply Brief at 7-8).

NSTAR Electric and National Grid also disagree with the intervenor recommendations to expand the load factor brackets beyond 15 percent because: (1) it would send the wrong signal

to customers about the demand exerted by these charging stations on their distribution systems; (2) a 15 percent cutoff for demand charge discount eligibility would result in more price continuity for EV charging station operators; and (3) the RMI report used to support the intervenors' position is not persuasive in this matter because it relies on rates from other jurisdictions with significant differences in customer chargers, demand charges, and other volumetric charges from those offered in the Commonwealth (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 5-6). NSTAR Electric and National Grid also oppose Electrify America's recommendation to calculate customers' load factors on an annual basis because it is not representative of the actual billing and customer monthly usage (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 7). Additionally, NSTAR Electric and National Grid contend that the Department should reject Electrify America's assertion that the end-state demand charge for customers with load factors greater than 15 percent is excessive and should be lowered because Electrify America did not present persuasive evidence to support its recommended end-state unit prices (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 7).

viii. Unitil

Unitil disagrees with the Attorney General's assertion that the DCA rates should maintain a substantially reduced demand charge for customers with load factors between zero percent and five percent because: (1) the DCA rates were designed to be revenue neutral and shift cost recovery from the demand charge to the energy charge and, therefore, DCA rate customers will contribute to the costs of local distribution facilities through the volumetric component of the

DCA rate, and (2) it would hinder the development of new EV charging sites with initially low utilization rates (D.P.U. 21-92, Unitil Track 2 Brief at 17-18).

In addition, Unitil urges the Department to reject CLF's, Tesla's, and ChargePoint's recommendation to expand the load factor brackets to provide demand charge discounts to customers with load factors of up to 30 percent because: (1) the RMI report that the intervenors relied on to support their positions was specific to the rate structure examined in that study, which significantly differs from the company's proposed DCA rates, and (2) the company's DCA rate proposal allows for price continuity as load factor improves (D.P.U. 21-92, Unitil Track 2 Brief at 43-45).

Regarding CLF's argument that utilization rate is a more appropriate method to measure EV charging usage than load factor, Unitil disagrees because load factor is: (1) commonly used in the utility industry; (2) measured by the utility with its existing meters; (3) related to the relationship between the utilization of facilities and the demand placed on the system; and (4) measured using the same demand that is used to apply the demand charges (D.P.U. 21-92, Unitil Track 2 Brief at 45). Moreover, Unitil notes that the Department's Order in D.P.U. 20-69-A directed the Companies to design DCA rates "based on the load factor of the EV charging site," and its proposal is consistent with that directive (D.P.U. 21-92, Unitil Track 2 Brief at 46).

b. DCA Rate Term

i. Attorney General

The Attorney General recommends that the Department reduce the term of the proposed DCA rates from ten years to five years, with the opportunity for an extension if the initial rates

have not yet accomplished their intended purpose by the end of the five-year term, because a ten-year DCA rate term: (1) is too lengthy given the evolving changes in the EV market; (2) would disincentivize customers from transitioning to future rate designs with greater benefits for load management initiatives; (3) would create excessive cost shifting, particularly to non-EV owners; (4) if terminated early, would be complicated, costly, and confusing to customers whereas a five-year DCA rate term could be easily extended if necessary upon a petition by the Companies; (5) is not necessarily more likely to accomplish its intended purpose than a five-year term; and (6) does not protect ratepayers from potentially excessive cost shifting, including cross-subsidization by non-participants (D.P.U. 21-90, Attorney General Track 2 Brief at 12-16; D.P.U. 21-91, Attorney General Track 2 Brief at 16-20; D.P.U. 21-92, Attorney General Brief at 21-24; D.P.U. 21-90/ D.P.U. 21-91, Attorney General Track 2 Reply Brief at 11; D.P.U. 21-92, Attorney General Track 2 Reply Brief at 2-4, 7). The Attorney General also recommends that the Department direct the Companies to incorporate into the DCA rates cost thresholds, at which time the Companies would close the DCA rates to new participants (D.P.U. 21-90, Attorney General Track 2 Brief at 16; D.P.U. 21-91, Attorney General Track 2 Brief at 19-20; D.P.U. 21-92, Attorney General Track 2 Brief at 24; D.P.U. 21-92, Attorney General Track 2 Reply Brief at 4).⁷²

⁷² For NSTAR Electric, the Attorney General recommends a cost threshold of \$28 million (D.P.U. 21-90, Attorney General Track 2 Brief at 16). For National Grid, the Attorney General recommends a cost threshold of \$10 million (D.P.U. 21-91, Attorney General Track 2 Brief at 20). For Unitil, the Attorney General recommends a cost threshold of \$135,000 (D.P.U. 21-92, Attorney General Track 2 Brief at 24).

ii. FreeWire

If the Department approves the DCA rate proposals, FreeWire requests that the Department set a program cost cap and limit the term of the DCA rates to five years, consistent with the Attorney General's recommendations (D.P.U. 21-90, FreeWire Track 2 Brief at 6-7; D.P.U. 21-91, FreeWire Track 2 Brief at 6).

iii. CEP

CEP recommends that the Department approve the DCA rate proposals for a ten-year term with a review of the DCA rates every three years to allow for continued evaluation and potential refinements where necessary (D.P.U. 21-90/D.P.U. 21-91, CEP Track 2 Brief at 2, 6, 7). According to CEP, the three-year review should include: (1) an assessment of the success of the DCA rates in supporting transportation electrification, particularly with respect to the development of new DCFC; (2) an analysis of EV adoption trends in the Commonwealth and DCFC load factors; (3) a comparison of gasoline prices relative to average electricity costs for EV charging stations; and (4) an evaluation of potential changes to the design of the DCA rates, including whether to add a time-varying component or adjust the load factor thresholds (D.P.U. 21-90/D.P.U. 21-91, CEP Track 2 Brief at 8). CEP contends that this approach would provide longer-term price certainty to EV station developers and EV drivers while also allowing for flexibility to adjust the DCA rates as market conditions evolve and new data is collected (D.P.U. 21-90/D.P.U. 21-91, CEP Track 2 Brief at 8).

iv. CLF

CLF opposes the Attorney General's recommendation to limit the term of the DCA rates from ten years to five years and to impose a cost threshold after which the DCA rates would be

closed to new participants because: (1) it could hinder the development of a robust EV charging station market in the Commonwealth and the attainment of the Commonwealth's climate goals; (2) other intervenors agree that a ten-year duration for the DCA rates is appropriate; (3) the cost threshold would arbitrarily cut off participation in the DCA rates regardless of whether the Commonwealth is on track to meet its electrification transportation and climate goals; (4) limiting participation in the DCA rates would create winners and losers and negatively impact the EV charging market; and (5) it could drive investments in public EV charging into communities where EV adoption is already rapidly growing, creating charging deserts in communities most in need of assistance (D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, CLF Track 2 Brief at 19-22, 24; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 2 Reply Brief at 2-4). Therefore, CLF requests that the Department reject the Attorney General's recommendations regarding both the duration of the DCA rates and the implementation of a cost threshold by which customers would no longer be permitted to enroll in the DCA rates (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 2 Reply Brief at 4).

v. Tesla and EVgo

Tesla and EVgo request that the Department reject the Attorney General's recommendation to limit the DCA term from ten years to five years because: (1) more price certainty would encourage developers to invest in EV charging infrastructure; (2) many other jurisdictions have approved EV charging rates for a ten-year period; (3) the Attorney General's recommendation is not supported by the record; (4) a shorter DCA rate term could make the Commonwealth a less attractive location for EV charging station developers to invest in EV charging infrastructure, which would impede progress in achieving the Commonwealth's

transportation electrification targets; (5) a ten-year DCA rate term will not disincentivize customers from shifting to a TOU rate; and (6) a ten-year DCA rate term better aligns with the anticipated timeline for investments in public DCFCs (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 2 Brief at 12-15, 16; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 2 Brief at 6-8, 10; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 2 Reply Brief at 6-7; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 2 Reply Brief at 2-3). EVgo also supports National Grid's proposal to conduct a review of the DCA rates at the mid-point of the offering to allow the Department and stakeholders an opportunity to review the efficacy and necessity of the DCA rates (D.P.U. 21-90/D.P.U. 21-91, EVgo Track 2 Reply Brief at 3-4).

vi. ChargePoint

ChargePoint asserts that it may be necessary for the Companies and the Department to make the DCA rate offerings permanently available to a subset of EV charging stations based on their unique charging patterns because DCFC utilization rates in less-traveled areas will likely be consistently lower than DCFC utilization rates in high-trafficked areas regardless of EV adoption rates (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, ChargePoint Track 2 Brief at 14-15).

vii. Electrify America

Electrify America disagrees with the Attorney General's recommendation to reduce the term of the DCA rates from ten years to five years because a ten-year term is necessary to provide EV charging station developers the requisite level of price certainty to make large capital investments to build out the public EV charging infrastructure network needed to meet the Commonwealth's transportation electrification goals (D.P.U. 21-90, Electrify America Track 2 Brief at 3-4, 16; D.P.U. 21-91, Electrify America Track 2 Brief at 3-4, 15; D.P.U. 21-90,

Electrify America Track 2 Reply Brief at 2; D.P.U. 21-91, Electrify America Track 2 Reply Brief at 3). Electrify America also requests that the Department clarify in its Order that it will not approve unilateral changes to the program term or material changes to the DCA rate structures during the program term (D.P.U. 21-90, Electrify America Track 2 Brief at 5, 16; D.P.U. 21-91, Electrify America Track 2 Brief at 5, 15).

viii. NSTAR Electric and National Grid

NSTAR Electric and National Grid oppose the Attorney General's recommendation to reduce the term of the DCA rates from ten years to five years because: (1) EV charging station operators need price certainty to evaluate the economic viability of their investments in EV charging stations; (2) the term of the proposed DCA rates was carefully considered by the Companies with feedback from stakeholders, including EV charging station developers; (3) it is inconsistent with the Commonwealth's transportation electrification targets for 2030; (4) the DCA rates may be re-assessed by the Department or Companies as necessary; (5) other intervenors support a ten-year term for the DCA rates; and (6) other jurisdictions have approved EV-specific rates for a ten-year period (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 10-12).

ix. Unitil

Unitil encourages the Department to reject the Attorney General's recommendation to reduce the term of the DCA rates from ten years to five years because: (1) the Attorney General's position is based on unsupported speculation and vague generalizations; (2) only customers with a load factor of 15 percent or below would be eligible to remain on the DCA rates; (3) to the extent that other rate offerings become available, customers would have the

ability to opt into those rates so long as they meet the applicable eligibility requirements; (4) the Attorney General misrepresents the extent to which cross-subsidization could occur under the DCA rates; (5) it would create price uncertainty for EV station developers; and (6) it could drive DCFC investments to only communities where EV adoption is likely to progress at a faster pace (D.P.U. 21-92, Unitil Track 2 Brief at 14-17).

c. Ancillary Load

i. Electrify America

Electrify America requests that the Department direct the Companies to include specific language in their EV tariffs.⁷³ According to Electrify America, its proposed tariff language should be adopted because: (1) it is broad enough to include ancillary equipment that EV charging station operators may need at their respective sites while ensuring that all equipment is directly supporting EV charging station operation; (2) it resolves ambiguity in the Companies' proposed tariff language by removing a case-by-case analysis of ancillary load eligibility; and (3) it would allow solar canopies to qualify as ancillary load (D.P.U. 21-90, Electrify America Track 2 Brief at 13-15, 17; D.P.U. 21-91, Electrify America Track 2 Brief at 13-15).

⁷³ Specifically, Electrify American proposes the following tariff language:

Rate EV-1 [EV-2] is an optional schedule that is applicable only to EV charging stations and supporting equipment. Ancillary equipment in support of station operation includes, but is not limited to, equipment needed for site safety, immediate site lighting, security, customer interface and transaction processing, networking, equipment heating and cooling, and co-located energy storage and solar systems.

(D.P.U. 21-90, Electrify America Track 2 Brief at 13; D.P.U. 21-91, Electrify America Track 2 Brief at 13).

ii. Attorney General

The Attorney General opposes Electrify America's proposed tariff language, which characterizes energy storage and solar canopies as ancillary loads, arguing that energy storage and solar canopies are not related to EV charging and that that it would be inappropriate to permit load from energy storage and solar canopies to qualify as ancillary load for purposes of the DCA rates (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 2 Reply Brief at 6-7). Moreover, the Attorney General argues that energy storage and export tariffs should be developed through the Attorney General's recommended load management process (see Section III.B.4.b) to ensure that the electric grid costs caused by energy storage are reflected in rates and that the rates incentivize load flexibility (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 2 Reply Brief at 7).

iii. ChargePoint

ChargePoint recommends that the Department direct the Companies to limit participation in the DCA rates to customers whose EV charging load makes up at least 90 percent of their total individually metered load (D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, ChargePoint Track 2 Brief at 3, 9, 17-18).

iv. NSTAR Electric and National Grid

NSTAR Electric and National Grid disagree with Electrify America's recommendation to classify solar canopies and battery storage as ancillary load for purposes of the DCA rates because: (1) solar canopies and battery storage are not related to EV-load; (2) the companies do not want customers to predicate their decisions on solar or battery storage installation on a temporary rate; and (3) the companies can separately meter the load from solar canopies and

battery storage to the extent that customers want to install those technologies at EV charging sites (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 13). Accordingly, NSTAR Electric and National Grid urge the Department to reject Electrify America's recommendation to include solar canopies and battery storage as ancillary load for purposes of the DCA rates (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 13).

d. DCA Rate Implementation

i. Intervenors

DOER, Tesla, and EVgo urge the Department to direct the Companies to make the DCA rate offerings effective immediately following Department approval in these proceedings and to provide bill credits to customers who enroll in the DCA rates retroactively to the date of the Department's Order in the instant proceedings regardless of how long it takes for the Companies to update their billing systems (D.P.U. 21-90/ D.P.U. 21-91/D.P.U. 21-92, DOER Track 2 Brief at 7-8, 14; D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, Tesla Track 2 Reply Brief at 7; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 2 Reply Brief at 4).

Electrify America contends that the Department should direct the Companies to make the DCA rate offerings available to customers within two months following the issuance of the Department's Order in these proceedings (D.P.U. 21-90, Electrify America Track 2 Brief at 16). Electrify America adds that a delay in implementation of the DCA rates of more than two months must include retroactive rebilling of the DCA rates (D.P.U. 21-90, Electrify America Track 2 Brief at 16).

ii. NSTAR Electric and National Grid

NSTAR Electric and National Grid urge the Department to reject the intervenor recommendations to direct the Companies to implement the DCA rates immediately following the Department's Order in this matter and to issue bill credits back to the date of the Department's Order because: (1) it will likely take six months for the Companies to implement the necessary billing system updates and train their customer service representatives on the DCA rates; (2) it would introduce an additional layer of complexity by adding back-billing into the implementation of the DCA rates; and (3) bill credits would be confusing to customers and send inconsistent price signals (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 14, 15). For these reasons, NSTAR Electric and National Grid request that the Department approve the Companies' proposal to implement the DCA rates within six months of the Department's Order in this matter with no bill credits to customers during that period (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 15).

iii. Unitil

Unitil opposes intervenor recommendations to make the DCA and residential EV TOU rates available immediately following the Department's approval of the rates in this matter because billing system updates and customer service training are necessary for implementation (D.P.U. 21-92, Unitil Track 2 Reply Brief at 4). Unitil states that it will take approximately three months for the company to accurately program its billing system to set up the required functionality for the new EV rates (D.P.U. 21-92, Unitil Track 2 Reply Brief at 4). Unitil also opposes DOER's recommendation for the Department to direct the Companies to provide

customers retroactive bill credits to the date of the Department's Order in these proceedings because it would: (1) introduce an additional layer of complexity into the implementation of a new program without providing meaningful benefits for EV market development, and (2) likely delay implementation of the program (D.P.U. 21-92, Unital Track 2 Reply Brief at 4).

Accordingly, Unital requests that the Department approve its implementation proposal without modification (D.P.U. 21-92, Unital Track 2 Reply Brief at 4).

e. Metering Options

i. Attorney General

The Attorney General asserts that the Department should direct the Companies to explore the metering capabilities of networked EVSE because the Companies' proposal to install a separate utility-owned meter to implement the DCA rates could underutilize the networked chargers' functionality, add duplicative technologies, and increase costs to ratepayers for use cases where the embedded meters in networked EVSE are an appropriate metering solution (D.P.U. 21-90, Attorney General Track 2 Brief at 20-21; D.P.U. 21-91, Attorney General Track 2 Brief at 24; D.P.U. 21-92, Attorney General Track 2 Brief at 28). Specifically, the Attorney General recommends that the Department direct the Companies to: (1) evaluate the metering capabilities of networked EVSE and vehicle telematics for billing purposes; (2) use the results from the first step to develop a plan to ensure integration and interoperability of networked chargers and EVs with the Companies' billing systems and future grid modernization investments; (3) propose milestones and timelines for conducting the evaluation and developing the plan described in the first two steps in a compliance filing to be submitted within 30 days following the Department's Order in this matter; (4) submit bi-annual reports, which may be

consolidated with any compliance filings associated with EV load management, to the Department that include the latest findings and progress on the evaluation and plan; and (5) coordinate to establish uniformity and minimize the costs of the evaluation (D.P.U. 21-90, Attorney General Track 2 Brief at 27-28; D.P.U. 21-91, Attorney General Track 2 Brief at 31-32; D.P.U. 21-92, Attorney General Track 2 Brief at 34; D.P.U. 21-92, Attorney General Track 2 Reply Brief at 11, 14-15). The Attorney General further recommends that the Department: (1) establish a process for stakeholder input on the evaluation and results, and (2) adopt standards for the use of EVSE and vehicle telematics submetering for billing purposes within two years following the Department's issuance of an Order in these matters based on the evaluation and stakeholder input (D.P.U. 21-90, Attorney General Track 2 Brief at 28; D.P.U. 21-91, Attorney General Track 2 Brief at 32; D.P.U. 21-92, Attorney General Track 2 Brief at 34-35; D.P.U. 21-92, Attorney General Track 2 Reply Brief at 15).

ii. Shell

Shell supports the Attorney General's recommendation for the Department to direct the Companies to evaluate the metering capabilities of networked EVSE and vehicle telematics for billing purposes and develop a plan to integrate these technologies into the Companies' billing systems (D.P.U. 21-90/D.P.U. 21-91, Shell Track 2 Reply Brief at 7). As part of the evaluation process, Shell recommends that the Department establish a technical standards working group to create standards, methodologies for accuracy, and communication protocols for networked EVSE following the Department's approval of the DCA rate proposals in these proceedings (D.P.U. 21-90/D.P.U. 21-91, Shell Track 2 Brief at 3, 8, 10, 11; D.P.U. 21-90/D.P.U. 21-91, Shell Track 2 Reply Brief at 3, 6-8). According to Shell, a comprehensive technology strategy

will allow the Companies to provide advanced load management functionalities while evaluating networked EVSE functionalities (D.P.U. 21-90/D.P.U. 21-91, Shell Track 2 Brief at 6; D.P.U. 21-90/D.P.U. 21-91, Shell Track 2 Reply Brief at 3). Shell also notes that other jurisdictions have adopted networked EVSE embedded metering, submetering, and managed charging to enhance the deployment of EVs (D.P.U. 21-90/D.P.U. 21-91, Shell Track 2 Brief at 6-8; D.P.U. 21-90/D.P.U. 21-91, Shell Track 2 Reply Brief at 5-6). Shell further recommends that the Department direct the Companies to analyze data from both AMI and networked EVSE in their billing systems to reduce redundancies in the regulatory process, avoid the need for multiple billing system upgrades, and reduce ratepayers' costs (D.P.U. 21-90/D.P.U. 21-91, Shell Track 2 Brief at 9; D.P.U. 21-90/D.P.U. 21-91, Shell Track 2 Reply Brief at 3).

iii. FreeWire

FreeWire argues that the metering capabilities of networked EVSE are accurate and secure enough to be used as the default metering option for EV-specific rates without the need for a costly additional utility meter and service upgrade (D.P.U. 21-90, FreeWire Track 2 Brief at 11; D.P.U. 21-91, FreeWire Track 2 Brief at 10, 12). Therefore, FreeWire recommends that the Department direct the Companies to immediately begin a process for evaluating whether embedded metering in networked EVSE can be used to implement EV-specific rates (D.P.U. 21-90, FreeWire Track 2 Brief at 11, 13; D.P.U. 21-91, FreeWire Track 2 Brief at 10-11, 12). FreeWire also supports the Attorney General's recommendation to require the Companies to: (1) establish a standard for data quality requirements for networked charger and vehicle telematics data; (2) evaluate whether networked chargers and vehicle telematics can serve as alternative metering approaches for future metering implementations; and (3) propose clear

timelines and milestones for addressing these recommendations (D.P.U. 21-90, FreeWire Track 2 Brief at 11; D.P.U. 21-91, FreeWire Track 2 Brief at 12). Additionally, FreeWire agrees with Shell that the Department should establish a technical standards working group and further argues that the Department should allow managed charging and battery storage to serve as an alternative to the DCA rates (D.P.U. 21-90/D.P.U. 21-91, FreeWire Track 2 Reply Brief at 4).

iv. ChargePoint

ChargePoint contends that the Department should deny Unitil's proposal to make company-owned AMI meters the default metering option for residential program participants because: (1) the smart, managed Level 2 EV charging stations required for enrollment in the EV program contain the requisite embedded metering capabilities to enable EV charging at a lower cost, and (2) other jurisdictions have developed or piloted EV-specific TOU rates with embedded metering (D.P.U. 21-92, ChargePoint Track 1 Brief at 1, 5, 7-10).⁷⁴

v. Tesla and EVgo

Tesla and EVgo contend that the Department should approve the Companies' proposal to implement the DCA rates using company-owned interval meters because: (1) alternative metering options have not yet been adequately tested; (2) alternative metering options are not yet widely available in the Commonwealth; (3) embedded meters in networked EVSE do not currently produce billing quality or consistent data; (4) the Companies may have difficulty obtaining data from third-party owned meters; (5) the Department lacks jurisdiction over

⁷⁴ ChargePoint also recommends that Unitil require EV chargers to be ENERGY STAR-certified and tested for safety by a nationally recognized laboratory (D.P.U. 21-92, ChargePoint Brief at 9).

third-party owned meters; and (6) in California, it took ten years to develop alternative metering options for EV charging rates (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 2 Brief at 15-16; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 2 Brief at 9, 10; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 2 Reply Brief at 8; D.P.U. 21-90/ D.P.U. 21-91, EVgo Track 2 Reply Brief at 5).

vi. Electrify America

Electrify America urges the Department to reject the Attorney General's recommendation to require the Companies to use embedded meters in networked EVSE as the default metering option for the DCA rates because doing so would increase EV station operator costs without any tangible benefit (D.P.U. 21-90, Electrify America Track 2 Brief at 12; D.P.U. 21-91, Electrify America Track 2 Brief at 12; D.P.U. 21-90, Electrify America Track 2 Reply Brief at 4; D.P.U. 21-91, Electrify America Track 2 Reply Brief at 4). Instead, Electrify America requests that the Department approve the Companies' proposal to make utility meters the default metering option to implement the DCA rates (D.P.U. 21-90, Electrify America Track 2 Brief at 12, 17; D.P.U. 21-91, Electrify America Track 2 Brief at 12, 15; D.P.U. 21-90, Electrify America Track 2 Reply Brief at 4; D.P.U. 21-91, Electrify America Track 2 Reply Brief at 4).

vii. NSTAR Electric and National Grid

NSTAR Electric and National Grid request that the Department approve their proposals to implement the DCA rates using separate utility-owned meters because: (1) the Department does not have regulatory authority over third-party owned meters; (2) third-party owned meters do not have the same consumer protections provided under G.L. c. 164, § 1; and (3) there is an

increased risk of malicious cyber activity with third-party owned meters (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 15-17).

NSTAR Electric and National Grid also disagree with the Attorney General's recommendation for the Department to direct the Companies to evaluate the metering capabilities of networked EVSE and vehicle telematics for billing purposes and to develop a plan to integrate networked chargers into the companies' billing systems because: (1) national standards for metering, testing, and evaluating networked EVSE do not currently exist; (2) the recommendation is beyond the scope of this proceeding; (3) testing of each potential networked charger telematics would require either shipping the charger to the companies' facilities or field testing the charger, which would be onerous, costly, and time-consuming; and (4) it would be administratively burdensome to add EV charging data from these technologies into the companies' billing systems (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 17-18, 22-23). Accordingly, NSTAR Electric and National Grid request that the Department reject the Attorney General's recommendation to require the Companies to evaluate networked EVSE and vehicle telematics and develop a plan to integrate these technologies into their billing systems (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 23).

Additionally, NSTAR Electric and National Grid argue that vehicle telematics are not a viable alternative to utility-owned meters because: (1) not all EVs are equipped with telematics capabilities; (2) EVs do not follow mandatory telematics data standards; (3) even if all EVs were equipped with standardized telematics capabilities, using vehicle telematics to implement the DCA rates would require data collection agreements between the companies and individual

drivers; (4) there are no industry standards for vehicle telematics data as it relates to energy usage; and (5) to determine peak kW demand for a given month, the companies would need to sum all individual charging sessions on an interval basis with locational data from EVs in a billing period and then calculate peak demand and total billed demand based on aggregated vehicle data, and it is unclear whether vehicle telematics could provide the charging information necessary to perform these complex calculations (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 18-19).

viii. Unitil

Unitil contends that the Department should approve its proposal to implement the DCA rates using a separate utility-owned meter because: (1) the use of third-party owned meters for this purpose without the express written consent of the company would violate Unitil's exclusive service territory rights under G.L. c. 164, § 1B; (2) the Department does not have regulatory authority over third-party owned meters; (3) third-party owned meters do not have the same consumer protections provided under G.L. c. 164, § 1; (4) EVSE operators do not have a regulatory obligation to ensure safe and reliable service to customers and are not directly accountable to the Department; (5) the use of third-party owned meters could impede Unitil's ability to respond to customer questions regarding meter information and accuracy, troubleshoot meter issues, resolve potential disputes, or comply with its duty to render timely and accurate current-use bills; (6) the use of third-party owned meters increases complexity and risk, may create the need for multiple processes for retrieving, processing, and storing third-party meter data, and could present compatibility issues with the company's metering, data management, and billing operations; (7) it is unclear whether the Department has the authority to require EVSE

manufacturers to carry cybersecurity insurance; and (8) Unitil would likely need to modify or upgrade its back-office capabilities and business processes to accommodate EVSE meters, which could be costly (D.P.U. 21-92, Unitil Track 1 Brief at 52-53; Unitil Track 1 Reply Brief at 12-13; D.P.U. 21-92, Unitil Track 2 Brief at 31-39; D.P.U. 21-92, Unitil Track 2 Reply Brief at 7-9).

Additionally, Unitil asserts that it would be impractical to use vehicle telematics as a replacement for utility-owned meters for public DCFC stations because: (1) not all EVs are equipped with telematics capabilities, and those that are equipped with such capabilities do not use mandatory data standards; (2) there are no industry standards for vehicle telematics data as it relates to energy usage; (3) even if all EVs were equipped with standardized telematics capabilities, using vehicle telematics to implement the DCA rates would require data collection agreements between the company and individual drivers; and (4) to determine peak kW demand for a given month, Unitil would need to sum all individual charging sessions on an interval basis with locational data from EVs in a billing period and then calculate peak demand and total billed demand based on aggregated vehicle data, and it is unclear whether vehicle telematics could provide the charging information necessary to perform these complex calculations (D.P.U. 21-92, Unitil Track 2 Brief at 41).

Nevertheless, Unitil proposes to collect and analyze EVSE data from participating EVSE vendors and the company's residential EV TOU meters and compare historical embedded EVSE data against the utility metering interval data to assess accuracy, availability, format, interface capabilities, data sharing, load metering, sub-metering, metering data disaggregation, remote control, volt/VAR capability, customer controls, testing, privacy, and cyber and physical security

in conjunction with other considerations that arise during the assessment (D.P.U. 21-92, Unitil Track 1 Brief at 53; Unitil Track 1 Reply Brief at 13-14; D.P.U. 21-92, Unitil Track 2 Brief at 40). Unitil states that it will collaborate with participating EVSE manufacturers to properly test the performance of networked EVSE metering capabilities and share that data with the Department and interested stakeholders as part of its annual reports to the Department (D.P.U. 21-92, Unitil Track 2 Brief at 40, 42). According to Unitil, its proposed approach is prudent and sensible and is consistent with the company's obligation to provide high quality, safe, and reliable service to its customers (D.P.U. 21-92, Unitil Track 1 Brief at 53; D.P.U. 21-92, Unitil Track 1 Reply Brief at 13). As such, Unitil requests approval of its proposal to deploy AMI meters as part of its EV program offerings.

f. Transition Plan

i. DOER

DOER urges the Department to direct the Companies to develop, in consultation with DOER and other stakeholders, a transition plan to replace the DCA rate offerings with AMI-enabled DCA EV rates by 2027, at the latest (D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, DOER Track 2 Brief at 9-11). DOER also recommends that the Department direct the Companies to file tariff revisions eliminating the DCA rates as soon as an implementation schedule for AMI-enabled DCA EV rates is established in a future proceeding by 2030 (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 2 Brief at 13, 14).

ii. Attorney General

The Attorney General argues that the timeline by which the Companies would be required to propose new advanced rate designs under DOER's proposal is too slow because:

(1) planning and stakeholder collaboration take time, so any delay in that process would be detrimental; (2) the Companies plan to deploy AMI meters before 2030, which is likely the earliest the new rates would be made available to customers under DOER's proposal; and (3) the Companies must proactively plan for managed charging to minimize wasteful and unnecessary spending on electric grid expansion to accommodate increased EV load (D.P.U. 21-90/ D.P.U. 21-91, Attorney General Track 2 Reply Brief at 4-6; D.P.U. 21-92, Attorney General Track 2 Reply Brief at 20-21).

iii. FreeWire

FreeWire agrees with DOER that the Department should direct the Companies to develop advanced AMI-enabled EV rates to replace the DCA rates by 2027 (D.P.U. 21-90/ D.P.U. 21-91, FreeWire Track 2 Reply Brief at 3, 5).

iv. Tesla

Tesla disagrees with DOER that the Companies should replace the DCA rates with AMI-enabled DCA EV rates before the end of the ten-year term (D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, Tesla Track 2 Reply Brief at 8). Nevertheless, Tesla supports a transition to AMI-enabled time-varying rates at the conclusion of the ten-year DCA rate term (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 2 Reply Brief at 8).

v. NSTAR Electric and National Grid

Given that the Companies do not yet have experience with the DCA rates, there are few DCFC stations currently deployed in the Commonwealth, and the nascent state of the EV charging market, NSTAR Electric and National Grid argue that it is premature for the Companies to identify a timeline and approach to transition the DCA rates to more advanced

AMI-enabled demand charge rate designs (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 24-25).

g. Marginal Cost Analyses

i. CEP

CEP recommends that the Department direct the Companies to conduct marginal cost analyses of EV load on their distribution systems within the next three years to evaluate the design and effectiveness of future EV rates and inform the design and assessment of other programs, such as load management (D.P.U. 21-90/D.P.U. 21-91, CEP Track 2 Brief at 2, 6-7, 9). In the absence of marginal cost studies, CEP argues that it would be difficult to determine the extent of any cost shifting resulting from EV-specific rates or the degree to which EV customers are reducing rates for other customers through spreading fixed costs over greater sales (D.P.U. 21-90/D.P.U. 21-91, CEP Track 2 Brief at 8).

ii. FreeWire

FreeWire supports CEP's recommendation to direct the Companies to conduct marginal cost studies within three years of the Department's Order in these matters because they are essential to developing future rates to replace the DCA rates proposed in this proceeding (D.P.U. 21-90/D.P.U. 21-91, FreeWire Track 2 Reply Brief at 4-5).

2. Other Issues

a. Attorney General

The Attorney General recommends that the Department direct the Companies to incorporate time-differentiated rates, including time-differentiated generation and transmission costs and volumetric distribution costs, into their DCA rates because time-differentiated rates

incentivize EV charging during off-peak periods, thereby encouraging EV adoption and cost-effectively preparing the electric grid for increasing load from renewable energy penetration (D.P.U. 21-90, Attorney General Track 2 Brief at 7-9; D.P.U. 21-91, Attorney General Track 2 Brief at 8-10; D.P.U. 21-92, Attorney General Track 2 Brief at 14, 16-17). The Attorney General also recommends directing the Companies to designate the on-peak period as 3:00pm to 8:00pm because it will incentivize EV charging outside of the hours with the highest distribution system costs and allow customers to realistically and meaningfully shift their electric consumption, which would, in turn, reduce potentially costly and harmful demand on the electric grid (D.P.U. 21-90, Attorney General Track 2 Brief at 8; D.P.U. 21-91, Attorney General Track 2 Brief at 10-11, 13; D.P.U. 21-92, Attorney General Track 2 Brief at 17-19). The Attorney General claims that its recommendations would benefit all ratepayers by: (1) reducing the Companies' power and fuel costs; (2) limiting the need for costly new infrastructure to accommodate peak demand; and (3) encouraging consumption during periods with higher renewable energy production (D.P.U. 21-90, Attorney General Track 2 Brief at 9; D.P.U. 21-91, Attorney General Track 2 Brief at 10; D.P.U. 21-92, Attorney General Track 2 Brief at 17).

b. CEP

CEP asserts that the non-coincident peak demand charge in National Grid's proposed G-2 rate sends a poor price signal, fails to reflect cost causation for most distribution system costs, and may result in higher emissions and inefficient use of the electric grid (D.P.U. 21-90/ D.P.U. 21-91, CEP Track 2 Brief at 9). Accordingly, CEP recommends that the Department direct National Grid to convert the non-coincident demand charge for its proposed G-2 rate to a

time-varying volumetric charge or a demand charge that only applies to peak hours (D.P.U. 21-90/D.P.U. 21-91, CEP Track 2 Brief at 2, 7, 9).

c. FreeWire

FreeWire contends that the DCA rate proposals would distort the competitive EVSE market by providing a significant advantage for site designs that do not incorporate battery storage systems or other approaches to managing energy costs (D.P.U. 21-90, FreeWire Track 2 Brief at 6; D.P.U. 21-91, FreeWire Track 2 Brief at 6). FreeWire also asserts that the DCA rate proposals are not sufficiently advanced enough to address the growing amount of variable and distributed energy resources on the electric grid and would fail to send customers an appropriate price signal to allow for an opportunity to make informed decisions about how much electricity to consume and at what time (D.P.U. 21-90, FreeWire Track 2 Brief at 7-8; D.P.U. 21-91, FreeWire Track 2 Brief at 7). Therefore, FreeWire recommends that the Department deny the DCA rate proposals and open an investigation into advanced rate design (D.P.U. 21-90, FreeWire Track 2 Brief at 8, 13; D.P.U. 21-91, FreeWire Track 2 Brief at 7-8, 12).

d. GECA

GECA asserts that, in developing the DCA rate proposals, the Companies did not fully consider how the DCA rates would impact the co-location of solar, storage, and DCFCs (D.P.U. 21-90/D.P.U. 21-91, GECA Track 2 Brief at 2). Accordingly, GECA recommends that the Department direct the Companies to submit proposals with changes to the DCA rates to incentivize the co-location of DCFC sites with solar generation and energy storage (D.P.U. 21-90/D.P.U. 21-91, GECA Track 2 Brief at 2).

e. Electrify America

Electrify America opposes the Attorney General's recommendation for the Department to direct the Companies to incorporate time-varying components into the proposed DCA rates because they could become misaligned with future TOU rates approved in other proceedings (D.P.U. 21-90, Electrify America Reply Track 2 Brief at 4-5; D.P.U. 21-91, Electrify America Track 2 Reply Brief at 5). Instead, Electrify America argues that the Department should consider TOU rate proposals that apply to all commercial rates, not just EV-specific rates, in a base distribution rate proceeding or a stand-alone rate design proceeding (D.P.U. 21-90, Electrify America Track 2 Reply Brief at 4-5; D.P.U. 21-91, Electrify America Track 2 Reply Brief at 5).

f. NSTAR Electric and National Grid

NSTAR Electric and National Grid urges the Department to reject the Attorney General's recommendation to incorporate time-varying price signals into the proposed DCA rates because: (1) it is beyond the scope of this proceeding; (2) it would require a redesign of the DCA rates, which would delay implementation of the DCA rates; (3) a peak period specific for EVSE has not yet been established and could vary between fleet and public charging sites as well as use-cases within those sites; (4) public DCFC load is largely inelastic because EV drivers are in transit and need to charge in order to complete their journey and, therefore, it is unclear whether time-differentiated rates would benefit public EV charging stations because these charging stations have little control over when their facilities are being utilized; (5) the Department should review proposed TOU rates holistically in a future proceeding; and (6) it would hamper NSTAR Electric's ability to align its legacy rates (D.P.U. 21-90/D.P.U. 21-91, NSTAR Electric and National Grid Joint Track 2 Reply Brief at 9-10, 27-28).

g. Unitil

Unitil contends that the Attorney General's recommendation to incorporate new time-varying price signals into the proposed DCA rates is beyond the scope of this proceeding (D.P.U. 21-92, Unitil Track 2 Brief at 18-19). Additionally, Unitil argues that the Attorney General's recommended modifications to the DCA rates: (1) are not supported by evidence; (2) could hinder the development of EV chargers, particularly for low load factor stations; and (3) are questionable because public charging station owners have little control over when their facilities are being utilized (D.P.U. 21-92, Unitil Track 2 Brief at 19). For these reasons, Unitil requests that the Department reject the Attorney General's proposed modifications to the DCA rate proposals (D.P.U. 21-92, Unitil Track 2 Brief at 19).

C. Analysis and Findings

1. Load Factors

A number of intervenors recommend revisions to the Companies' proposed load factor brackets. The Attorney General and FreeWire recommend that the Department direct the Companies to incorporate a demand charge applicable to the zero percent to five percent load factor bracket (D.P.U. 21-90, Attorney General Track 2 Brief at 9-12; D.P.U. 21-91, Attorney General Track 2 Brief at 13-16; D.P.U. 21-92, Attorney General Track 2 Brief at 19-21; D.P.U. 21-92, Attorney General Track 2 Reply Brief at 9; D.P.U. 21-90, FreeWire Track 2 Brief at 4-5; D.P.U. 21-91, FreeWire Track 2 Brief at 4-5). Additionally, several intervenors recommend an expansion of the load factor brackets to 25 percent or 30 percent (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 2 Brief at 8-15, 24; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 2 Brief at 5, 12; D.P.U. 21-90/ D.P.U. 21-91, EVgo

Track 2 Brief at 4, 10; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 2 Reply Brief at 2, 6; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 2 Reply Brief at 4-5; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, ChargePoint Track 2 Brief at 3-4, 9-10). Electrify America urges the Department to require NSTAR Electric and National Grid to reduce their end-state demand charge rates and to assess customer load factor on an average annual basis (D.P.U. 21-90, Electrify America Track 2 Brief at 6-7, 16; D.P.U. 21-91, Electrify America Track 2 Brief at 6-7, 15).

Currently, public EV charging sites are assigned to a general service rate based on the size of their expected load (D.P.U. 21-90, Exh. ES-RDC-1, at 5; D.P.U. 21-91, Exh. NG-DCA-1, at 10). Depending on the particular service territory and EV charging station size, the site may be billed on a rate structure comprised of both demand and energy charges (D.P.U. 21-90, Exh. ES-RDC-1, at 5; D.P.U. 21-91, Exh. NG-DCA-1, at 10). Because EV charging stations in the Companies' service territories typically have load factors averaging less than ten percent, this combination of low energy use and high charging power under a demand charge-based rate structure can result in demand charges comprising the majority of an EV charging station's monthly bill (D.P.U. 21-90, Exh. ES-RDC-1, at 5-6; D.P.U. 21-91, Exh. NG-DCA-1, at 10; D.P.U. 21-92, Exh. JDT-1, at 4).⁷⁵ High demand charges have been identified as a significant obstacle to EV charger deployment (D.P.U. 21-90, Exh. ES-RDC-REB-1, at 13; D.P.U. 21-91, Exh. NG-DCA-REB-1, at 15-16; D.P.U. 21-92, Exh. JDT-1, at 4). See also D.P.U. 20-69-A at 42. The legislature sought to address this barrier by enacting Section 29 of the Transportation

⁷⁵ EV charging sites in Massachusetts commonly bill EV drivers for use of their station on a per kWh basis, which results in a mismatch between station revenue and operational costs because utilization is low (D.P.U. 21-91, Exh. NG-DCA-1, at 10; D.P.U. 21-92, Exh. JDT-1, at 6).

Act, requiring that each electric distribution company submit a commercial EV rate design tariff or program proposal that includes alternatives to traditional demand charges.

The Companies proposed a 100 percent demand charge discount for the lowest load factor bracket (i.e., a load factor between zero percent and five percent) (D.P.U. 21-90, Exh. ES-RDC-1, at 18-19; D.P.U. 21-91, Exh. NG-DCA-1, at 23-24; D.P.U. 21-92, Exh. JDT-2). In the case of smaller customers with EV charging stations, it is not necessary to apply a demand charge in order to ensure that these customers contribute to the Companies' distribution system costs. For example, residential rates do not incorporate a demand charge; instead, customers served under such rates pay demand-related costs through the incorporation of those costs within the energy-only distribution charge (D.P.U. 21-90/ D.P.U. 21-91/D.P.U. 21-92, Tr. 5, at 950).⁷⁶ See, e.g., Nantucket Electric Company, D.P.U. 91-106/138, at 142 (1991). In fact, demand charges for EV charging stations with load factors below five percent produce volatile charges that deter developers from deploying fast charging technology (D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, Tr. 5, at 949). Therefore, the Department finds the argument that demand charges are necessary for the lowest load factor bracket to be unpersuasive.

The Attorney General characterizes her proposed 75 percent demand charge discount for the zero percent to five percent load bracket as having a minimal effect on rates (D.P.U. 21-90, Attorney General Track 2 Brief at 11). While the effective unit price may be more acceptable as load factors approach five percent, billing impacts vary widely across the zero percent to

⁷⁶ The absence of a demand charge is also a feature of C&I rates intended for small use customers, such as National Grid's G-1 rate, Unitil's GD-1 rate, and certain customers served on NSTAR Electric's G-1 rate.

five percent load bracket (D.P.U. 21-90, RR-AG-Track 2-1, Att.; D.P.U. 21-91, RR-AG-Track-2-2, Att.). For example, an NSTAR Electric customer with a demand of 500 kW and a load factor of one percent to two percent would experience an effective unit price between \$0.41 and \$0.63 per kWh (D.P.U. 21-90, RR-AG-Track 2-1, Att.). Similarly, a National Grid customer with the same demand and load factor would experience an effective unit price between \$0.35 and \$0.52 per kWh (D.P.U. 21-91, RR-AG-Track-2-2, Att.). The Department considers these unit prices to be significant and finds that they will likely result in significant obstacles to the deployment of EV charging stations in the Commonwealth.

The Companies' analysis of anticipated annual load factors and unit prices at DCFC stations over a ten-year period support their proposed load factor brackets (D.P.U. 21-90, Exh. ES-RDC-2, at 5-6; D.P.U. 21-91, Exh. NG-DCA-3, at 3-4; D.P.U. 21-92, Exh. JDT-6, at 2). Under the "High" scenario based on assumptions derived from the Memorandum of Understanding on State Zero-Emission Vehicle Programs, load factors will increase from two percent to eight percent over the next ten years and the projected unit price would decline from \$1.21 per kWh to \$0.34 per kWh over the same period (D.P.U. 21-90, Exh. ES-RDC-2, at 5; D.P.U. 21-91, Exh. NG-DCA-3, at 3). Under a "Low" scenario based on scaled-back DCFC and medium- and heavy-duty vehicle deployments and load factor projections from those used in the high scenario, load factors will increase from two percent to three percent over the next ten years and the projected unit price would decline from \$1.22 per kWh to \$0.71 per kWh over that same period (D.P.U. 21-90, Exh. ES-RDC-2, at 5; D.P.U. 21-91, Exhs. NG-DCA-3, at 3; DPU 3-14). NSTAR Electric's and National Grid's high estimate indicates that load factors may be sufficiently high in ten years to yield an economic unit rate for EV charging stations

comparable to the cost of refueling a gasoline-fueled car (D.P.U. 21-90, Exhs. ES-RDC-REB-1, at 8; AG 10-3; D.P.U. 21-91, Exhs. NG-DCA-REB-1, at 10; AG 10-3).

In the case of NSTAR Electric, under a 100 percent demand charge discount scenario where the class revenue requirement is recovered entirely through the energy charge, a one percent load factor produces a unit rate of \$0.27 per kWh (D.P.U. 21-90, Exhs. ES-RDC-2, at 4; DPU 3-3). Under a full demand charge scenario, a 16 percent load factor produces a unit rate of \$0.25 per kWh (D.P.U. 21-90, Exhs. ES-RDC-2, at 4; DPU 3-3). In the case of National Grid, under a 100 percent demand charge discount where the class revenue requirement is recovered entirely through the energy charge, a one percent load factor for a G-3 customer with 300 kW demand produces a unit rate of \$0.30 per kWh (D.P.U. 21-91, Exhs. NG-DCA-3, at 1-2; NG-DCA-REB-1, at 13). Under a full demand charge scenario, a 16 percent load factor produces a unit rate of \$0.23 per kWh (D.P.U. 21-91, Exhs. NG-DCA-3, at 1-2; NG-DCA-REB-1, at 13). In the case of Unitil, under a 100 percent demand charge discount where the class revenue requirement is recovered entirely through the energy charge, a one percent load factor for a GD-2 customer with 300 kW demand produces a unit rate of \$0.21 per kWh (D.P.U. 21-92, Exh. JDT-6, at 1). Under a full demand charge scenario, a 16 percent load factor produces a unit rate of \$0.26 per kWh (D.P.U. 21-92, Exh. JDT-6, at 1). This evidence indicates that the Companies' proposed demand charge discounts allow for price continuity as load factors improve (D.P.U. 21-90, Exh. ES-RDC-REB-1, at 12; D.P.U. 21-91, Exh. NG-DCA-REB-1, at 13-14; D.P.U. 21-92, Exh. JDT-Rebuttal-2, at 17). Additionally, the evidence demonstrates that the Companies' proposed demand charge discounts produce relatively flat load curves as the bill savings percentages decrease within and between the EV

pricing tiers as load factors increase (D.P.U. 21-90, Exhs. ES-RDC-REB-1, at 12; EA-JJS-3; D.P.U. 21-91, Exhs. NG-DCA-1, at 13-14; EA-JJS-3; D.P.U. 21-92, Exh. JDT-Rebuttal-2, at 17).

Several intervenors relied upon the RMI report to support their assertion that the load factor brackets should be expanded beyond the 15 percent load factor bracket proposed by the Companies (see D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Exh. CLF-CV-SUR-2). The RMI report evaluated two EV tariffs of Xcel Energy in Colorado and Pacific Gas and Electric Company in California, as well as a hypothetical tariff prepared by RMI (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Exh. CLF-CV-SUR-2, at 8-10). There are some limitations in the applicability of the RMI report. First, the RMI report relies on utilization rates, which is defined as the percentage of time an EV charger is actively charging in a month (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Exh. CLF-CV-SUR-2, at 12). In contrast, the Companies' proposals are based on load factors, which the Companies define as the ratio of billed kWh to the product of billed kW and the number of hours in the billing period (D.P.U. 21-90, Exhs. DPU 3-15; CLF-ES 3-1; D.P.U. 21-91, Exhs. DPU 3-18; CLF-NG 3-1; D.P.U. 21-92, Exh. JDT-1, at 7). Because the Companies are unable to measure utilization rates, the Department considers the use of load factors to be more relevant than utilization rates to measure demand (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 5, at 947-948).

More significantly, the EV rate components (i.e., customer charges, demand charges, and volumetric energy charges) in these jurisdictions, as well as those in RMI's hypothetical tariff, are considerably different from those in Massachusetts. For example, because demand charges in Massachusetts are much lower than those used in California and Colorado (D.P.U. 21-90/

D.P.U. 21-91/D.P.U. 21-92, Exh. CLF-CV-SUR-2, at 8-10), load factors and discounts needed to be higher in order to arrive at RMI's recommended dollar-per-mile basis within those jurisdictions (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 5, at 1021). Moreover, RMI's own analysis noted that the relevance of its hypothetical tariff was found in its sliding scale design, a feature that the Companies have proposed to incorporate in their own EV tariffs (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Exh. CLF-CV-SUR-2, at 35; Tr. 5, at 1021). The Department finds that the RMI report is more supportive of sliding scale rate designs, with the particular prices and amounts to be determined based on the level of demand charges in each jurisdiction.

Electrify America contends that the end-state demand charges for NSTAR Electric and National Grid customers with load factors greater than 15 percent is too high and should be significantly reduced with commensurate increases in the volumetric charges (D.P.U. 21-90/D.P.U. 21-91, Exh. EA-JJS-1, at 4-5). The evidence relied on by Electrify America, however, demonstrates that, notwithstanding the decreased price differential that would occur once a customer's load on the EV-2 rate exceeds 15 percent, NSTAR Electric's proposed EV prices remain below the otherwise applicable T-2 rate on which the customer would be assigned and National Grid's proposed EV prices remain below the otherwise applicable G-2 or G-3 rates on which the customer would be assigned (D.P.U. 21-90 Exh. EA-JJS-3; D.P.U. 21-91, Exhs. NG-JJS-3; NG-DCA-3, at 1-4; NG-DCA-Reb-1, at 13-14). Therefore, the Department declines to adopt Electrify America's proposed reduction to NSTAR Electric's and National Grid's end-state demand charges.

The Companies propose to calculate EV charging station load factors annually based on a monthly average of load factors from the twelve months of the prior year (D.P.U. 21-90,

Exh. ES-RDC-1, at 15; D.P.U. 21, Exh. NG-DCA-1, at 16; D.P.U. 21-92, JDT-1, at 9-10).

Electrify America recommends that the Department direct the Companies to calculate the annual load factor based on the average demand throughout the program year divided by the peak demand of the program year (D.P.U. 21-90, Exh. EA-JJS-SUR-1, at 12-13). Typically, an annual load factor is calculated based on the maximum demand observed over twelve months (D.P.U. 21-90, Exh. ES-RDC-REB-1, at 16; D.P.U. 21-92, Exh. JDT-1, at 9-10). If the load peaks on an annual basis, then the annual load factor will be lower than the load factor on a monthly basis, where the load factor is calculated based on the usage and the demand within the same month (D.P.U. 21-90, Exh. ES-RDC-REB-1, at 16-17). The lower annual load factor would not be representative of the actual billing and customer usage occurring on a monthly basis (D.P.U. 21-90, Exh. ES-RDC-REB-1, at 17). The use of an average of monthly load factors, however, aligns with how demand and usage is billed monthly. Therefore, the Department accepts the Companies' proposal to rely on annual load factors based on the average monthly load over the previous year.

2. DCA Rate Term

The Companies, CEP, CLF, Electrify America, EVgo, and Tesla support a ten-year term for the DCA rates (see, e.g., D.P.U. 21-90/D.P.U. 21-91, CEP Track 2 Brief at 2, 6, 7; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, CLF Track 2 Reply Brief at 2-4; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 2 Brief at 12-15, 16; D.P.U. 21-90/ D.P.U. 21-91, EVgo Track 2 Brief at 6-8, 10; D.P.U. 21-90, Electrify America Track 2 Brief at 3-4, 16). In contrast, the Attorney General and FreeWire support a five-year term for the DCA rates, and ChargePoint opines that future EV developments may warrant making the DCA rates permanently available

to DCFCs in less-traveled areas (D.P.U. 21-90, Attorney General Track 2 Brief at 12-16; D.P.U. 21-91, Attorney General Track 2 Brief at 16-20; D.P.U. 21-92, Attorney General Brief at 21-24; D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 2 Reply Brief at 11; D.P.U. 21-92, Attorney General Track 2 Reply Brief at 2-4, 7; D.P.U. 21-90, FreeWire Track 2 Brief at 6-7; D.P.U. 21-91, FreeWire Track 2 Brief at 6; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, ChargePoint Track 2 Brief at 14-15). The selection of an appropriate term is driven by multiple factors, including those outside of a utility's control (D.P.U. 21-90/D.P.U. 21-91, Exh. AG 10-3). The Companies' proposed ten-year term is based on input from stakeholders, such as EV charging station developers, as well as other considerations, including the Commonwealth's transportation electrification and 2030 decarbonization goals (D.P.U. 21-90, Exhs. ES-RDC-REB-1, at 9; DPU 3-6; D.P.U. 21-91, Exhs. NG-DCA-REB-1, at 10; DPU 3-9; D.P.U. 21-92, Exh. JDT-Rebuttal-2, at 10-11).

Investment horizons are a critical consideration in determining the appropriate term for the proposed DCA rates. EV charging stations are capital-intensive by nature, requiring at least one year for planning and construction (D.P.U. 21-90, Exh. EA-JJS-SUR-1, at 7; D.P.U. 21-91, Exh. EA-JJS-SUR-1, at 6). Consequently, EV charging station developers need price certainty to evaluate the economic viability of their investment decisions (D.P.U. 21-90, Exhs. EA-JJS-SUR-1, at 7; CLF-CV-1, at 18; EVgo-RTB-1; Tesla-WE-1, at 8; D.P.U. 21-91, Exhs. EA-JJS-1, at 6; CLF-CV-1, at 18; EVgo-RTB-1, at 14; Tesla-WE-1, at 8). If the DCA rate term is too short, it could deter investment in public EV charging stations or result in over-investment in public EV charging stations within communities where EV adoption is

rapidly growing at the expense of other communities where investor returns may not be as quickly realized (D.P.U. 21-90, Exh. EA-JJS-SUR-1, at 7).

The Companies' based the term of their DCA rate proposals in part on their analysis of anticipated annual load factors and unit prices at DCFC stations over a ten-year period (D.P.U. 21-90, Exh. ES-RDC-2, at 5-6; D.P.U. 21-91, Exh. NG-DCA-3, at 3-4; D.P.U. 21-92, Exh. JDT-6, at 2). As noted above, under NSTAR Electric's and National Grid's high forecast scenario, load factors may be sufficiently high within ten-years to yield an economic unit rate for EV charging stations comparable to that of gas-fueled vehicles (D.P.U. 21-90, Exh. ES-RDC-REB-1, at 8; D.P.U. 21-91, Exh. NG-DCA-REB-1, at 10). The Department finds that the Companies' reliance on unit price projections to determine the appropriate duration for their proposed DCA tariffs was reasonable and based on substantive evidence.

The Attorney General notes that a number of states, including Florida, Nevada, Pennsylvania, and Rhode Island, have approved EV charging rates for five-year terms or less, and that other states, including California, North Carolina, and South Carolina, have offered similar terms for economic development rates (D.P.U. 21-90/D.P.U. 21-91, Attorney General Track 2 Reply Brief at 9-10 & n.19).⁷⁷ It is, however, uncertain whether the development of the EV charging station market will be sufficiently robust to transition to AMI-enabled rates within the next ten years (D.P.U. 21-91, Exh. NG-DCA-REB-1, at 9). Further, as noted by several

⁷⁷ The Department is familiar with the concept of economic development rates. Commonwealth Electric Company, D.P.U. 93-41 (1993). Although EV charging service has been likened to economic development rates, the Department finds that there are significant differences between time-limited rate discounts to promote economic development and the use of such rates to promote the role of EVs as part of the Commonwealth's overall climate strategies.

intervenors, there is credible evidence to suggest that a shorter-term offering (i.e., an offering of three or five years) may not provide DCFC station developers enough price stability to overcome the risk of making the high initial investment in these stations (D.P.U. 21-90, Exhs. ES-RDC-REB-1, at 9; DPU 3-6; D.P.U. 21-91, Exhs. NG-DCA-REB-1, at 10; DPU 3-9; EA-JJS-SUR-1, at 7; D.P.U. 21-92, Exh. JDT-Rebuttal-2, at 10).

The Department notes that other jurisdictions, including Arizona, California, Illinois, and Oregon, have approved the use of ten-year terms for time-limited EV rates (D.P.U. 21-90/ D.P.U. 21-91, Exhs. EVgo-RTB-5; EVgo-RTB-6; EVgo-RTB-9; EVgo-RTB-10; EVgo-RTB-11; TESLA-WE-5). While the EV rates in some of these states incorporate a phase-in of demand charges after an initial period, or restrictions on the number of customers that can enroll in such rates, the Department finds that inclusion of a demand charge phase-in or participation restrictions do not negate the fact that the respective regulatory commission approved ten-year terms for the EV rates.

Based on the foregoing analysis, the Department finds that a ten-year term for the DCA rates strikes an appropriate balance between the need for price certainty and stability for EV charging station developers and the Commonwealth's transportation electrification and 2030 decarbonization goals. Therefore, the Department approves a ten-year term for the proposed DCA rates.⁷⁸

⁷⁸ In doing so, the Department recognizes that future events may warrant reexamination of the DCA rates, including their term.

3. Ancillary Load

The Companies each proposed revisions to their exemplar tariff to include language that certain types of ancillary load qualify for the DCA rates (D.P.U. 21-90, Exhs. ES-RDC-3; ES-RDC-REB-1, at 14; D.P.U. 21-91, Exhs. NG-DCA-1, at 13-14; NG-DCA-REB-1, at 16; D.P.U. 21-92, Exhs. JDT-Rebuttal-2, at 20; DPU 13-7).⁷⁹ The Department's tariff construction standards requires that a proposed tariff have sufficient detail to explain the basis for the rate to be charged for the offered service.⁸⁰ 220 CMR 5.00; NEES-EUA Merger, D.T.E. 99-47, at 22 (2000). Therefore, the Department finds it is appropriate to examine the Companies' proposed tariff language governing ancillary load.

Certain types of load, such as security lighting, touchpads, and telecommunications equipment, are not directly related to load from EV charging equipment itself, but are essential to the operation of the EV charging station (D.P.U. 21-90, Exh. ES-RDC-REB-1, at 14; D.P.U. 21-91, Exh. NG-DCA-REB-1, at 16; D.P.U. 21-92, Exh. JDT-Rebuttal-2, at 20). While this type of load can potentially be metered in combination with other load at some EV charging stations, such as those co-located with a convenience store, other EV charging stations may operate as stand-alone installations (D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, Exhs. CP-MJD-1, at 15; Tesla-WE-1, at 14-15). In such cases, driver security and convenience would require the

⁷⁹ In its initial filings, NSTAR Electric's and Unital's exemplar DCA tariffs made no provision for ancillary load while National Grid's exemplar tariff required all ancillary load to be separately metered (D.P.U. 21-90, Exh. ES-RDC-3; D.P.U. 21-91, Exh. NG-DCA-1, at 13-14; D.P.U. 21-92, Exh. Unital-JDT-3).

⁸⁰ The sufficiency of a tariff must be judged on its face, and testimony is insufficient to cure a defect or supply a missing essential term. Boston Gas Company, D.P.U. 92-259, at 47-48 (1993); Dedham Water Company, D.P.U. 13271, at 10 (1961).

provision of amenities, such as security lighting, that could be provided by the host facility (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Exh. Tesla-WE-1, at 14-15). As acknowledged by the Companies, this type of load may be considered ancillary load and included in the metering for EV charging infrastructure (D.P.U. 21-90, Exh. ES-RDC-REB-1, at 14; D.P.U. 21-91, NG-DCA-REB-1, at 16; D.P.U. 21-92, Exh. JDT-Reb-2, at 20; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 5, at 1056-1058). Further, inclusion of some ancillary load in EV charging station metering is expected to have a minimal effect on the total EV charging load for that station (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 5, at 953-954). Based on these considerations, the Department finds it appropriate to permit ancillary load of this type to be metered with EV charging equipment for purposes of the DCA rates.

In addition to this type of ancillary load, EV charging station developers may choose to install solar canopies and energy storage (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 5, at 1066-1068). This type of co-located infrastructure offers potential benefits to the owner of an EV charging station, such as reduced reliance on the utility's electric grid and lower demand charges, resulting in potential cost savings (D.P.U. 21-90/D.P.U. 21-91, Exh. GECA-JRC-1, at 14-16). Nevertheless, this type of co-located infrastructure is not essential to the operation of the EV charging facility (D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, Tr. 5, at 1066-1068). While the inclusion of some ancillary load in EV charging station metering is expected to have a minimal effect on the total EV charging load for that station, combining more extensive infrastructure, such as solar canopies and energy storage, with EV charging equipment for metering purposes would skew load data results away from EV charging equipment in favor of ancillary load (D.P.U. 21-90, Exh. ES-RDC-Reb-1, at 14; D.P.U. 21-91, Exh. DPU 13-8;

D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, Tr. 5, at 1066-1068; Tr. 6, at 1207-1209). Given the need to reliably determine load patterns associated with EV charging stations, the Department is persuaded that the definition of ancillary load for purposes of the DCA rates needs to be narrowly defined. Moreover, given that the proposed DCA rates are intended to be temporary, the Department is persuaded that it would be inappropriate for customers enrolled in the DCA rates to base their non-EV charging infrastructure investment decisions, such as those related to net metering credits or solar payment, on the characteristics of a temporary rate (D.P.U. 21-90/ D.P.U. 21-91/D.P.U. 21-92, Tr. 5, at 1067-1068). To the extent that a DCA rate customer wishes to install solar canopies or battery storage equipment at their EV charging sites, the Companies are capable of separately metering the load associated with those technologies (D.P.U. 21-90/ D.P.U. 21-91/D.P.U. 21-92, Tr. 5, at 1068-1069).⁸¹ On this basis, the Department declines to include solar canopies or energy storage facilities as ancillary load for purposes of the DCA rates.

⁸¹ GECA recommends that the co-location of renewables and energy storage be incorporated into the Companies' DCA rate proposals; while FreeWire asserts that the Department should deny the DCA rate proposals because they do not sufficiently incentivize the co-location of battery storage systems (D.P.U. 21-90/D.P.U. 21-91, Exh. GECA-JRC-1, at 31; D.P.U. 21-90, FreeWire Track 2 Brief at 6; D.P.U. 21-91, FreeWire Track 2 Brief at 6). The Department declines to consider co-location of renewables, such as battery energy storage systems, in the present proceedings. These proceedings are limited to a review of the Companies' EV charging infrastructure and DCA rate proposals, and Unifil's residential EV TOU rate proposal. Nonetheless, while we determine that the co-location of renewables, including energy storage systems, is outside the scope of this proceeding, the Department expects the Companies to work cooperatively with EV charging station developers considering co-location of these types of technologies. The Department may consider whether future EV rates should include a component to incentivize such co-location in a future proceeding and encourages the Companies to evaluate the benefits of co-locating EV charging stations and renewables prospectively.

Additionally, ChargePoint recommends that the Department direct the Companies to limit the amount of ancillary load that can qualify for the DCA rates to no more than ten percent of an EV charging station's total load (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, ChargePoint Track 2 Brief at 3, 9, 17-18). As determined above, the Department has found it appropriate to narrowly define ancillary load to non-EV charging load that is nonetheless essential to the operation of an EV charging station. The Department finds that, given this narrow definition of ancillary load, it is unnecessary for the Companies to set a cap on the percentage of ancillary load eligible for inclusion in the DCA rates.

Based on the foregoing analysis, the Department directs NSTAR Electric to include the following language in its EV tariffs (see D.P.U. 21-90, Exh. ES-RDC-REB-1, at 14).

[Rate] is an optional schedule that is applicable only to EV charging station equipment which includes security lighting, networking, touch screens, component heating, charger fans and cooling equipment, of which the aggregate load must be metered separately. Any non-EV general service use must be separately metered and assigned the applicable rate.

The Department directs National Grid to delete the following EV pricing language from its G-2 and G-3 tariffs: "Any non-EV charging usage at the site's service location must be separately metered and receive delivery service at the applicable general service rate"

(D.P.U. 21-91, Exh. NG-DCA-4). National Grid shall replace this language with the following:

EV charging station usage includes security lighting, networking, touch screens, component heating, charger fans and cooling equipment, of which the aggregate load must be metered separately. Any non-EV general service use must be separately metered.

(D.P.U. 21-91, Exh. DPU 13-8).

The Department directs Unitil to delete the first paragraph under “EV Demand Charge Alternative” as proposed in Exhibit JDT-3 and include the language, which identifies specific categories of ancillary load that would be permitted on the same meter as an EV charger, in its GD-2 and GD-3 tariffs as provided in response to information request Exhibit DPU 13-7 (see D.P.U. 21-92, Exhs. JDT-3, at 3, 12; JDT-Rebuttal-2, at 20; DPU 13-7).

4. DCA Rate Implementation

A number of intervenors recommend that the Companies implement the proposed DCA rates immediately following the Department’s Order in these matters, and to issue bill credits retroactively to the date of the Department’s Order (D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, DOER Track 2 Brief at 7-8, 14; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 2 Reply Brief at 7; D.P.U. 21-90/D.P.U. 21-91, EVgo Track 2 Reply Brief at 4). There is credible evidence in the record that it will likely take six months for NSTAR Electric and National Grid and three months for Unitil to implement the necessary billing system updates and train their customer service representatives on the DCA rates (D.P.U. 21-90, Exh. ES-RDC-1, at 17-18; D.P.U. 21-91, Exh. NG-DCA-1, at 22; D.P.U. 21-92, Exh. JDT-1, at 21). Incorporating back-billing into the implementation of the DCA rates would create an additional layer of complexity and could result in customer confusion and inconsistent price signals.

Moreover, requiring the Companies to issue billing credits raises issues relative to retroactive ratemaking. The rule against retroactive ratemaking is implicated when the Department requires refunds of charges previously fixed by a formal finding that had become final. Boston Edison Company v. Department of Public Utilities, 375 Mass. 1, 6 (1978); Metropolitan District Commission v. Department of Public Utilities, 352 Mass. 18, 26-27 (1967).

The Department may not generally order adjustments of a company's base distribution rates.⁸²

See Boston Edison Co. v. Department of Public Utilities, 375 Mass. 1, 6 (1978); Lowell Gas Co. v. Attorney General, 377 Mass. 37, 44-45 (1979); Fryer v. Department of Public Utilities, 374 Mass. 685, 689-690 (1978).

Based on these considerations, the Department declines to require implementation of the proposed DCA rates immediately upon approval. Instead, the Department directs the Companies to implement the DCA rates within six months of the Department's Order and disposition of any relevant post-Order motions or appeals in this matter with no provision for billing credits.

5. Metering Options

In D.P.U. 20-69-A at 42-43, the Department stated that the proposed DCA rates should be based on EV charging data collected through one of the following means: (1) smart chargers or networked chargers; (2) EV telematics; or (3) interval meters installed at the request of the customer. The Department also encouraged the Companies to solicit input from EV charging companies and other stakeholders to standardize the data quality requirements for smart charger and EV telematics data. D.P.U. 20-69-A at 43 n.21.

⁸² The rule against retroactive ratemaking is not without exception. For example, exceptions to retroactive ratemaking have been recognized for the recovery of extraordinary past losses that otherwise would not be recoverable in future rates. See, e.g., Attorney General v. Department of Public Utilities, 453 Mass. 191, 201-202 (2009); Attorney General v. Department of Public Utilities, 390 Mass. 208, 228-229 (1983); Electric Industry Restructuring, D.P.U. 95-30, at 29, 37-39 (1995). Further, rate adjustments associated with reconciling mechanisms do not constitute retroactive ratemaking. Fitchburg Gas and Electric Light Company v. Department of Telecommunications and Energy, 440 Mass. 625, 627-628 (2004). None of these exceptions apply to the Companies' exemplar DCA tariffs.

In these proceedings, the Companies state that the DCA rates were evaluated using EV charging data collected from separately metered EV charging sites in compliance with the Department's directives in D.P.U. 20-69-A (D.P.U. 21-90, Exh. ES-RDC-1, at 13; D.P.U. 21-91, Exh. NG-DCA-1, at 17; D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 10). The Companies also state that, in analyzing the capabilities of embedded EVSE meters and EV telematics, they determined that there would be a host of challenges to using these technologies for data collection and billing purposes, including technical, cybersecurity, and consumer protection concerns, and that there are no national standards for metering, testing, and evaluating embedded EVSE meters (D.P.U. 21-90, Exh. ES-RDC-Reb-1, at 17, 20; RR-DPU-Track 2-1; D.P.U. 21-91, Exh. NG-DCA-Reb-1, at 20, 23; RR-DPU-Track 2-2; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 6, at 1141-1143, 1257). Therefore, the Companies propose to install utility-owned meters to implement the DCA rates and collect EV charging data.

Shell and FreeWire, however, support the use of embedded metering for billing purposes, with Shell recommending that the Department convene a working group to establish technical standards for embedded EVSE metering (D.P.U. 21-90, FreeWire Track 2 Brief at 11; D.P.U. 21-91, FreeWire Track 2 Brief at 10, 12; D.P.U. 21-90/D.P.U. 21-91, Shell Track 2 Reply Brief at 7). The Attorney General recommends that the Companies evaluate the metering capabilities of networked EVSE and EV telematics for billing purposes and develop a plan to integrate networked chargers into their billing system (D.P.U. 21-90, Attorney General Track 2 Brief at 20-21; D.P.U. 21-91, Attorney General Track 2 Brief at 24; D.P.U. 21-92, Attorney General Track 2 Brief at 28).

On November 30, 2022, the Department issued an Order approving full deployment of AMI meters and preauthorizing the Companies' core AMI investments. Grid Mod Track 2 Order at 238, 258, 277. Additionally, the Department determined that the Companies' proposed meter replacement plans struck an appropriate balance between maximizing customer benefits and minimizing stranded costs. Grid Mod Track 2 Order at 204-205. Further, the Department stated that AMI meters should be capable of load disaggregation, which would eliminate the need for a company to install more than one meter at a customer's location. Grid Mod Track 2 Order at 234. With full AMI deployment on the horizon, the Department is concerned that the Companies' proposal to separately meter customers' EV load using soon-to-be obsolete traditional utility meters will result in unnecessary stranded costs for ratepayers.

The Department acknowledges the Companies' concerns with these technologies. Indeed, the Department notes that, in addition to potential data compatibility and cybersecurity issues, there may be implementation issues involving the ability of utilities to obtain data sharing agreements with EV drivers, particularly in the case of non-customers. Nevertheless, the Department recognizes that networked chargers and EV telematics may provide benefits, including eliminating the need for a second utility-owned meter, new managed charging opportunities, and V2G capabilities (D.P.U. 21-90, Exh. AG-REN-2, at 29-32). Accordingly, the Department directs the Companies to work with EVSE providers, the Attorney General, and other stakeholders to explore the metering capabilities of networked EVSE and vehicle telematics for data collection and billing purposes in an effort to reach consensus on EVSE data quality standards. Further, the Companies shall coordinate efforts to the extent feasible to

establish uniform statewide EVSE data quality standards. The Companies shall report on their progress in their annual reports.

Despite our concerns regarding the stranded costs associated with the Companies' metering proposal, the evidentiary record in this proceeding demonstrates that there are still significant hurdles to overcome before embedded EVSE meters and EV telematics can be used for data collection and billing purposes (D.P.U. 21-90, Exh. ES-RDC-REB-1, at 17, 19-20; D.P.U. 21-91, Exh. NG-DCA-REB-1, at 20, 22-23; D.P.U. 21-92, Exh. CG-Rebuttal-2, at 10-11; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tr. 6, at 1141-1143, 1244-1245; RR-DPU-Track 2-1; RR-DPU-Track 2-2). Therefore, the Department finds that the Companies' proposal to deploy utility-owned meters for data collection and billing purposes, before establishing EVSE data quality standards, is reasonable and based on credible evidence. In doing so, we recognize that advances in technology may eventually provide some role for other metering technologies in EV data collection and billing. Grid Modernization, DPU 12-76-A at 27 n.35 (2014); D.P.U. 12-76-B at 1. Depending upon future technological advances, the Department may reexamine the appropriateness of continued use and deployment of utility-owned meters for EV data collection and billing purposes.

6. Transition Plan

A number of intervenors recommend that the Department direct the Companies to develop a transition plan to replace the DCA rates with AMI-enabled rates (D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, DOER Track 2 Brief at 9-11; D.P.U. 21-90/D.P.U. 21-91, FreeWire Track 2 Reply Brief at 3, 5; D.P.U. 21-90/D.P.U. 21-91/D.P.U. 21-92, Tesla Track 2 Reply Brief at 8). Transition plans require consideration of multiple factors, including those outside of a

utility's control (D.P.U. 21-90/D.P.U. 21-91, Exh. AG 10-3). With the approval of the Companies' AMI investments, the Department finds that it is appropriate for the Companies to begin planning for AMI-enabled demand charge rates. Grid Mod Track 2 Order at 238, 258, 277. The Department also recognizes that the Companies need to collect data and information related to the implementation of the DCA rates to inform any transition plans (D.P.U. 21-90, Exh. FW-ES 3-4; D.P.U. 21-91, Exh. FW-NG 3-4; D.P.U. 21-90/ D.P.U. 21-91/D.P.U. 21-92, Tr. 6, at 1231-1235). Therefore, the Department declines at this time to require the submission of any transition plans. However, the Department expects the Companies to identify a timeline and approach to transition all proposed DCA rates to future demand charge rate designs that will be enabled through the full deployment of AMI. Accordingly, the Department directs the Companies, as an initial step toward the development of a transition plan, to report on the implementation of the DCA rates in their annual reports, including relevant data and lessons learned on DCA rate implementation, and the status of all transition plan development activities undertaken.

7. Time-Varying Rates

The Attorney General and CEP urge the Department to direct the Companies to incorporate time-varying rate components into their DCA rate proposals (D.P.U. 21-90, Attorney General Track 2 Brief at 7-9; D.P.U. 21-91, Attorney General Track 2 Brief at 8-10; D.P.U. 21-92, Attorney General Track 2 Brief at 14, 16-17; D.P.U. 21-90/ D.P.U. 21-91, CEP Track 2 Brief at 9). The Department finds that the evaluation of time-varying rates is beyond the scope of this proceeding. Neither the Transportation Act nor the Department's directives in D.P.U. 20-69-A required the distribution companies to propose time-varying DCA rates.

Additionally, the Attorney General's recommendation would require a complete redesign of the Companies' proposed DCA rates, including transmission and basic service rates,⁸³ significantly delaying the implementation of the proposed DCA rates and frustrating the intent of both the Transportation Act and our directives in D.P.U. 20-69-A.

Further, on August 11, 2022, during the course of these proceedings, Governor Baker signed into law the 2022 Clean Energy Act. Pursuant to Section 90 of the 2022 Clean Energy Act, the Companies must submit proposals to the Department on or before August 11, 2023 for approval to offer a TOU rate designed to reflect the cost of providing electricity to a consumer charging an EV at an EV charging station at different times of the day. Accordingly, on or before August 11, 2023, each company shall file EV TOU rate designs with the Department. The Department encourages the Companies to consider including time-varying DCA rates as part of their EV TOU rate designs. To the extent feasible, the Companies shall coordinate the development of their EV TOU rate proposals. Any proposed tariff included as part of the Companies' EV TOU rate proposals must be filed as an exemplar tariff. The Department will review company-specific tariffs at the conclusion of our investigation of the EV TOU rates.

8. Customer Outreach

NSTAR Electric and National Grid propose to inform existing and prospective customers about the DCA rate offerings through multiple outlets, including EVSE vendors with relationships with customers, direct outreach to EV charging station developers, and project

⁸³ A peak period specific for EVSE has not yet been established and could vary between fleet and public charging sites as well as among individual sites (D.P.U. 21-91, Exh. NG-DCA-Reb-1, at 17).

commitment letters and the make-ready application process (D.P.U. 21-90, Exh. DOER-ES 4-1; D.P.U. 21-91, Exhs. DPU 3-7; DOER-NG 4-1, at 1). Unitil proposes to inform existing and prospective customers about the DCA rate offerings through multiple outlets, including customer newsletters, bill inserts, social media, earned media, and the company's website (D.P.U. 21-92, Exh. DOER-FGE 3-1). Unitil also proposes to engage in outreach to EVSE customers on its GD-2 and GD-3 rates as part of its project commitment letters and the make ready application process (D.P.U. 21-92, Exhs. CVSG-1 (Rev.), at 35-38); DOER-FGE 3-1). DOER suggests expanding the Companies' customer outreach efforts to include direct mail, bill inserts, emails, website postings, and communication with municipal officials (D.P.U. 21-90/D.P.U. 21-91/ D.P.U. 21-92, DOER Track 2 Brief at 8).

The Department recognizes the importance of a robust customer outreach program to engage customers and to provide simple, clear information about the availability of new rate offerings. Time Varying Rates, D.P.U. 14-04-C at 19 (2014); NSTAR Electric Company, D.P.U. 12-95, at 17 (2014). The Department finds DOER's additional recommended outreach methods to be reasonable and appropriate given the importance of the DCA rates in achieving the Commonwealth's transportation electrification goals. Therefore, the Department directs the Companies to include direct mail, bill inserts, emails, website postings, and communication with municipal officials as part of their overall customer outreach efforts.

9. Marginal Cost Studies

CEP and FreeWire recommend that the Companies be directed to conduct marginal cost analyses of EV load on their distribution systems within the next three years to evaluate the design and effectiveness of future EV rates and inform the design and assessment of other

programs, such as load management (D.P.U. 21-90/D.P.U. 21-91, CEP Track 2 Brief at 2, 6-7, 9; D.P.U. 21-90/D.P.U. 21-91, FreeWire Track 2 Reply Brief at 4-5). While the Department has long required electric and gas distribution companies to provide a marginal cost study as part of a base distribution rate case filing, as a practical matter, the Department does not rely on the results of a marginal cost study in designing tariffed rates for electric and gas distribution companies.⁸⁴ D.P.U. 18-150, at 516. Rather, in evaluating a petitioning company's rate design proposals, the Department considers its rate design goals of efficiency and simplicity as well as ensuring the continuity of rates, fairness between rate classes, and corporate earnings stability. See, e.g., Fitchburg Gas and Electric Light Company, D.P.U. 15-80/D.P.U. 15-81, at 294 (2015); Bay State Gas Company, D.P.U. 13-75, at 330 (2014); Bay State Gas Company, D.P.U. 12-25, at 444 (2012); New England Gas Company, D.P.U. 10-114, at 341 (2011); Massachusetts Electric Company/Nantucket Electric Company, D.P.U. 09-39, at 401 (2009). We also consider relevant statutory requirements in determining appropriate rate design and allocation. See, e.g., G.L. c. 164, § 94I (cost-allocation method based on equalized rates of return for each customer class with specific parameters).

NSTAR Electric's proposed DCA rates are based on a revenue-neutral shift in demand billing units associated with its then-existing C&I rates (D.P.U. 21-90, Exhs. ES-RDC-1, at 18-19; ES-RDC-2, at 2). National Grid's proposed DCA rates are based on a revenue-neutral

⁸⁴ Marginal cost studies are still submitted by gas distribution companies. Boston Gas Company, D.P.U. 20-120, at 451-468 (2021); NSTAR Gas Company, D.P.U. 19-120, at 423-427 (2020). These studies are intended to ensure that special contracts are priced above marginal distribution cost. See D.P.U. 18-150, at 516. Marginal cost studies have also been used to determine voltage splits for electric distribution companies. NSTAR Electric Company, D.P.U. 22-22, at 410 (November 30, 2022).

shift in demand billing units associated with its G-2 and G-3 rates (D.P.U. 21-91, Exhs. NG-DCA-1, at 18-19; NG-CRP-2, at 2; AG 13-2). Until's proposed DCA rates are based on a revenue-neutral shift in demand billing units associated with its GD-2 and GD-3 rates (D.P.U. 21-92, Exh. JDT-1, at 7). The Companies' C&I rates that serve as the basis for the Companies' proposed DCA rates were not based on marginal cost pricing. NSTAR Electric Company/Western Massachusetts Electric Company, D.P.U. 17-05-B at 281-309 (2017); D.P.U. 18-150, at 516-517; Fitchburg Gas and Electric Light Company, D.P.U. 19-130 (2020); Fitchburg Gas and Electric Light Company, D.P.U. 15-80, at 314-325 (2016). Insofar as the Companies' underlying commercial rates were not derived from the results of marginal cost studies, the Department finds it unnecessary to require the use of marginal cost studies to design DCA rates.⁸⁵ Therefore, the Department declines to direct the Companies to prepare a marginal cost study.

10. NSTAR Electric DCA Rate Proposal

On November 30, 2022, the Department issued an Order in NSTAR Electric's base distribution rate proceeding, D.P.U. 22-22, approving, among other things, the Company's proposed rate design alignment and consolidation plan. To establish consistency and simplicity, the company proposed and the Department allowed the company to establish: (1) Rate G-1 as its rate class for customers with annual demand equal to or less than 100 kW; (2) Rate G-2 for customers with annual demand greater than 100 kW; (3) Rate G-3 for customers with large loads

⁸⁵ The Department further recognizes that a marginal cost study may suggest the need for a demand-based DCA rate, which would be contrary to the requirements of Section 29 of the Transportation Act that electric distribution companies develop a non-demand-based EV rate.

who frequently receive service at the primary voltage level; and (4) WMA Rate T-5, which is unique to WMA and which serves a small number of customers. D.P.U. 22-22, at 421, 432.

Moreover, the Department allowed the Company's proposed non-demand offering for small C&I customers under the G-1 rate class. D.P.U. 22-22, at 422.

NSTAR Electric stated that it would align its EV-1 and EV-2 proposals with the revised rate structure consistent with its proposals in D.P.U. 22-22 (D.P.U. 21-90, Exh. DPU 13-1). For example, the Company would propose to alter the availability breakpoint at 100 kW rather than 200 kW as originally proposed in the instant proceeding (D.P.U. 21-90, Exh. DPU 13-1). The Company calculated an alternative Rate EV-1 based on its D.P.U. 22-22 proposals, which showed a higher rate (except for in the former Boston Edison service area) than the rates the Company proposed for its newly expanded Rate G-1 (D.P.U. 21-90, Exh. DPU 13-1). Therefore, the Company stated that it would not propose a Rate EV-1, and, instead, EV charging stations would take service on the otherwise applicable proposed Rate G-1 (D.P.U. 21-90, Exh. DPU 13-1). Rate EV-2 would be introduced starting at demand greater than 100 kW (D.P.U. 21-90, Exh. DPU 13-1). Accordingly, the Department approves the company's modified DCA rates as provided in its response to information request DPU 13-1 and disallows Rate EV-1. In compliance with this Order, the Department directs NSTAR Electric to file a revised Rate EV-2 with updated pricing consistent with the rate design approved in D.P.U. 22-22.

11. Conclusion

Based on the considerations discussed above, as well as after review and consideration of the issues raised by intervenors, the Department approves the Companies' proposed DCA rate

proposals, with the exception of NSTAR Electric's proposal as discussed and modified above.

Accordingly, the Companies are directed to submit tariffs in compliance with this Order.

VIII. UNITIL RESIDENTIAL EV TOU RATE

A. Description of the Proposal

Unitil proposes a separately metered EV TOU rate for residential customers to incentivize off-peak charging (D.P.U. 21-92, Exhs. JDT-1, at 11; CSVG-1 (Rev.) at 21-22).

Unitil's proposed residential EV TOU consists of three main rate components, differentiated by season: (1) a generation component, which is provided through basic service; (2) a transmission component that is separately charged to all customers and adjusted annually; and (3) a distribution component that is established in base distribution rate proceedings (D.P.U. 21-92, Exh. JDT-1, at 11).

The company determined the generation component by differentiating basic service seasonal energy purchases by time period (i.e., summer on-peak, winter off-peak, etc.), using seasonal load profiles and ISO-NE locational marginal prices to determine time-differentiated projected basic service revenues (D.P.U. 21-92, Exh. JDT-1, at 12). Then, Unitil calculated a time-differentiated marginal rate by dividing the projected basic service revenues by the differentiated seasonal basic service energy purchases for each time period (D.P.U. 21-92, Exh. JDT-1, at 12). The company used the share for each time period and time-differentiated marginal rates to calculate TOU ratios (D.P.U. 21-92, Exh. JDT-1, at 12). Finally, Unitil applied these ratios to the seasonal basic service total costs for each time period to determine the time-differentiated basic service rates (D.P.U. 21-92, Exh. JDT-1, at 12).

For the transmission component, the company time-differentiated its annual system

transmission cost by season and time period, and then divided those costs by time-differentiated system transmission kWh (D.P.U. 21-92, Exh. JDT-1, at 13). To develop the distribution component, the company calculated a time-varied distribution rate in order to produce an overall TOU rate for all components such that the on-peak to off-peak ratio is three to one (D.P.U. 21-92, Exh. JDT-1, at 14).

In its initial filing, Unitil proposed a residential EV TOU consisting of two time periods, an on-peak period of 10 a.m. to 10 p.m. for non-holiday weekdays and an off-peak period for all other times (D.P.U. 21-92, Exh. JDT-1, at 16, 18). During the course of this proceeding, Unitil amended its residential EV TOU proposal, with an on-peak period of 3 p.m. to 8 p.m. and a mid-peak period of 6 a.m. to 3 p.m. for non-holiday weekdays, and an off-peak period for all other times, with rates calculated in a manner consistent with its original proposal (D.P.U. 21-92, Exhs. JDT-1, at 16-17; JDT-Rebuttal-2, at 7).⁸⁶ The company states that its amended proposal mirrors the EV TOU rate approved for its New Hampshire affiliate, Unitil Energy Systems, Inc., and is consistent with the Attorney General's recommendations in this proceeding (D.P.U. 21-92, Exh. JDT-Rebuttal-2, at 7).

Unitil's residential EV TOU proposal includes an incremental customer charge of \$6.39 per billing cycle, which represents the carrying cost associated with a separate meter required to meter the EV charging port (D.P.U. 21-92, Exh. JDT-1, at 16, 19). Unitil estimates that it would take three months following Department approval to update its billing system to implement the

⁸⁶ The company maintained the on-peak to off-peak ratio at three to one, while the summer mid-peak to off-peak ratio is 1.89 to one and the winter mid-peak to off-peak ratio is 1.57 to one (D.P.U. 21-92, Exh. JDT-1, at 18).

residential EV TOU and train its customer service representatives on the new rate (D.P.U. 21-92, Exh. JDT-1, at 21).

B. Positions of the Parties

1. Attorney General

The Attorney General recommends that Unitil expand the residential EV TOU rate offering to include an opt-in whole house TOU rate option because it would reduce ratepayer costs and provide additional load management benefits by including more customer load (D.P.U. 21-92, Attorney General Track 2 Brief at 7, 10). The Attorney General also urges the Department to establish a mechanism by which the Department and stakeholders would reevaluate the TOU rate every two or three years or as part of the Attorney General's recommended load management process (see Section III.B.4.b, below) (D.P.U. 21-92, Attorney General Track 2 Brief at 7, 10, 12).

2. Unitil

Unitil opposes the Attorney General's recommendation to expand the residential EV TOU rate offering to include an opt-in whole house TOU rate option as beyond the scope of this proceeding and not relevant to the Department's review of the company's proposed residential EV TOU rate (D.P.U. 21-92, Unitil Track 2 Brief at 13, 20-22). Further, Unitil argues that this issue was not properly noticed for this proceeding nor was the record sufficiently developed to support approval of the Attorney General's recommended whole house TOU rate (D.P.U. 21-92, Unitil Track 2 Brief at 13, 20-22).

C. Analysis and Findings

The Attorney General recommends that the Department direct Unitil to expand the residential EV TOU rate offering to include an opt-in whole house TOU rate option (D.P.U. 21-92, Attorney General Track 2 Brief at 7, 10). In D.P.U. 20-69-A, at 44, the Department encouraged, but did not require, Unitil to propose an EV-specific TOU rate for residential customers. Consistent with the Department's request, Unitil proposed a residential EV TOU rate, which we examine, below. The Department, however, does not require an expansion of Unitil's residential EV TOU rate proposal to include an opt-in whole house TOU rate option at this time. As previously stated, pursuant to Section 90 of the 2022 Clean Energy Act, the Companies must submit proposals to the Department on or before August 11, 2023 for approval to offer an opt-in residential TOU rate for EV owners or lessees, designed to reflect the cost of providing electricity to a consumer charging an EV at different times of the day. The Department will further explore EV TOU rate options in that proceeding.⁸⁷

The Department reviewed Unitil's three-part residential EV TOU rate proposal and finds it to be reasonable and consistent with the Department's request in D.P.U. 20-69-A. Additionally, the Department determines that Unitil's proposal for an on-peak non-holiday weekdays, mid-peak non-holiday weekdays, and off-peak for all other times, will assist in incentivizing off-peak charging and support the Commonwealth's public policy goals and the Department's grid modernization objective to optimize system demand by facilitating consumer price responsiveness (D.P.U. 21-92, Exh. JDT-1, at 12-14). D.P.U. 15-120/D.P.U. 15-121/

⁸⁷ The Department also intends to explore TOU rates for non-EV customers in a separate proceeding.

D.P.U. 15-122, at 101-102. Accordingly, we approve Unitil's proposed three-part residential EV TOU rate.

The Department directs the company to file a residential EV TOU tariff for Department review and approval no later than January 15, 2023. The Department expects that the compliance tariff will be identical to the exemplar tariff in all respects other than the inclusion of effective dates.

In Section III.C.4.c.i, above, the Department approved the company's proposal to offer EVSE rebates to low-income residential customers in one to four-unit properties enrolled in the residential EV TOU rate (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 34). The company proposes to collect the data from participating residential EV TOU rate meters and analyze and compare historical embedded EVSE data against the utility metering interval data (D.P.U. 21-92, Exh. CSVG-1 (Rev.) at 34-45). As discussed in Section VII.C.5, above, the Department urges the company to complete its assessment of EVSE metering capabilities in a timely manner and provide EV program customers the option to participate in the program using embedded EVSE meters instead of a second utility-owned meter (D.P.U. 21-92, Exhs. CSVG-4, at 1; JDT-1, at 19).

The Department also directs Unitil to report on the implementation of the residential EV TOU rate in its annual reports, including data on customer enrollment and other relevant data and lessons learned. The Department expects Unitil to use its experience implementing the residential EV TOU rate to inform the design and implementation of any future TOU rate proposal.

IX. ORDER

Accordingly, after due notice, hearing, and consideration, it is

ORDERED: That the electric vehicle charging infrastructure proposal plans filed by NSTAR Electric Company, Massachusetts Electric Company and Nantucket Electric Company, and Fitchburg Gas and Electric Light Company are APPROVED in part and DENIED in part, consistent with the directives contained herein; and it is

FURTHER ORDERED: That the demand charge alternative rates proposed by NSTAR Electric Company are APPROVED in part and DENIED in part, consistent with directives contained herein; and it is

FURTHER ORDERED: That the demand charge alternative rates proposed by Massachusetts Electric Company and Nantucket Electric Company and Fitchburg Gas and Electric Light Company are APPROVED; and it is

FURTHER ORDERED: That the residential electric vehicle time-of-use rate proposed by Fitchburg Gas and Electric Light Company is APPROVED; and it is

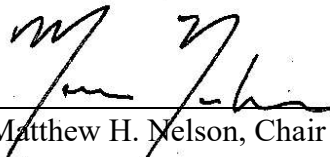
FURTHER ORDERED: That NSTAR Electric Company shall file by January 15, 2023 revised grid modernization factor and electric vehicle program factor tariffs consistent with the directives contained herein; and it is

FURTHER ORDERED: That Massachusetts Electric Company and Nantucket Electric Company shall file by January 15, 2023 revised electric vehicle program factor and General Service – Small Commercial and Industrial G-1 tariffs consistent with the directives contained herein; and it is

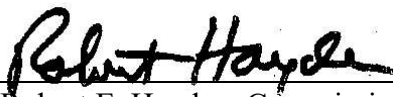
FURTHER ORDERED: That Fitchburg Gas and Electric Light Company shall file by January 15, 2023 revised grid modernization factor and residential electric vehicle time-of-use tariffs consistent with the directives contained herein; and it is

FURTHER ORDERED: That NSTAR Electric Company, Massachusetts Electric Company and Nantucket Electric Company, and Fitchburg Gas and Electric Light Company shall comply with all other orders and directives contained in this Order.

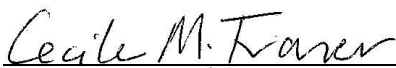
By Order of the Department,



Matthew H. Nelson, Chair



Robert E. Hayden, Commissioner



Cecile M. Fraser, Commissioner

An appeal as to matters of law from any final decision, order or ruling of the Commission may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the Order of the Commission be modified or set aside in whole or in part. Such petition for appeal shall be filed with the Secretary of the Commission within twenty days after the date of service of the decision, order or ruling of the Commission, or within such further time as the Commission may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the Clerk of said Court. G.L. c. 25, § 5.